superior conj	1600 Sep 29 14:40	6°♎37'17	1°18'10
minimum elong	1600 Sep 29 21:49	6°♎59'38	1°18'01
	1600 Oct 18 07:07	0°♏	
evening rise	1600 Nov 07 20:45	25°♏46'10	
desc. node	1600 Nov 10 03:45	28°♏38'31	
	1600 Nov 11 05:46	0°♐	
	1600 Dec 05 04:27	0°♑	
	1600 Dec 29 04:13	0°♒	
	1601 Jan 22 07:07	0°♓	
	1601 Feb 15 16:56	0°♈	
asc. node	1601 Mar 03 07:01	18°♈50'26	
	1601 Mar 12 15:43	0°♉	
	1601 Apr 07 13:39	0°♊	
	1601 May 05 11:29	0°♋	
evening max el	1601 May 12 13:02	6°♋58'26	45°26'00
	1601 Jun 09 21:44	0°♌	
greatest brilliancy	1601 Jun 19 08:21	4°♌37'47	-4.7m
desc. node	1601 Jun 22 20:25	5°♌43'43	
retrograde	1601 Jun 30 02:58	6°♌41'50	
evening set	1601 Jul 16 00:14	1°♌52'55	
	1601 Jul 19 04:41	30°℞♋	
inferior conj	1601 Jul 21 13:38	28°♋31'41	-6°05'20
minimum elong	1601 Jul 21 03:44	28°♋47'08	6°03'17
min. Earth dist.	1601 Jul 21 13:30	28°♋31'53	0.28951 AU
morning rise	1601 Jul 26 07:08	25°♋38'48	
direct	1601 Aug 12 05:42	20°♋14'57	
greatest brilliancy	1601 Aug 22 19:13	22°♋16'16	-4.8m
	1601 Sep 06 00:14	0°♌	
morning max el	1601 Sep 30 19:11	21°♌19'00	46°15'09
	1601 Oct 09 08:37	0°♍	
asc. node	1601 Oct 13 23:45	4°♍53'07	
	1601 Nov 05 12:00	0°♎	
	1601 Nov 30 20:15	0°♏	
	1601 Dec 25 10:21	0°♐	
	1602 Jan 18 16:55	0°♑	
desc. node	1602 Feb 02 13:10	18°♑25'20	
	1602 Feb 11 20:56	0°♒	
	1602 Mar 08 00:47	0°♓	
	1602 Apr 01 05:51	0°♈	
morning set	1602 Apr 06 12:19	6°♈30'56	
	1602 Apr 25 12:50	0°♉	
superior conj	1602 May 14 04:35	22°♉58'27	-0°29'10
minimum elong	1602 May 14 10:32	23°♉16'44	0°28'54
max. Earth dist.	1602 May 15 15:51	24°♉46'55	1.73403 AU
	1602 May 19 21:40	0°♊	
asc. node	1602 May 26 16:45	8°♊21'13	
	1602 Jun 13 07:46	0°♋	
evening rise	1602 Jun 19 19:55	7°♋59'14	
	1602 Jul 07 18:33	0°♌	
	1602 Aug 01 06:18	0°♍	
	1602 Aug 25 20:13	0°♎	
desc. node	1602 Sep 15 05:55	24°♎45'34	
	1602 Sep 19 13:58	0°♏	
	1602 Oct 14 13:47	0°♐	
	1602 Nov 09 00:25	0°♑	
	1602 Dec 05 12:21	0°♒	
evening max el	1602 Dec 19 00:03	14°♒17'04	47°17'38
	1603 Jan 04 11:41	0°♓	
asc. node	1603 Jan 06 09:20	1°♓37'57	
greatest brilliancy	1603 Jan 28 12:16	15°♓56'22	-4.9m
retrograde	1603 Feb 07 22:32	18°♓00'18	
evening set	1603 Feb 25 19:43	11°♓47'05	
min. Earth dist.	1603 Feb 28 04:51	10°♓18'04	0.27763 AU
inferior conj	1603 Feb 28 20:13	9°♓53'51	8°47'44
morning rise	1603 Mar 03 20:58	8°♓00'47	
direct	1603 Mar 21 16:53	1°♓56'33	
greatest brilliancy	1603 Mar 30 17:20	3°♓27'43	-4.8m
desc. node	1603 Apr 27 22:36	21°♓37'51	
	1603 May 07 03:50	0°♈	
morning max el	1603 May 09 21:33	2°♈37'05	46°00'05
	1603 Jun 05 09:45	0°♉	
	1603 Jul 02 06:27	0°♊	
	1603 Jul 28 01:44	0°♋	
asc. node	1603 Aug 19 02:07	26°♋15'58	
	1603 Aug 22 04:23	0°♌	
	1603 Sep 15 18:25	0°♍	
	1603 Oct 09 23:20	0°♎	
	1603 Nov 02 22:41	0°♏	
morning set	1603 Nov 03 13:59	0°♏48'00	
	1603 Nov 26 19:26	0°♐	
desc. node	1603 Dec 08 15:37	14°♐54'21	
superior conj	1603 Dec 14 03:07	21°♐48'09	-0°13'05
minimum elong	1603 Dec 13 23:38	21°♐37'12	0°12'55
behind sun begin	1603 Dec 13 07:13	20°♐45'31	
behind sun end	1603 Dec 14 16:04	22°♐28'53	
max. Earth dist.	1603 Dec 14 12:58	22°♐19'10	1.71055 AU
	1603 Dec 20 15:28	0°♑	
	1604 Jan 13 12:02	0°♒	
evening rise	1604 Jan 24 16:00	14°♒00'36	
	1604 Feb 06 10:27	0°♓	
	1604 Mar 01 12:34	0°♈	
	1604 Mar 25 20:37	0°♉	
asc. node	1604 Mar 30 18:59	6°♉01'53	
	1604 Apr 19 13:14	0°♊	
	1604 May 14 17:53	0°♋	
	1604 Jun 09 17:18	0°♌	
	1604 Jul 07 04:40	0°♍	
desc. node	1604 Jul 20 08:11	13°♍16'35	
evening max el	1604 Jul 22 17:54	15°♍35'40	45°40'40
	1604 Aug 08 00:13	0°♎	
greatest brilliancy	1604 Aug 31 12:49	14°♎00'03	-4.8m
retrograde	1604 Sep 09 15:14	15°♎30'49	
evening set	1604 Sep 27 04:13	9°♎47'24	
inferior conj	1604 Sep 30 15:53	7°♎41'11	-8°05'30
minimum elong	1604 Sep 30 23:36	7°♎29'20	8°04'35
min. Earth dist.	1604 Oct 01 14:05	7°♎07'07	0.27726 AU
morning rise	1604 Oct 04 18:36	5°♎11'56	
	1604 Oct 17 17:58	30°℞♍	
direct	1604 Oct 21 16:43	29°♍40'58	
	1604 Oct 25 17:18	0°♎	
greatest brilliancy	1604 Nov 01 22:14	2°♎01'22	-4.9m
asc. node	1604 Nov 10 11:39	6°♎25'38	
	1604 Dec 08 11:25	0°♏	
morning max el	1604 Dec 11 09:28	2°♏56'43	46°53'55
	1605 Jan 05 07:45	0°♐	
	1605 Jan 31 02:21	0°♑	
	1605 Feb 25 03:23	0°♒	
desc. node	1605 Mar 02 01:02	5°♒55'20	
	1605 Mar 21 21:21	0°♓	
	1605 Apr 15 12:33	0°♈	
	1605 May 10 02:46	0°♉	
	1605 Jun 03 16:12	0°♊	
morning set	1605 Jun 14 09:20	13°♊06'35	
asc. node	1605 Jun 23 04:34	23°♊53'39	
	1605 Jun 28 04:03	0°♋	
max. Earth dist.	1605 Jul 18 04:29	24°♋36'39	1.73388 AU

superior conj	1605 Jul 20 18:58	27°♋49'05	0°59'18
minimum elong	1605 Jul 20 10:12	27°♋22'07	0°59'00
	1605 Jul 22 13:26	0°♌	
	1605 Aug 15 20:19	0°♍	
evening rise	1605 Aug 25 18:18	12°♍16'38	
	1605 Sep 09 01:35	0°♎	
	1605 Oct 03 06:30	0°♏	
desc. node	1605 Oct 12 17:53	11°♏44'09	
	1605 Oct 27 12:07	0°♐	
	1605 Nov 20 19:31	0°♑	
	1605 Dec 15 07:01	0°♒	
	1606 Jan 09 04:29	0°♓	
asc. node	1606 Feb 02 21:08	28°♓40'30	
	1606 Feb 04 01:24	0°♈	
evening max el	1606 Feb 28 09:49	26°♈00'24	46°21'58
	1606 Mar 04 11:27	0°♉	
greatest brilliancy	1606 Apr 08 10:07	25°♉39'55	-4.8m
retrograde	1606 Apr 19 05:40	27°♉49'43	
evening set	1606 May 04 22:33	23°♉00'55	
inferior conj	1606 May 10 14:45	19°♉33'54	3°25'05
minimum elong	1606 May 10 21:43	19°♉22'57	3°23'11
min. Earth dist.	1606 May 10 16:22	19°♉31'22	0.28774 AU
morning rise	1606 May 16 21:06	15°♉47'11	
desc. node	1606 May 25 10:29	12°♉11'18	
direct	1606 Jun 01 01:12	11°♉18'56	
greatest brilliancy	1606 Jun 11 05:44	13°♉11'04	-4.7m
	1606 Jul 07 14:28	0°♊	
morning max el	1606 Jul 19 19:34	11°♊00'54	45°44'23
	1606 Aug 07 14:41	0°♋	
	1606 Sep 03 18:04	0°♌	
asc. node	1606 Sep 15 14:05	13°♌42'44	
	1606 Sep 29 08:03	0°♍	
	1606 Oct 24 01:12	0°♎	
	1606 Nov 17 06:33	0°♏	
	1606 Dec 11 06:07	0°♐	
	1607 Jan 04 03:39	0°♑	
desc. node	1607 Jan 05 03:18	1°♑14'14	
morning set	1607 Jan 18 23:09	18°♑35'52	
	1607 Jan 28 01:13	0°♒	
	1607 Feb 21 00:05	0°♓	
superior conj	1607 Mar 01 03:44	10°♓11'07	-1°25'57
minimum elong	1607 Mar 01 02:44	10°♓08'01	1°25'56
max. Earth dist.	1607 Mar 05 02:03	15°♓05'21	1.71952 AU
	1607 Mar 17 01:25	0°♈	
evening rise	1607 Apr 09 15:47	29°♈15'17	
	1607 Apr 10 06:16	0°♉	
asc. node	1607 Apr 28 06:59	22°♉12'24	
	1607 May 04 15:24	0°♊	
	1607 May 29 05:16	0°♋	
	1607 Jun 23 00:41	0°♌	
	1607 Jul 18 03:50	0°♍	
	1607 Aug 12 19:21	0°♎	
desc. node	1607 Aug 17 19:58	5°♎46'33	
	1607 Sep 08 09:01	0°♏	
evening max el	1607 Oct 05 00:46	27°♏59'26	46°48'56
	1607 Oct 07 02:05	0°♐	
greatest brilliancy	1607 Nov 14 10:37	28°♐18'34	-4.9m
	1607 Nov 21 19:40	0°♑	
retrograde	1607 Nov 24 05:47	0°♑07'02	
	1607 Nov 26 15:11	30°℞♐	
evening set	1607 Dec 08 11:34	26°♐04'04	
asc. node	1607 Dec 08 23:28	25°♐48'05	
inferior conj	1607 Dec 14 17:28	22°♐25'39	1°29'34
minimum elong	1607 Dec 14 14:04	22°♐30'49	1°28'28
min. Earth dist.	1607 Dec 14 11:26	22°♐34'49	0.26407 AU
morning rise	1607 Dec 20 16:45	18°♐57'00	
direct	1608 Jan 04 02:27	14°♐49'05	
greatest brilliancy	1608 Jan 13 23:11	16°♐40'48	-4.9m
	1608 Feb 04 09:18	0°♑	
morning max el	1608 Feb 23 10:38	17°♑32'36	46°44'43
	1608 Mar 06 11:58	0°♒	
desc. node	1608 Mar 29 12:57	25°♒22'37	
	1608 Apr 02 14:42	0°♓	
	1608 Apr 28 12:42	0°♈	
	1608 May 23 22:02	0°♉	
	1608 Jun 17 23:55	0°♊	
	1608 Jul 12 19:32	0°♋	
asc. node	1608 Jul 20 16:19	9°♋34'34	
	1608 Aug 06 08:47	0°♌	
morning set	1608 Aug 21 05:44	18°♌19'52	
	1608 Aug 30 15:57	0°♍	
	1608 Sep 23 18:27	0°♎	
max. Earth dist.	1608 Sep 24 00:11	0°♎17'55	1.72056 AU
superior conj	1608 Sep 27 05:59	4°♎20'42	1°19'26
minimum elong	1608 Sep 27 12:31	4°♎41'05	1°19'20
	1608 Oct 17 18:15	0°♏	
evening rise	1608 Nov 05 08:27	23°♏17'09	
desc. node	1608 Nov 09 05:51	28°♏09'45	
	1608 Nov 10 17:03	0°♐	
	1608 Dec 04 15:54	0°♑	
	1608 Dec 28 15:51	0°♒	
	1609 Jan 21 19:01	0°♓	
	1609 Feb 15 05:19	0°♈	
asc. node	1609 Mar 02 09:04	18°♈18'05	
	1609 Mar 12 04:59	0°♉	
	1609 Apr 07 04:48	0°♊	
	1609 May 05 07:43	0°♋	
evening max el	1609 May 10 05:04	4°♋47'46	45°26'54
	1609 Jun 11 10:23	0°♌	
greatest brilliancy	1609 Jun 17 00:18	2°♌28'39	-4.7m
desc. node	1609 Jun 21 22:22	3°♌54'44	
retrograde	1609 Jun 27 18:35	4°♌32'39	
	1609 Jul 13 04:56	30°℞♋	
evening set	1609 Jul 13 14:02	29°♋47'21	
inferior conj	1609 Jul 19 05:58	26°♋22'22	-5°51'03
minimum elong	1609 Jul 18 20:07	26°♋37'45	5°48'55
min. Earth dist.	1609 Jul 19 05:38	26°♋22'53	0.28961 AU
morning rise	1609 Jul 24 02:06	23°♋25'17	
direct	1609 Aug 09 22:03	18°♋05'35	
greatest brilliancy	1609 Aug 20 11:01	20°♋05'51	-4.8m
	1609 Sep 06 17:10	0°♌	
morning max el	1609 Sep 28 09:27	19°♌01'38	46°13'26
	1609 Oct 09 03:44	0°♍	
asc. node	1609 Oct 13 01:57	4°♍10'21	
	1609 Nov 05 03:02	0°♎	
	1609 Nov 30 09:40	0°♏	
	1609 Dec 24 22:57	0°♐	
	1610 Jan 18 04:59	0°♑	
desc. node	1610 Feb 01 15:12	17°♑54'59	
	1610 Feb 11 08:36	0°♒	
	1610 Mar 07 12:10	0°♓	
	1610 Mar 31 17:02	0°♈	
morning set	1610 Apr 04 03:09	4°♈14'01	
	1610 Apr 24 23:52	0°♉	
superior conj	1610 May 11 21:33	20°♉49'18	-0°32'15
minimum elong	1610 May 12 04:03	21°♉09'18	0°31'57
max. Earth dist.	1610 May 13 11:56	22°♉47'23	1.73368 AU
	1610 May 19 08:38	0°♊	
asc. node	1610 May 25 18:45	7°♊53'46	
	1610 Jun 12 18:42	0°♋	
evening rise	1610 Jun 17 14:42	5°♋55'57	

	1610 Jul 07 05:36	0°♌	
	1610 Jul 31 17:37	0°♍	
	1610 Aug 25 08:01	0°♎	
desc. node	1610 Sep 14 08:03	24°♎14'41	
	1610 Sep 19 02:29	0°♏	
	1610 Oct 14 03:21	0°♐	
	1610 Nov 08 15:47	0°♑	
	1610 Dec 05 07:31	0°♒	
evening max el	1610 Dec 16 13:40	11°♒51'18	47°18'12
	1611 Jan 04 21:24	0°♓	
asc. node	1611 Jan 05 11:21	0°♓28'56	
greatest brilliancy	1611 Jan 26 04:01	13°♓34'53	-4.9m
retrograde	1611 Feb 05 12:41	15°♓37'45	
evening set	1611 Feb 23 08:50	9°♓27'14	
inferior conj	1611 Feb 26 11:15	7°♓31'09	8°47'03
minimum elong	1611 Feb 26 09:38	7°♓33'42	8°47'01
min. Earth dist.	1611 Feb 25 18:47	7°♓57'04	0.27705 AU
morning rise	1611 Mar 01 10:38	5°♓40'07	
	1611 Mar 14 18:42	30°℞♒	
direct	1611 Mar 19 05:54	29°♒35'51	
	1611 Mar 23 19:37	0°♓	
greatest brilliancy	1611 Mar 28 07:00	1°♓07'14	-4.8m
desc. node	1611 Apr 27 00:44	20°♓38'01	
	1611 May 07 03:45	0°♈	
morning max el	1611 May 07 10:56	0°♈17'21	46°01'28
	1611 Jun 05 02:09	0°♉	
	1611 Jul 01 20:10	0°♊	
	1611 Jul 27 14:08	0°♋	
asc. node	1611 Aug 18 04:14	25°♋46'54	
	1611 Aug 21 16:05	0°♌	
	1611 Sep 15 05:45	0°♍	
	1611 Oct 09 10:30	0°♎	
morning set	1611 Nov 01 03:11	28°♎23'47	
	1611 Nov 02 09:50	0°♏	
	1611 Nov 26 06:37	0°♐	
desc. node	1611 Dec 07 17:34	14°♐25'12	
superior conj	1611 Dec 11 13:06	19°♐13'13	-0°09'08
minimum elong	1611 Dec 11 10:40	19°♐05'34	0°09'00
behind sun begin	1611 Dec 10 12:21	17°♐55'20	
behind sun end	1611 Dec 12 08:59	20°♐15'47	
max. Earth dist.	1611 Dec 11 17:17	19°♐26'25	1.71066 AU
	1611 Dec 20 02:41	0°♑	
	1612 Jan 12 23:18	0°♒	
evening rise	1612 Jan 22 02:00	11°♒26'05	
	1612 Feb 05 21:47	0°♓	
	1612 Feb 29 23:58	0°♈	
	1612 Mar 25 08:13	0°♉	
asc. node	1612 Mar 29 21:08	5°♉32'52	
	1612 Apr 19 01:14	0°♊	
	1612 May 14 06:43	0°♋	
	1612 Jun 09 07:51	0°♌	
	1612 Jul 06 23:18	0°♍	
desc. node	1612 Jul 19 10:14	12°♍27'10	
evening max el	1612 Jul 20 07:51	13°♍18'57	45°39'10
	1612 Aug 08 12:21	0°♎	
greatest brilliancy	1612 Aug 29 01:05	11°♎40'42	-4.8m
retrograde	1612 Sep 07 05:12	13°♎12'52	
evening set	1612 Sep 24 20:24	7°♎25'12	
inferior conj	1612 Sep 28 06:00	5°♎22'06	-8°13'15
minimum elong	1612 Sep 28 13:06	5°♎11'14	8°12'29
min. Earth dist.	1612 Sep 29 03:45	4°♎48'47	0.27795 AU
morning rise	1612 Oct 02 05:26	2°♎57'51	
	1612 Oct 07 20:45	30°℞♍	
direct	1612 Oct 19 07:41	27°♍20'45	
greatest brilliancy	1612 Oct 30 13:16	29°♍41'35	-4.9m
	1612 Oct 31 07:17	0°♎	

asc. node	1612 Nov 09 13:36	5°♎00'59	
	1612 Dec 08 10:28	0°♏	
morning max el	1612 Dec 09 00:45	0°♏36'19	46°53'05
	1613 Jan 05 00:18	0°♐	
	1613 Jan 30 16:32	0°♑	
	1613 Feb 24 16:21	0°♒	
desc. node	1613 Mar 01 03:08	5°♒23'01	
	1613 Mar 21 09:33	0°♓	
	1613 Apr 15 00:12	0°♈	
	1613 May 09 14:01	0°♉	
	1613 Jun 03 03:11	0°♊	
morning set	1613 Jun 12 03:20	11°♊01'16	
asc. node	1613 Jun 22 06:31	23°♊26'20	
	1613 Jun 27 14:53	0°♋	
max. Earth dist.	1613 Jul 16 03:06	22°♋45'09	1.73416 AU
superior conj	1613 Jul 18 13:20	25°♋44'31	0°57'02
minimum elong	1613 Jul 18 04:38	25°♋17'40	0°56'42
	1613 Jul 22 00:15	0°♌	
	1613 Aug 15 07:13	0°♍	
evening rise	1613 Aug 23 11:53	10°♍08'36	
	1613 Sep 08 12:38	0°♎	
	1613 Oct 02 17:47	0°♏	
desc. node	1613 Oct 11 20:00	11°♏15'20	
	1613 Oct 26 23:45	0°♐	
	1613 Nov 20 07:37	0°♑	
	1613 Dec 14 19:49	0°♒	
	1614 Jan 08 18:27	0°♓	
asc. node	1614 Feb 01 23:13	28°♓00'45	
	1614 Feb 03 17:49	0°♈	
evening max el	1614 Feb 26 01:51	23°♈46'19	46°24'27
	1614 Mar 04 11:27	0°♉	
greatest brilliancy	1614 Apr 06 02:20	23°♉28'21	-4.8m
retrograde	1614 Apr 16 22:41	25°♉38'35	
evening set	1614 May 02 16:57	20°♉46'37	
inferior conj	1614 May 08 06:53	17°♉22'39	3°43'34
minimum elong	1614 May 08 14:21	17°♉10'54	3°41'33
min. Earth dist.	1614 May 08 08:08	17°♉20'41	0.28755 AU
morning rise	1614 May 14 12:03	13°♉37'51	
desc. node	1614 May 24 12:24	9°♉40'34	
direct	1614 May 29 17:21	9°♉08'06	
greatest brilliancy	1614 Jun 08 20:25	10°♉59'27	-4.7m
	1614 Jul 07 19:01	0°♊	
morning max el	1614 Jul 17 12:25	8°♊53'16	45°44'06
	1614 Aug 07 07:44	0°♋	
	1614 Sep 03 07:57	0°♌	
asc. node	1614 Sep 14 16:09	13°♌10'21	
	1614 Sep 28 20:33	0°♍	
	1614 Oct 23 13:01	0°♎	
	1614 Nov 16 18:00	0°♏	
	1614 Dec 10 17:22	0°♐	
	1615 Jan 03 14:46	0°♑	
desc. node	1615 Jan 04 05:23	0°♑45'56	
morning set	1615 Jan 16 09:10	16°♑01'59	
	1615 Jan 27 12:14	0°♒	
	1615 Feb 20 11:03	0°♓	
superior conj	1615 Feb 26 15:45	7°♓44'39	-1°25'42
minimum elong	1615 Feb 26 13:44	7°♓38'21	1°25'42
max. Earth dist.	1615 Mar 02 14:58	12°♓41'49	1.71904 AU
	1615 Mar 16 12:19	0°♈	
evening rise	1615 Apr 07 06:06	26°♈57'34	
	1615 Apr 09 17:10	0°♉	
asc. node	1615 Apr 27 08:56	21°♉44'44	
	1615 May 04 02:24	0°♊	
	1615 May 28 16:30	0°♋	
	1615 Jun 22 12:22	0°♌	

	1615 Jul 17 16:20	0°♍	
	1615 Aug 12 09:18	0°♎	
desc. node	1615 Aug 16 22:07	5°♎11'39	
	1615 Sep 08 01:55	0°♏	
evening max el	1615 Oct 02 15:16	25°♏39'05	46°46'37
	1615 Oct 07 03:07	0°♐	
greatest brilliancy	1615 Nov 11 23:53	25°♐50'54	-4.9m
retrograde	1615 Nov 21 18:05	27°♐37'51	
evening set	1615 Dec 05 23:55	23°♐35'37	
asc. node	1615 Dec 08 01:27	22°♐27'00	
inferior conj	1615 Dec 12 05:38	19°♐57'15	1°05'08
minimum elong	1615 Dec 12 03:09	20°♐01'02	1°04'19
min. Earth dist.	1615 Dec 12 01:06	20°♐04'10	0.26401 AU
morning rise	1615 Dec 18 06:31	16°♐26'17	
direct	1616 Jan 01 15:03	12°♐20'55	
greatest brilliancy	1616 Jan 11 12:49	14°♐13'26	-4.9m
	1616 Feb 04 20:02	0°♑	
morning max el	1616 Feb 20 23:28	15°♑07'16	46°45'50
	1616 Mar 06 06:55	0°♒	
desc. node	1616 Mar 28 15:03	24°♒45'12	
	1616 Apr 02 05:35	0°♓	
	1616 Apr 28 01:45	0°♈	
	1616 May 23 10:03	0°♉	
	1616 Jun 17 11:19	0°♊	
	1616 Jul 12 06:34	0°♋	
asc. node	1616 Jul 19 18:28	9°♋07'49	
	1616 Aug 05 19:34	0°♌	
morning set	1616 Aug 18 22:40	16°♌10'47	
	1616 Aug 30 02:39	0°♍	
max. Earth dist.	1616 Sep 21 11:56	27°♍51'23	1.72110 AU
	1616 Sep 23 05:10	0°♎	
superior conj	1616 Sep 24 21:26	2°♎05'38	1°20'35
minimum elong	1616 Sep 25 03:19	2°♎23'59	1°20'30
	1616 Oct 17 05:06	0°♏	
evening rise	1616 Nov 02 20:29	20°♏50'09	
desc. node	1616 Nov 08 07:48	27°♏41'26	
	1616 Nov 10 04:03	0°♐	
	1616 Dec 04 03:03	0°♑	
	1616 Dec 28 03:10	0°♒	
	1617 Jan 21 06:36	0°♓	
	1617 Feb 14 17:22	0°♈	
asc. node	1617 Mar 01 11:12	17°♈47'03	
	1617 Mar 11 17:56	0°♉	
	1617 Apr 06 19:46	0°♊	
	1617 May 05 04:18	0°♋	
evening max el	1617 May 07 20:11	2°♋35'35	45°27'40
	1617 Jun 13 19:29	0°♌	
greatest brilliancy	1617 Jun 14 16:10	0°♌19'42	-4.7m
desc. node	1617 Jun 21 00:27	2°♌02'06	
retrograde	1617 Jun 25 10:03	2°♌23'55	
	1617 Jul 06 12:15	30°℞♋	
evening set	1617 Jul 11 03:47	27°♋41'46	
inferior conj	1617 Jul 16 22:11	24°♋13'26	-5°36'06
minimum elong	1617 Jul 16 12:28	24°♋28'38	5°33'55
min. Earth dist.	1617 Jul 16 21:57	24°♋13'48	0.28970 AU
morning rise	1617 Jul 21 20:57	21°♋12'16	
direct	1617 Aug 07 13:53	15°♋56'28	
greatest brilliancy	1617 Aug 18 03:25	17°♋56'40	-4.8m
	1617 Sep 07 05:29	0°♌	
morning max el	1617 Sep 25 23:31	16°♌44'41	46°11'56
	1617 Oct 08 22:01	0°♍	
asc. node	1617 Oct 12 03:57	3°♍28'36	
	1617 Nov 04 17:29	0°♎	
	1617 Nov 29 22:35	0°♏	
	1617 Dec 24 11:05	0°♐	
	1618 Jan 17 16:38	0°♑	
desc. node	1618 Jan 31 17:19	17°♑26'04	
	1618 Feb 10 19:53	0°♒	
	1618 Mar 06 23:10	0°♓	
	1618 Mar 31 03:49	0°♈	
morning set	1618 Apr 01 18:01	1°♈58'12	
	1618 Apr 24 10:30	0°♉	
superior conj	1618 May 09 14:32	18°♉41'21	-0°35'16
minimum elong	1618 May 09 21:34	19°♉02'58	0°34'57
max. Earth dist.	1618 May 11 07:07	20°♉46'11	1.73338 AU
	1618 May 18 19:12	0°♊	
asc. node	1618 May 24 20:47	7°♊27'28	
	1618 Jun 12 05:18	0°♋	
evening rise	1618 Jun 15 09:24	3°♋53'27	
	1618 Jul 06 16:21	0°♌	
	1618 Jul 31 04:41	0°♍	
	1618 Aug 24 19:33	0°♎	
desc. node	1618 Sep 13 10:05	23°♎44'25	
	1618 Sep 18 14:43	0°♏	
	1618 Oct 13 16:40	0°♐	
	1618 Nov 08 06:56	0°♑	
	1618 Dec 05 02:44	0°♒	
evening max el	1618 Dec 14 03:04	9°♒26'14	47°18'45
asc. node	1619 Jan 04 13:30	29°♒19'31	
	1619 Jan 05 09:47	0°♓	
greatest brilliancy	1619 Jan 23 19:15	11°♓13'42	-4.9m
retrograde	1619 Feb 03 02:57	13°♓16'19	
evening set	1619 Feb 20 21:25	7°♓08'49	
min. Earth dist.	1619 Feb 23 08:36	5°♓37'03	0.27649 AU
inferior conj	1619 Feb 24 01:29	5°♓10'31	8°45'20
minimum elong	1619 Feb 23 23:01	5°♓14'25	8°45'14
morning rise	1619 Feb 27 00:47	3°♓19'47	
	1619 Mar 05 03:45	30°℞♒	
direct	1619 Mar 16 18:53	27°♒15'55	
greatest brilliancy	1619 Mar 25 20:41	28°♒47'51	-4.8m
	1619 Mar 29 01:58	0°♓	
desc. node	1619 Apr 26 02:38	19°♓40'20	
morning max el	1619 May 05 01:03	28°♓00'32	46°02'57
	1619 May 07 02:07	0°♈	
	1619 Jun 04 17:47	0°♉	
	1619 Jul 01 09:21	0°♊	
	1619 Jul 27 02:07	0°♋	
asc. node	1619 Aug 17 06:19	25°♋18'40	
	1619 Aug 21 03:27	0°♌	
	1619 Sep 14 16:48	0°♍	
	1619 Oct 08 21:25	0°♎	
morning set	1619 Oct 29 16:24	26°♎00'38	
	1619 Nov 01 20:42	0°♏	
	1619 Nov 25 17:27	0°♐	
desc. node	1619 Dec 06 19:39	13°♐57'32	
superior conj	1619 Dec 08 23:03	16°♐39'17	-0°05'09
minimum elong	1619 Dec 08 21:40	16°♐34'58	0°05'05
behind sun begin	1619 Dec 07 20:24	15°♐15'26	
behind sun end	1619 Dec 09 22:57	17°♐54'31	
max. Earth dist.	1619 Dec 09 01:13	16°♐46'09	1.71076 AU
	1619 Dec 19 13:33	0°♑	
	1620 Jan 12 10:13	0°♒	
evening rise	1620 Jan 19 12:06	8°♒53'00	
	1620 Feb 05 08:46	0°♓	
	1620 Feb 29 11:03	0°♈	
	1620 Mar 24 19:30	0°♉	
asc. node	1620 Mar 28 23:05	5°♉04'13	
	1620 Apr 18 12:56	0°♊	
	1620 May 13 19:17	0°♋	
	1620 Jun 08 22:13	0°♌	
	1620 Jul 06 18:06	0°♍	

evening max el	1620 Jul	17	22:27	11°♍04'43	45°37'30
desc. node	1620 Jul	18	12:21	11°♍37'48	
	1620 Aug	09	04:16	0°♎	
greatest brilliancy	1620 Aug	26	12:40	9°♎21'11	-4.8m
retrograde	1620 Sep	04	19:10	10°♎54'56	
evening set	1620 Sep	22	12:13	5°♎03'29	
inferior conj	1620 Sep	25	19:55	3°♎03'03	-8°20'12
minimum elong	1620 Sep	26	02:21	2°♎53'12	8°19'35
min. Earth dist.	1620 Sep	26	16:53	2°♎30'56	0.27865 AU
morning rise	1620 Sep	29	16:11	0°♎43'33	
	1620 Sep	30	22:22	30°℞♍	
direct	1620 Oct	16	22:54	25°♍00'46	
greatest brilliancy	1620 Oct	28	03:34	27°♍21'08	-4.9m
	1620 Nov	02	17:12	0°♎	
asc. node	1620 Nov	08	15:37	3°♎39'23	
morning max el	1620 Dec	06	16:10	28°♎16'53	46°52'18
	1620 Dec	08	08:26	0°♏	
	1621 Jan	04	16:21	0°♐	
	1621 Jan	30	06:19	0°♑	
	1621 Feb	24	04:57	0°♒	
desc. node	1621 Feb	28	05:12	4°♒51'34	
	1621 Mar	20	21:25	0°♓	
	1621 Apr	14	11:34	0°♈	
	1621 May	09	01:01	0°♉	
	1621 Jun	02	13:54	0°♊	
morning set	1621 Jun	09	21:29	8°♊57'12	
asc. node	1621 Jun	21	08:42	23°♊00'27	
	1621 Jun	27	01:28	0°♋	
max. Earth dist.	1621 Jul	14	01:57	20°♋55'10	1.73440 AU
superior conj	1621 Jul	16	07:51	23°♋41'05	0°54'40
minimum elong	1621 Jul	15	23:13	23°♋14'33	0°54'21
	1621 Jul	21	10:50	0°♌	
	1621 Aug	14	17:54	0°♍	
evening rise	1621 Aug	21	05:36	8°♍01'39	
	1621 Sep	07	23:32	0°♎	
	1621 Oct	02	04:58	0°♏	
desc. node	1621 Oct	10	21:57	10°♏46'19	
	1621 Oct	26	11:20	0°♐	
	1621 Nov	19	19:41	0°♑	
	1621 Dec	14	08:35	0°♒	
	1622 Jan	08	08:24	0°♓	
asc. node	1622 Feb	01	01:17	27°♓21'09	
	1622 Feb	03	10:20	0°♈	
evening max el	1622 Feb	23	18:06	21°♈33'13	46°26'57
	1622 Mar	04	12:24	0°♉	
greatest brilliancy	1622 Apr	03	18:57	21°♉17'44	-4.8m
retrograde	1622 Apr	14	15:24	23°♉27'44	
evening set	1622 Apr	30	11:30	18°♉32'40	
inferior conj	1622 May	05	23:01	15°♉11'47	4°01'46
minimum elong	1622 May	06	06:57	14°♉59'17	3°59'40
min. Earth dist.	1622 May	05	23:54	15°♉10'24	0.28734 AU
morning rise	1622 May	12	02:47	11°♉28'58	
desc. node	1622 May	23	14:33	7°♉14'57	
direct	1622 May	27	09:41	6°♉57'45	
greatest brilliancy	1622 Jun	06	10:52	8°♉47'50	-4.7m
	1622 Jul	07	21:41	0°♊	
morning max el	1622 Jul	15	04:38	6°♊44'31	45°43'53
	1622 Aug	07	00:19	0°♋	
	1622 Sep	02	21:34	0°♌	
asc. node	1622 Sep	13	18:10	12°♌38'19	
	1622 Sep	28	08:54	0°♍	
	1622 Oct	23	00:45	0°♎	
	1622 Nov	16	05:26	0°♏	
	1622 Dec	10	04:38	0°♐	
desc. node	1623 Jan	03	07:33	0°♑17'40	
	1623 Jan	03	01:55	0°♑	
morning set	1623 Jan	13	18:46	13°♑26'36	
	1623 Jan	26	23:18	0°♒	
	1623 Feb	19	21:59	0°♓	
superior conj	1623 Feb	24	03:22	5°♓16'51	-1°25'18
minimum elong	1623 Feb	24	00:21	5°♓07'23	1°25'17
max. Earth dist.	1623 Feb	28	05:07	10°♓22'07	1.71849 AU
	1623 Mar	15	23:11	0°♈	
evening rise	1623 Apr	04	20:10	24°♈39'00	
	1623 Apr	09	04:03	0°♉	
asc. node	1623 Apr	26	10:59	21°♉17'21	
	1623 May	03	13:24	0°♊	
	1623 May	28	03:46	0°♋	
	1623 Jun	22	00:06	0°♌	
	1623 Jul	17	04:53	0°♍	
	1623 Aug	11	23:23	0°♎	
desc. node	1623 Aug	16	00:10	4°♎36'19	
	1623 Sep	07	19:09	0°♏	
evening max el	1623 Sep	30	04:40	23°♏16'01	46°44'04
	1623 Oct	07	05:33	0°♐	
greatest brilliancy	1623 Nov	09	13:26	23°♐23'07	-4.9m
retrograde	1623 Nov	19	05:30	25°♐08'05	
evening set	1623 Dec	03	12:21	21°♐06'03	
asc. node	1623 Dec	07	03:38	19°♐02'10	
inferior conj	1623 Dec	09	17:42	17°♐28'13	0°40'25
minimum elong	1623 Dec	09	16:09	17°♐30'35	0°39'55
min. Earth dist.	1623 Dec	09	15:01	17°♐32'18	0.26403 AU
morning rise	1623 Dec	15	19:59	13°♐55'01	
direct	1623 Dec	30	03:10	9°♐51'43	
greatest brilliancy	1624 Jan	09	03:07	11°♐45'50	-4.9m
	1624 Feb	05	04:19	0°♑	
morning max el	1624 Feb	18	11:24	12°♑38'38	46°47'01
	1624 Mar	06	01:38	0°♒	
desc. node	1624 Mar	27	17:02	24°♒07'09	
	1624 Apr	01	20:28	0°♓	
	1624 Apr	27	14:50	0°♈	
	1624 May	22	22:09	0°♉	
	1624 Jun	16	22:49	0°♊	
	1624 Jul	11	17:41	0°♋	
asc. node	1624 Jul	18	20:29	8°♋40'20	
	1624 Aug	05	06:29	0°♌	
morning set	1624 Aug	16	15:53	14°♌02'09	
	1624 Aug	29	13:29	0°♍	
max. Earth dist.	1624 Sep	19	02:17	25°♍32'35	1.72163 AU
superior conj	1624 Sep	22	13:23	29°♍51'44	1°21'35
minimum elong	1624 Sep	22	18:35	0°♎07'56	1°21'30
	1624 Sep	22	16:02	0°♎	
	1624 Oct	16	16:05	0°♏	
evening rise	1624 Oct	31	09:00	18°♏24'26	
desc. node	1624 Nov	07	09:56	27°♏13'15	
	1624 Nov	09	15:12	0°♐	
	1624 Dec	03	14:23	0°♑	
	1624 Dec	27	14:43	0°♒	
	1625 Jan	20	18:28	0°♓	
	1625 Feb	14	05:45	0°♈	
asc. node	1625 Feb	28	13:09	17°♈14'27	
	1625 Mar	11	07:18	0°♉	
	1625 Apr	06	11:15	0°♊	
	1625 May	05	01:55	0°♋	
evening max el	1625 May	05	10:46	0°♋21'24	45°28'44
greatest brilliancy	1625 Jun	12	07:43	28°♋09'55	-4.7m
	1625 Jun	19	10:42	0°♌	
desc. node	1625 Jun	20	02:35	0°♌04'57	
retrograde	1625 Jun	23	01:58	0°♌15'04	
	1625 Jun	26	15:52	30°℞♋	
evening set	1625 Jul	08	17:45	25°♋35'29	

inferior conj	1625 Jul 14	14:30	22°♋04'08	-5°20'40	
minimum elong	1625 Jul 14	04:57	22°♋19'04	5°18'28	
min. Earth dist.	1625 Jul 14	14:17	22°♋04'29	0.28979 AU	
morning rise	1625 Jul 19	15:53	18°♋59'10		
direct	1625 Aug 05	05:43	13°♋46'48		
greatest brilliancy	1625 Aug 15	20:15	15°♋47'35	-4.7m	
	1625 Sep 07	14:52	0°♌		
morning max el	1625 Sep 23	14:19	14°♌29'06	46°10'37	
	1625 Oct 08	16:05	0°♍		
asc. node	1625 Oct 11	05:56	2°♍46'43		
	1625 Nov 04	08:00	0°♎		
	1625 Nov 29	11:38	0°♏		
	1625 Dec 23	23:23	0°♐		
	1626 Jan 17	04:29	0°♑		
desc. node	1626 Jan 30	19:20	16°♑56'01		
	1626 Feb 10	07:26	0°♒		
	1626 Mar 06	10:29	0°♓		
morning set	1626 Mar 30	08:22	29°♓39'39		
	1626 Mar 30	14:57	0°♈		
	1626 Apr 23	21:29	0°♉		
superior conj	1626 May 07	07:09	16°♉31'10	-0°38'16	
minimum elong	1626 May 07	14:40	16°♉54'21	0°37'56	
max. Earth dist.	1626 May 09	01:15	18°♉40'45	1.73303 AU	
	1626 May 18	06:06	0°♊		
asc. node	1626 May 23	22:55	7°♊00'33		
	1626 Jun 11	16:13	0°♋		
evening rise	1626 Jun 13	03:55	1°♋49'30		
	1626 Jul 06	03:26	0°♌		
	1626 Jul 30	16:05	0°♍		
	1626 Aug 24	07:27	0°♎		
desc. node	1626 Sep 12	12:05	23°♎12'57		
	1626 Sep 18	03:20	0°♏		
	1626 Oct 13	06:23	0°♐		
	1626 Nov 07	22:33	0°♑		
	1626 Dec 04	22:45	0°♒		
evening max el	1626 Dec 11	17:03	7°♒02'07	47°19'16	
asc. node	1627 Jan 03	15:29	28°♒07'10		
	1627 Jan 06	02:41	0°♓		
greatest brilliancy	1627 Jan 21	09:45	8°♓50'57	-4.9m	
retrograde	1627 Jan 31	17:42	10°♓54'13		
evening set	1627 Feb 18	09:34	4°♓50'05		
min. Earth dist.	1627 Feb 20	22:04	3°♓16'36	0.27596 AU	
inferior conj	1627 Feb 21	15:45	2°♓48'56	8°42'37	
minimum elong	1627 Feb 21	12:25	2°♓54'09	8°42'28	
morning rise	1627 Feb 24	15:26	0°♓57'54		
	1627 Feb 26	06:27	30°♑♒		
direct	1627 Mar 14	08:19	24°♒54'58		
greatest brilliancy	1627 Mar 23	10:07	26°♒27'12	-4.8m	
	1627 Mar 31	11:29	0°♓		
desc. node	1627 Apr 25	04:48	18°♓43'24		
morning max el	1627 May 02	16:06	25°♓44'46	46°04'20	
	1627 May 07	00:06	0°♈		
	1627 Jun 04	09:38	0°♉		
	1627 Jun 30	22:49	0°♊		
	1627 Jul 26	14:25	0°♋		
asc. node	1627 Aug 16	08:17	24°♋49'12		
	1627 Aug 20	15:06	0°♌		
	1627 Sep 14	04:08	0°♍		
	1627 Oct 08	08:37	0°♎		
morning set	1627 Oct 27	05:56	23°♎37'33		
	1627 Nov 01	07:52	0°♏		
	1627 Nov 25	04:38	0°♐		
desc. node	1627 Dec 05	21:47	13°♐29'02		
superior conj	1627 Dec 06	09:21	14°♐05'27	-0°01'10	
minimum elong	1627 Dec 06	09:03	14°♐04'30	0°01'10	
behind sun begin	1627 Dec 05	06:50	12°♐41'59		
behind sun end	1627 Dec 07	11:16	15°♐27'01		
max. Earth dist.	1627 Dec 06	10:18	14°♐08'26	1.71082 AU	
	1627 Dec 19	00:44	0°♑		
	1628 Jan 11	21:26	0°♒		
evening rise	1628 Jan 16	22:32	6°♒20'03		
	1628 Feb 04	20:01	0°♓		
	1628 Feb 28	22:25	0°♈		
	1628 Mar 24	07:06	0°♉		
asc. node	1628 Mar 28	01:09	4°♉34'56		
	1628 Apr 18	01:02	0°♊		
	1628 May 13	08:19	0°♋		
	1628 Jun 08	13:11	0°♌		
	1628 Jul 06	13:53	0°♍		
evening max el	1628 Jul 15	13:41	8°♍51'04	45°35'59	
desc. node	1628 Jul 17	14:22	10°♍46'19		
	1628 Aug 10	02:13	0°♎		
greatest brilliancy	1628 Aug 24	00:42	7°♎01'51	-4.8m	
retrograde	1628 Sep 02	09:11	8°♎36'42		
evening set	1628 Sep 20	04:02	2°♎42'10		
inferior conj	1628 Sep 23	10:04	0°♎43'54	-8°26'12	
minimum elong	1628 Sep 23	15:47	0°♎35'08	8°25'43	
min. Earth dist.	1628 Sep 24	06:04	0°♎13'12	0.27931 AU	
	1628 Sep 24	14:42	30°♑♍		
morning rise	1628 Sep 27	03:18	28°♍28'44		
direct	1628 Oct 14	14:27	22°♍40'54		
greatest brilliancy	1628 Oct 25	17:35	24°♍59'57	-4.9m	
	1628 Nov 04	06:32	0°♎		
asc. node	1628 Nov 07	17:49	2°♎20'06		
morning max el	1628 Dec 04	07:15	25°♎55'51	46°51'23	
	1628 Dec 08	05:55	0°♏		
	1629 Jan 04	08:26	0°♐		
	1629 Jan 29	20:16	0°♑		
	1629 Feb 23	17:45	0°♒		
desc. node	1629 Feb 27	07:12	4°♒19'13		
	1629 Mar 20	09:29	0°♓		
	1629 Apr 13	23:08	0°♈		
	1629 May 08	12:14	0°♉		
	1629 Jun 02	00:55	0°♊		
morning set	1629 Jun 07	15:42	6°♊52'28		
asc. node	1629 Jun 20	10:44	22°♊33'08		
	1629 Jun 26	12:23	0°♋		
max. Earth dist.	1629 Jul 11	22:59	18°♋58'42	1.73462 AU	
superior conj	1629 Jul 14	02:21	21°♋36'47	0°52'14	
minimum elong	1629 Jul 13	17:54	21°♋10'44	0°51'55	
	1629 Jul 20	21:44	0°♌		
	1629 Aug 14	04:53	0°♍		
evening rise	1629 Aug 18	23:19	5°♍53'52		
	1629 Sep 07	10:41	0°♎		
	1629 Oct 01	16:26	0°♏		
desc. node	1629 Oct 10	00:05	10°♏17'05		
	1629 Oct 25	23:11	0°♐		
	1629 Nov 19	08:04	0°♑		
	1629 Dec 13	21:42	0°♒		
	1630 Jan 07	22:46	0°♓		
asc. node	1630 Jan 31	03:19	26°♓40'15		
	1630 Feb 03	03:26	0°♈		
evening max el	1630 Feb 21	09:58	19°♈18'19	46°29'28	
	1630 Mar 04	14:57	0°♉		
greatest brilliancy	1630 Apr 01	12:14	19°♉07'31	-4.8m	
retrograde	1630 Apr 12	07:50	21°♉16'38		
evening set	1630 Apr 28	06:18	16°♉18'34		
inferior conj	1630 May 03	15:19	13°♉00'52	4°19'25	
minimum elong	1630 May 03	23:40	12°♉47'42	4°17'17	
min. Earth dist.	1630 May 03	15:58	12°♉59'51	0.28711 AU	
morning rise	1630 May 09	17:27	9°♉20'04		

desc. node	1630 May 22 16:38	4°♉54'11	
direct	1630 May 25 02:00	4°♉47'26	
greatest brilliancy	1630 Jun 04 01:37	6°♉36'10	-4.7m
	1630 Jul 07 23:09	0°♊	
morning max el	1630 Jul 12 20:08	4°♊33'24	45°43'37
	1630 Aug 06 16:50	0°♋	
	1630 Sep 02 11:20	0°♌	
asc. node	1630 Sep 12 20:15	12°♌05'54	
	1630 Sep 27 21:26	0°♍	
	1630 Oct 22 12:38	0°♎	
	1630 Nov 15 17:00	0°♏	
	1630 Dec 09 16:02	0°♐	
desc. node	1631 Jan 02 09:29	29°♐48'12	
	1631 Jan 02 13:14	0°♑	
morning set	1631 Jan 11 04:18	10°♑50'28	
	1631 Jan 26 10:31	0°♒	
	1631 Feb 19 09:07	0°♓	
superior conj	1631 Feb 21 14:58	2°♓48'20	-1°24'44
minimum elong	1631 Feb 21 10:57	2°♓35'48	1°24'42
max. Earth dist.	1631 Feb 25 17:36	7°♓56'29	1.71793 AU
	1631 Mar 15 10:15	0°♈	
evening rise	1631 Apr 02 10:10	22°♈19'40	
	1631 Apr 08 15:06	0°♉	
asc. node	1631 Apr 25 13:10	20°♉50'01	
	1631 May 03 00:32	0°♊	
	1631 May 27 15:08	0°♋	
	1631 Jun 21 11:58	0°♌	
	1631 Jul 16 17:39	0°♍	
	1631 Aug 11 13:47	0°♎	
desc. node	1631 Aug 15 02:08	4°♎00'05	
	1631 Sep 07 12:56	0°♏	
evening max el	1631 Sep 27 17:14	20°♏50'40	46°41'37
	1631 Oct 07 09:44	0°♐	
greatest brilliancy	1631 Nov 07 03:17	20°♐55'46	-4.9m
retrograde	1631 Nov 16 16:58	22°♐38'51	
evening set	1631 Dec 01 01:08	18°♐36'20	
asc. node	1631 Dec 06 05:37	15°♐36'38	
inferior conj	1631 Dec 07 05:56	14°♐59'34	0°15'52
minimum elong	1631 Dec 07 05:20	15°♐00'30	0°15'39
transit middle	1631 Dec 07 05:20	15°♐00'30	0°15'39
transit begin	1631 Dec 07 03:52	15°♐02'44	
transit end	1631 Dec 07 06:48	14°♐58'16	
min. Earth dist.	1631 Dec 07 05:13	15°♐00'40	0.26410 AU
morning rise	1631 Dec 13 09:24	11°♐24'32	
direct	1631 Dec 27 15:02	7°♐22'40	
greatest brilliancy	1632 Jan 06 17:52	9°♐18'59	-4.9m
	1632 Feb 05 10:15	0°♑	
morning max el	1632 Feb 15 23:32	10°♑10'11	46°48'06
	1632 Mar 05 19:55	0°♒	
desc. node	1632 Mar 26 19:09	23°♒29'36	
	1632 Apr 01 11:13	0°♓	
	1632 Apr 27 03:54	0°♈	
	1632 May 22 10:14	0°♉	
	1632 Jun 16 10:17	0°♊	
	1632 Jul 11 04:47	0°♋	
asc. node	1632 Jul 17 22:30	8°♋12'50	
	1632 Aug 04 17:23	0°♌	
morning set	1632 Aug 14 09:11	11°♌53'51	
	1632 Aug 29 00:20	0°♍	
max. Earth dist.	1632 Sep 16 18:24	23°♍19'12	1.72219 AU
superior conj	1632 Sep 20 05:19	27°♍37'43	1°22'27
minimum elong	1632 Sep 20 09:49	27°♍51'44	1°22'24
	1632 Sep 22 02:57	0°♎	
	1632 Oct 16 03:07	0°♏	
evening rise	1632 Oct 28 21:28	15°♏58'30	
desc. node	1632 Nov 06 12:03	26°♏44'56	
	1632 Nov 09 02:22	0°♐	
	1632 Dec 03 01:43	0°♑	
	1632 Dec 27 02:16	0°♒	
	1633 Jan 20 06:21	0°♓	
	1633 Feb 13 18:11	0°♈	
asc. node	1633 Feb 27 15:15	16°♈42'10	
	1633 Mar 10 20:46	0°♉	
	1633 Apr 06 02:57	0°♊	
evening max el	1633 May 03 01:45	28°♊08'18	45°29'59
	1633 May 05 00:21	0°♋	
greatest brilliancy	1633 Jun 09 22:48	25°♋59'53	-4.7m
desc. node	1633 Jun 19 04:32	28°♋03'44	
retrograde	1633 Jun 20 18:27	28°♋06'37	
evening set	1633 Jul 06 07:54	23°♋29'18	
inferior conj	1633 Jul 12 06:48	19°♋55'10	-5°04'52
minimum elong	1633 Jul 11 21:27	20°♋09'45	5°02'39
min. Earth dist.	1633 Jul 12 06:17	19°♋55'59	0.28986 AU
morning rise	1633 Jul 17 10:48	16°♋46'41	
direct	1633 Aug 02 21:45	11°♋37'34	
greatest brilliancy	1633 Aug 13 12:39	13°♋38'43	-4.7m
	1633 Sep 07 21:27	0°♌	
morning max el	1633 Sep 21 05:57	12°♌16'10	46°09'10
	1633 Oct 08 09:37	0°♍	
asc. node	1633 Oct 10 08:09	2°♍06'11	
	1633 Nov 03 22:18	0°♎	
	1633 Nov 29 00:35	0°♏	
	1633 Dec 23 11:36	0°♐	
	1634 Jan 16 16:13	0°♑	
desc. node	1634 Jan 29 21:25	16°♑26'36	
	1634 Feb 09 18:49	0°♒	
	1634 Mar 05 21:38	0°♓	
morning set	1634 Mar 27 22:26	27°♓20'32	
	1634 Mar 30 01:55	0°♈	
	1634 Apr 23 08:19	0°♉	
superior conj	1634 May 04 23:37	14°♉20'55	-0°41'13
minimum elong	1634 May 05 07:37	14°♉45'34	0°40'53
max. Earth dist.	1634 May 06 19:31	16°♉36'03	1.73270 AU
	1634 May 17 16:52	0°♊	
asc. node	1634 May 23 00:56	6°♊33'39	
evening rise	1634 Jun 10 22:27	29°♊46'04	
	1634 Jun 11 03:00	0°♋	
	1634 Jul 05 14:21	0°♌	
	1634 Jul 30 03:18	0°♍	
	1634 Aug 23 19:09	0°♎	
desc. node	1634 Sep 11 14:14	22°♎42'38	
	1634 Sep 17 15:48	0°♏	
	1634 Oct 12 20:01	0°♐	
	1634 Nov 07 14:17	0°♑	
	1634 Dec 04 19:21	0°♒	
evening max el	1634 Dec 09 07:54	4°♒40'26	47°19'38
asc. node	1635 Jan 02 17:32	26°♒52'44	
	1635 Jan 07 01:32	0°♓	
greatest brilliancy	1635 Jan 18 23:37	6°♓27'10	-4.9m
retrograde	1635 Jan 29 08:40	8°♓31'26	
evening set	1635 Feb 15 21:06	2°♓31'16	
min. Earth dist.	1635 Feb 18 10:57	0°♓55'59	0.27540 AU
inferior conj	1635 Feb 19 05:42	0°♓26'41	8°39'01
minimum elong	1635 Feb 19 01:32	0°♓33'12	8°38'45
	1635 Feb 19 22:48	30°℞♒	
morning rise	1635 Feb 22 06:12	28°♒34'47	
direct	1635 Mar 11 22:00	22°♒33'39	
greatest brilliancy	1635 Mar 20 22:39	24°♒05'32	-4.8m
	1635 Apr 02 00:21	0°♓	
desc. node	1635 Apr 24 06:56	17°♓48'03	
morning max el	1635 Apr 30 07:14	23°♓29'41	46°05'41

	1635 May 06 21:03	0°♈	
	1635 Jun 04 00:59	0°♉	
	1635 Jun 30 11:57	0°♊	
	1635 Jul 26 02:24	0°♋	
asc. node	1635 Aug 15 10:26	24°♋21'04	
	1635 Aug 20 02:28	0°♌	
	1635 Sep 13 15:11	0°♍	
	1635 Oct 07 19:32	0°♎	
morning set	1635 Oct 24 19:46	21°♎16'26	
	1635 Oct 31 18:44	0°♏	
	1635 Nov 24 15:31	0°♐	
superior conj	1635 Dec 03 19:41	11°♐32'32	0°02'50
minimum elong	1635 Dec 03 20:26	11°♐34'53	0°02'48
behind sun begin	1635 Dec 02 18:29	10°♐13'15	
behind sun end	1635 Dec 04 22:23	12°♐56'31	
max. Earth dist.	1635 Dec 03 18:54	11°♐30'02	1.71095 AU
desc. node	1635 Dec 04 23:45	13°♐00'51	
	1635 Dec 18 11:42	0°♑	
	1636 Jan 11 08:27	0°♒	
evening rise	1636 Jan 14 08:32	3°♒46'14	
	1636 Feb 04 07:06	0°♓	
	1636 Feb 28 09:35	0°♈	
	1636 Mar 23 18:30	0°♉	
asc. node	1636 Mar 27 03:18	4°♉06'34	
	1636 Apr 17 12:55	0°♊	
	1636 May 12 21:12	0°♋	
	1636 Jun 08 04:04	0°♌	
	1636 Jul 06 09:57	0°♍	
evening max el	1636 Jul 13 04:52	6°♍38'08	45°34'30
desc. node	1636 Jul 16 16:26	9°♍54'47	
	1636 Aug 11 07:42	0°♎	
greatest brilliancy	1636 Aug 21 13:29	4°♎44'37	-4.8m
retrograde	1636 Aug 30 22:52	6°♎19'49	
evening set	1636 Sep 17 19:41	0°♎23'00	
	1636 Sep 18 11:04	30°℞♍	
inferior conj	1636 Sep 21 00:21	28°♍26'26	-8°31'21
minimum elong	1636 Sep 21 05:17	28°♍18'50	8°31'00
min. Earth dist.	1636 Sep 21 19:34	27°♍56'52	0.27991 AU
morning rise	1636 Sep 24 14:42	26°♍15'13	
direct	1636 Oct 12 05:44	20°♍22'51	
greatest brilliancy	1636 Oct 23 07:40	22°♍40'24	-4.9m
	1636 Nov 05 08:05	0°♎	
asc. node	1636 Nov 06 19:47	1°♎04'10	
morning max el	1636 Dec 01 21:16	23°♎33'26	46°50'21
	1636 Dec 08 02:12	0°♏	
	1637 Jan 03 23:54	0°♐	
	1637 Jan 29 09:47	0°♑	
	1637 Feb 23 06:14	0°♒	
desc. node	1637 Feb 26 09:19	3°♒48'09	
	1637 Mar 19 21:17	0°♓	
	1637 Apr 13 10:26	0°♈	
	1637 May 07 23:11	0°♉	
	1637 Jun 01 11:37	0°♊	
morning set	1637 Jun 05 09:36	4°♊47'39	
asc. node	1637 Jun 19 12:42	22°♊06'37	
	1637 Jun 25 22:59	0°♋	
max. Earth dist.	1637 Jul 09 18:42	16°♋59'10	1.73484 AU
superior conj	1637 Jul 11 20:43	19°♋32'59	0°49'44
minimum elong	1637 Jul 11 12:26	19°♋07'32	0°49'24
	1637 Jul 20 08:21	0°♌	
	1637 Aug 13 15:35	0°♍	
evening rise	1637 Aug 16 17:03	3°♍47'05	
	1637 Sep 06 21:34	0°♎	
	1637 Oct 01 03:35	0°♏	
desc. node	1637 Oct 09 02:10	9°♏48'41	
	1637 Oct 25 10:42	0°♐	
	1637 Nov 18 20:06	0°♑	
	1637 Dec 13 10:29	0°♒	
	1638 Jan 07 12:52	0°♓	
asc. node	1638 Jan 30 05:24	26°♓00'02	
	1638 Feb 02 20:32	0°♈	
evening max el	1638 Feb 19 00:45	17°♈01'13	46°31'45
	1638 Mar 04 18:54	0°♉	
greatest brilliancy	1638 Mar 30 05:51	16°♉57'41	-4.8m
retrograde	1638 Apr 09 23:43	19°♉05'24	
evening set	1638 Apr 26 00:56	14°♉04'09	
inferior conj	1638 May 01 07:25	10°♉49'55	4°36'54
minimum elong	1638 May 01 16:07	10°♉36'10	4°34'43
min. Earth dist.	1638 May 01 08:08	10°♉48'47	0.28688 AU
morning rise	1638 May 07 07:41	7°♉11'19	
desc. node	1638 May 21 18:34	2°♉38'03	
direct	1638 May 22 17:35	2°♉36'59	
greatest brilliancy	1638 Jun 01 16:39	4°♉24'57	-4.7m
	1638 Jul 07 23:08	0°♊	
morning max el	1638 Jul 10 10:41	2°♊20'32	45°43'29
	1638 Aug 06 08:47	0°♋	
	1638 Sep 02 00:40	0°♌	
asc. node	1638 Sep 11 22:20	11°♌34'28	
	1638 Sep 27 09:35	0°♍	
	1638 Oct 22 00:12	0°♎	
	1638 Nov 15 04:14	0°♏	
	1638 Dec 09 03:06	0°♐	
desc. node	1639 Jan 01 11:34	29°♐20'24	
	1639 Jan 02 00:10	0°♑	
morning set	1639 Jan 08 14:10	8°♑16'29	
	1639 Jan 25 21:21	0°♒	
	1639 Feb 18 19:53	0°♓	
superior conj	1639 Feb 19 02:42	0°♓21'20	-1°24'00
minimum elong	1639 Feb 18 21:43	0°♓05'44	1°23'56
max. Earth dist.	1639 Feb 23 04:33	5°♓27'07	1.71741 AU
	1639 Mar 14 20:59	0°♈	
evening rise	1639 Mar 30 23:58	20°♈00'33	
	1639 Apr 08 01:52	0°♉	
asc. node	1639 Apr 24 15:06	20°♉22'42	
	1639 May 02 11:26	0°♊	
	1639 May 27 02:17	0°♋	
	1639 Jun 20 23:38	0°♌	
	1639 Jul 16 06:15	0°♍	
	1639 Aug 11 04:07	0°♎	
desc. node	1639 Aug 14 04:18	3°♎24'46	
	1639 Sep 07 06:54	0°♏	
evening max el	1639 Sep 25 05:09	18°♏24'37	46°39'10
	1639 Oct 07 15:33	0°♐	
greatest brilliancy	1639 Nov 04 16:55	18°♐28'45	-4.9m
retrograde	1639 Nov 14 04:41	20°♐10'28	
evening set	1639 Nov 28 14:01	16°♐06'45	
inferior conj	1639 Dec 04 18:06	12°♐31'33	-0°08'50
minimum elong	1639 Dec 04 18:26	12°♐31'02	0°08'44
transit middle	1639 Dec 04 18:26	12°♐31'02	0°08'44
transit begin	1639 Dec 04 14:57	12°♐36'20	
transit end	1639 Dec 04 21:55	12°♐25'44	
min. Earth dist.	1639 Dec 04 19:18	12°♐29'42	0.26419 AU
asc. node	1639 Dec 05 07:39	12°♐10'55	
morning rise	1639 Dec 10 22:35	8°♐55'11	
direct	1639 Dec 25 02:48	4°♐54'01	
greatest brilliancy	1640 Jan 04 08:30	6°♐52'52	-4.9m
	1640 Feb 05 13:51	0°♑	
morning max el	1640 Feb 13 12:24	7°♑44'34	46°49'21
	1640 Mar 05 13:23	0°♒	
desc. node	1640 Mar 25 21:14	22°♒53'20	
	1640 Apr 01 01:27	0°♓	

	1640 Apr 26 16:35	0°♈	
	1640 May 21 22:02	0°♉	
	1640 Jun 15 21:33	0°♊	
	1640 Jul 10 15:41	0°♋	
asc. node	1640 Jul 17 00:39	7°♋46'16	
	1640 Aug 04 04:06	0°♌	
morning set	1640 Aug 12 02:23	9°♌45'50	
	1640 Aug 28 10:59	0°♍	
max. Earth dist.	1640 Sep 14 12:13	21°♍11'47	1.72274 AU
superior conj	1640 Sep 17 21:11	25°♍24'07	1°23'10
minimum elong	1640 Sep 18 00:58	25°♍35'54	1°23'09
	1640 Sep 21 13:40	0°♎	
	1640 Oct 15 13:59	0°♏	
evening rise	1640 Oct 26 10:02	13°♏33'26	
desc. node	1640 Nov 05 13:58	26°♏16'30	
	1640 Nov 08 13:25	0°♐	
	1640 Dec 02 12:56	0°♑	
	1640 Dec 26 13:42	0°♒	
	1641 Jan 19 18:04	0°♓	
	1641 Feb 13 06:26	0°♈	
asc. node	1641 Feb 26 17:23	16°♈10'39	
	1641 Mar 10 10:04	0°♉	
	1641 Apr 05 18:37	0°♊	
evening max el	1641 Apr 30 17:34	25°♊57'57	45°31'11
	1641 May 04 23:28	0°♋	
greatest brilliancy	1641 Jun 07 13:44	23°♋50'14	-4.7m
retrograde	1641 Jun 18 11:19	25°♋58'37	
desc. node	1641 Jun 18 06:38	25°♋58'34	
evening set	1641 Jul 03 22:17	21°♋23'26	
inferior conj	1641 Jul 09 23:08	17°♋46'35	-4°48'36
minimum elong	1641 Jul 09 14:05	18°♋00'42	4°46'23
min. Earth dist.	1641 Jul 09 22:08	17°♋48'08	0.28994 AU
morning rise	1641 Jul 15 05:43	14°♋34'39	
direct	1641 Jul 31 14:19	9°♋28'48	
greatest brilliancy	1641 Aug 11 04:35	11°♋29'43	-4.7m
	1641 Sep 08 01:53	0°♌	
morning max el	1641 Sep 18 22:21	10°♌05'34	46°07'41
	1641 Oct 08 02:43	0°♍	
asc. node	1641 Oct 09 10:08	1°♍25'42	
	1641 Nov 03 12:22	0°♎	
	1641 Nov 28 13:22	0°♏	
	1641 Dec 22 23:41	0°♐	
	1642 Jan 16 03:52	0°♑	
desc. node	1642 Jan 28 23:29	15°♑57'15	
	1642 Feb 09 06:10	0°♒	
	1642 Mar 05 08:43	0°♓	
morning set	1642 Mar 25 12:43	25°♓02'14	
	1642 Mar 29 12:47	0°♈	
	1642 Apr 22 19:03	0°♉	
superior conj	1642 May 02 16:18	12°♉11'32	-0°44'06
minimum elong	1642 May 03 00:44	12°♉37'31	0°43'44
max. Earth dist.	1642 May 04 16:08	14°♉38'52	1.73235 AU
	1642 May 17 03:31	0°♊	
asc. node	1642 May 22 02:58	6°♊07'07	
evening rise	1642 Jun 08 17:12	27°♊43'31	
	1642 Jun 10 13:43	0°♋	
	1642 Jul 05 01:15	0°♌	
	1642 Jul 29 14:33	0°♍	
	1642 Aug 23 06:55	0°♎	
desc. node	1642 Sep 10 16:14	22°♎11'38	
	1642 Sep 17 04:21	0°♏	
	1642 Oct 12 09:49	0°♐	
	1642 Nov 07 06:20	0°♑	
	1642 Dec 04 16:46	0°♒	
evening max el	1642 Dec 06 23:22	2°♒20'02	47°19'48
asc. node	1643 Jan 01 19:41	25°♒35'46	
	1643 Jan 08 09:33	0°♓	
greatest brilliancy	1643 Jan 16 13:27	4°♓02'46	-4.9m
retrograde	1643 Jan 26 23:33	6°♓07'38	
evening set	1643 Feb 13 08:13	0°♓12'10	
	1643 Feb 13 16:16	30°℞♒	
min. Earth dist.	1643 Feb 15 23:42	28°♒34'29	0.27479 AU
inferior conj	1643 Feb 16 19:30	28°♒03'35	8°34'28
minimum elong	1643 Feb 16 14:33	28°♒11'18	8°34'06
morning rise	1643 Feb 19 21:09	26°♒10'08	
direct	1643 Mar 09 11:49	20°♒11'43	
greatest brilliancy	1643 Mar 18 10:44	21°♒42'37	-4.8m
	1643 Apr 03 02:34	0°♓	
desc. node	1643 Apr 23 08:49	16°♓53'05	
morning max el	1643 Apr 27 22:03	21°♓13'38	46°07'12
	1643 May 06 17:20	0°♈	
	1643 Jun 03 16:07	0°♉	
	1643 Jun 30 00:59	0°♊	
	1643 Jul 25 14:23	0°♋	
asc. node	1643 Aug 14 12:28	23°♋52'23	
	1643 Aug 19 13:55	0°♌	
	1643 Sep 13 02:21	0°♍	
	1643 Oct 07 06:36	0°♎	
morning set	1643 Oct 22 09:35	18°♎54'49	
	1643 Oct 31 05:46	0°♏	
	1643 Nov 24 02:35	0°♐	
superior conj	1643 Dec 01 06:03	8°♐59'18	0°06'47
minimum elong	1643 Dec 01 07:50	9°♐04'53	0°06'41
behind sun begin	1643 Nov 30 07:43	7°♐49'03	
behind sun end	1643 Dec 02 07:56	10°♐20'44	
max. Earth dist.	1643 Dec 01 01:34	8°♐45'11	1.71108 AU
desc. node	1643 Dec 04 01:51	12°♐32'32	
	1643 Dec 17 22:48	0°♑	
	1644 Jan 10 19:38	0°♒	
evening rise	1644 Jan 11 18:25	1°♒11'30	
	1644 Feb 03 18:22	0°♓	
	1644 Feb 27 20:58	0°♈	
	1644 Mar 23 06:07	0°♉	
asc. node	1644 Mar 26 05:15	3°♉36'57	
	1644 Apr 17 01:02	0°♊	
	1644 May 12 10:17	0°♋	
	1644 Jun 07 19:17	0°♌	
	1644 Jul 06 06:49	0°♍	
evening max el	1644 Jul 10 19:24	4°♍23'23	45°32'59
desc. node	1644 Jul 15 18:32	9°♍02'01	
	1644 Aug 13 02:50	0°♎	
greatest brilliancy	1644 Aug 19 02:50	2°♎27'47	-4.8m
retrograde	1644 Aug 28 12:13	4°♎02'56	
	1644 Sep 12 01:07	30°℞♍	
evening set	1644 Sep 15 11:08	28°♍04'15	
inferior conj	1644 Sep 18 14:49	26°♍08'55	-8°35'37
minimum elong	1644 Sep 18 18:57	26°♍02'32	8°35'22
min. Earth dist.	1644 Sep 19 09:34	25°♍39'59	0.28055 AU
morning rise	1644 Sep 22 02:33	24°♍01'11	
direct	1644 Oct 09 20:37	18°♍04'29	
greatest brilliancy	1644 Oct 20 22:30	20°♍21'09	-4.9m
asc. node	1644 Nov 05 21:49	29°♍49'43	
	1644 Nov 06 03:14	0°♎	
morning max el	1644 Nov 29 10:43	21°♎08'35	46°49'17
	1644 Dec 07 22:14	0°♏	
	1645 Jan 03 15:28	0°♐	
	1645 Jan 28 23:30	0°♑	
	1645 Feb 22 18:55	0°♒	
desc. node	1645 Feb 25 11:21	3°♒16'00	
	1645 Mar 19 09:19	0°♓	
	1645 Apr 12 22:00	0°♈	

	1645 May 07 10:24	0°♉	
	1645 May 31 22:36	0°♊	
morning set	1645 Jun 03 03:41	2°♊42'30	
asc. node	1645 Jun 18 14:53	21°♊39'57	
	1645 Jun 25 09:50	0°♋	
max. Earth dist.	1645 Jul 07 14:29	14°♋59'08	1.73501 AU
superior conj	1645 Jul 09 15:24	17°♋29'34	0°47'11
minimum elong	1645 Jul 09 07:21	17°♋04'49	0°46'51
	1645 Jul 19 19:11	0°♌	
	1645 Aug 13 02:31	0°♍	
evening rise	1645 Aug 14 11:13	1°♍41'04	
	1645 Sep 06 08:43	0°♎	
	1645 Sep 30 15:04	0°♏	
desc. node	1645 Oct 08 04:08	9°♏18'56	
	1645 Oct 24 22:38	0°♐	
	1645 Nov 18 08:36	0°♑	
	1645 Dec 12 23:46	0°♒	
	1646 Jan 07 03:34	0°♓	
asc. node	1646 Jan 29 07:28	25°♓18'02	
	1646 Feb 02 14:28	0°♈	
evening max el	1646 Feb 16 14:39	14°♈40'29	46°34'11
	1646 Mar 05 01:23	0°♉	
greatest brilliancy	1646 Mar 27 23:24	14°♉46'22	-4.8m
retrograde	1646 Apr 07 15:31	16°♉52'59	
evening set	1646 Apr 23 19:37	11°♉48'07	
inferior conj	1646 Apr 28 23:30	8°♉37'43	4°54'05
minimum elong	1646 Apr 29 08:31	8°♉23'27	4°51'51
min. Earth dist.	1646 Apr 29 00:27	8°♉36'12	0.28664 AU
morning rise	1646 May 04 21:44	5°♉01'39	
direct	1646 May 20 08:39	0°♉25'05	
desc. node	1646 May 20 20:44	0°♉25'22	
greatest brilliancy	1646 May 30 08:06	2°♉12'57	-4.7m
	1646 Jul 07 22:26	0°♊	
morning max el	1646 Jul 08 01:31	0°♊07'19	45°43'39
	1646 Aug 06 00:45	0°♋	
	1646 Sep 01 14:09	0°♌	
asc. node	1646 Sep 11 00:20	11°♌02'09	
	1646 Sep 26 21:57	0°♍	
	1646 Oct 21 12:01	0°♎	
	1646 Nov 14 15:48	0°♏	
	1646 Dec 08 14:32	0°♐	
desc. node	1646 Dec 31 13:43	28°♐51'26	
	1647 Jan 01 11:32	0°♑	
morning set	1647 Jan 05 23:39	5°♑39'48	
	1647 Jan 25 08:38	0°♒	
superior conj	1647 Feb 16 13:52	27°♒51'07	-1°23'04
minimum elong	1647 Feb 16 07:54	27°♒32'28	1°23'00
	1647 Feb 18 07:04	0°♓	
max. Earth dist.	1647 Feb 20 11:47	2°♓44'48	1.71689 AU
	1647 Mar 14 08:08	0°♈	
evening rise	1647 Mar 28 13:19	17°♈38'42	
	1647 Apr 07 13:03	0°♉	
asc. node	1647 Apr 23 17:11	19°♉54'37	
	1647 May 01 22:44	0°♊	
	1647 May 26 13:52	0°♋	
	1647 Jun 20 11:43	0°♌	
	1647 Jul 15 19:16	0°♍	
	1647 Aug 10 18:54	0°♎	
desc. node	1647 Aug 13 06:19	2°♎47'59	
	1647 Sep 07 01:34	0°♏	
evening max el	1647 Sep 22 17:36	15°♏59'32	46°36'47
	1647 Oct 07 23:58	0°♐	
greatest brilliancy	1647 Nov 02 05:51	16°♐00'29	-4.9m
retrograde	1647 Nov 11 16:47	17°♐41'36	
evening set	1647 Nov 26 03:09	13°♐36'04	
inferior conj	1647 Dec 02 06:15	10°♐02'36	-0°33'31
minimum elong	1647 Dec 02 07:33	10°♐00'38	0°33'06
min. Earth dist.	1647 Dec 02 09:05	9°♐58'18	0.26441 AU
asc. node	1647 Dec 04 09:48	8°♐44'41	
morning rise	1647 Dec 08 11:36	6°♐25'22	
direct	1647 Dec 22 15:14	2°♐24'18	
greatest brilliancy	1648 Jan 01 22:55	4°♐25'22	-4.9m
	1648 Feb 05 16:30	0°♑	
morning max el	1648 Feb 11 02:25	5°♑20'15	46°50'22
	1648 Mar 05 07:03	0°♒	
desc. node	1648 Mar 24 23:13	22°♒15'25	
	1648 Mar 31 16:03	0°♓	
	1648 Apr 26 05:39	0°♈	
	1648 May 21 10:12	0°♉	
	1648 Jun 15 09:08	0°♊	
	1648 Jul 10 02:55	0°♋	
asc. node	1648 Jul 16 02:40	7°♋18'18	
	1648 Aug 03 15:08	0°♌	
morning set	1648 Aug 09 19:47	7°♌37'32	
	1648 Aug 27 21:57	0°♍	
max. Earth dist.	1648 Sep 12 05:48	19°♍02'54	1.72321 AU
superior conj	1648 Sep 15 13:28	23°♍11'02	1°23'47
minimum elong	1648 Sep 15 16:31	23°♍20'31	1°23'45
	1648 Sep 21 00:40	0°♎	
	1648 Oct 15 01:05	0°♏	
evening rise	1648 Oct 23 23:10	11°♏09'30	
desc. node	1648 Nov 04 16:07	25°♏48'06	
	1648 Nov 08 00:40	0°♐	
	1648 Dec 02 00:23	0°♑	
	1648 Dec 26 01:25	0°♒	
	1649 Jan 19 06:10	0°♓	
	1649 Feb 12 19:08	0°♈	
asc. node	1649 Feb 25 19:18	15°♈37'08	
	1649 Mar 09 23:54	0°♉	
	1649 Apr 05 11:02	0°♊	
evening max el	1649 Apr 28 10:01	23°♊47'49	45°32'34
	1649 May 05 00:16	0°♋	
greatest brilliancy	1649 Jun 05 04:47	21°♋39'28	-4.7m
retrograde	1649 Jun 16 04:01	23°♋48'59	
desc. node	1649 Jun 17 08:44	23°♋47'18	
evening set	1649 Jul 01 12:45	19°♋16'05	
inferior conj	1649 Jul 07 15:18	15°♋36'31	-4°31'51
minimum elong	1649 Jul 07 06:35	15°♋50'06	4°29'40
min. Earth dist.	1649 Jul 07 13:45	15°♋38'56	0.28995 AU
morning rise	1649 Jul 13 00:22	12°♋21'12	
direct	1649 Jul 29 07:03	7°♋18'47	
greatest brilliancy	1649 Aug 08 19:48	9°♋18'44	-4.7m
	1649 Sep 08 05:00	0°♌	
morning max el	1649 Sep 16 14:41	7°♌54'11	46°06'20
	1649 Oct 07 19:43	0°♍	
asc. node	1649 Oct 08 12:09	0°♍45'07	
	1649 Nov 03 02:28	0°♎	
	1649 Nov 28 02:11	0°♏	
	1649 Dec 22 11:50	0°♐	
	1650 Jan 15 15:36	0°♑	
desc. node	1650 Jan 28 01:30	15°♑27'24	
	1650 Feb 08 17:38	0°♒	
	1650 Mar 04 20:00	0°♓	
morning set	1650 Mar 23 02:26	22°♓41'24	
	1650 Mar 28 23:54	0°♈	
	1650 Apr 22 06:02	0°♉	
superior conj	1650 Apr 30 08:17	9°♉59'05	-0°46'58
minimum elong	1650 Apr 30 17:06	10°♉26'15	0°46'36
max. Earth dist.	1650 May 02 12:48	12°♉40'56	1.73199 AU
	1650 May 16 14:26	0°♊	

asc. node	1650 May 21	05:06	5°♊40'07	
evening rise	1650 Jun 06	11:18	25°♊38'12	
	1650 Jun 10	00:39	0°♋	
	1650 Jul 04	12:23	0°♌	
	1650 Jul 29	02:01	0°♍	
	1650 Aug 22	18:55	0°♎	
desc. node	1650 Sep 09	18:14	21°♎39'59	
	1650 Sep 16	17:08	0°♏	
	1650 Oct 11	23:51	0°♐	
	1650 Nov 06	22:40	0°♑	
evening max el	1650 Dec 04	14:52	29°♑59'55	47°19'55
	1650 Dec 04	14:54	0°♒	
asc. node	1650 Dec 31	21:39	24°♒16'21	
	1651 Jan 10	08:44	0°♓	
greatest brilliancy	1651 Jan 14	03:46	1°♓39'21	-4.9m
retrograde	1651 Jan 24	14:14	3°♓44'00	
	1651 Feb 07	02:18	30°℞♒	
evening set	1651 Feb 10	19:10	27°♒54'01	
min. Earth dist.	1651 Feb 13	12:48	26°♒13'00	0.27420 AU
inferior conj	1651 Feb 14	09:23	25°♒40'51	8°28'57
minimum elong	1651 Feb 14	03:42	25°♒49'45	8°28'28
morning rise	1651 Feb 17	12:31	23°♒45'11	
direct	1651 Mar 07	01:40	17°♒50'16	
greatest brilliancy	1651 Mar 15	23:17	19°♒20'11	-4.8m
	1651 Apr 03	21:46	0°♓	
desc. node	1651 Apr 22	11:01	15°♓59'46	
morning max el	1651 Apr 25	12:10	18°♓55'29	46°08'25
	1651 May 06	13:06	0°♈	
	1651 Jun 03	07:10	0°♉	
	1651 Jun 29	14:04	0°♊	
	1651 Jul 25	02:26	0°♋	
asc. node	1651 Aug 13	14:28	23°♋23'26	
	1651 Aug 19	01:23	0°♌	
	1651 Sep 12	13:32	0°♍	
	1651 Oct 06	17:39	0°♎	
morning set	1651 Oct 19	23:23	16°♎33'12	
	1651 Oct 30	16:47	0°♏	
	1651 Nov 23	13:36	0°♐	
max. Earth dist.	1651 Nov 28	05:18	5°♐51'14	1.71119 AU
superior conj	1651 Nov 28	16:46	6°♐27'17	0°10'41
minimum elong	1651 Nov 28	19:32	6°♐36'01	0°10'32
behind sun begin	1651 Nov 27	23:22	5°♐32'35	
behind sun end	1651 Nov 29	15:42	7°♐39'27	
desc. node	1651 Dec 03	03:58	12°♐04'29	
	1651 Dec 17	09:52	0°♑	
evening rise	1652 Jan 09	04:35	28°♑37'57	
	1652 Jan 10	06:43	0°♒	
	1652 Feb 03	05:29	0°♓	
	1652 Feb 27	08:12	0°♈	
	1652 Mar 22	17:37	0°♉	
asc. node	1652 Mar 25	07:20	3°♉08'06	
	1652 Apr 16	13:06	0°♊	
	1652 May 11	23:27	0°♋	
	1652 Jun 07	10:43	0°♌	
	1652 Jul 06	04:30	0°♍	
evening max el	1652 Jul 08	09:05	2°♍06'33	45°31'35
desc. node	1652 Jul 14	20:33	8°♍07'50	
	1652 Aug 16	03:02	0°♎	
greatest brilliancy	1652 Aug 16	16:17	0°♎11'05	-4.8m
retrograde	1652 Aug 26	01:27	1°♎46'21	
	1652 Sep 04	14:08	30°℞♍	
evening set	1652 Sep 13	02:09	25°♍46'07	
inferior conj	1652 Sep 16	05:14	23°♍51'41	-8°38'57
minimum elong	1652 Sep 16	08:33	23°♍46'33	8°38'47
min. Earth dist.	1652 Sep 16	23:47	23°♍23'02	0.28116 AU
morning rise	1652 Sep 19	14:42	21°♍47'06	
direct	1652 Oct 07	11:06	15°♍46'11	
greatest brilliancy	1652 Oct 18	13:51	18°♍02'57	-4.8m
asc. node	1652 Nov 05	00:01	28°♍38'01	
	1652 Nov 06	17:23	0°♎	
morning max el	1652 Nov 27	00:03	18°♎43'51	46°48'19
	1652 Dec 07	17:32	0°♏	
	1653 Jan 03	06:39	0°♐	
	1653 Jan 28	12:54	0°♑	
	1653 Feb 22	07:18	0°♒	
desc. node	1653 Feb 24	13:22	2°♒44'40	
	1653 Mar 18	21:01	0°♓	
	1653 Apr 12	09:14	0°♈	
	1653 May 06	21:19	0°♉	
	1653 May 31	09:21	0°♊	
morning set	1653 May 31	21:38	0°♊37'36	
asc. node	1653 Jun 17	16:53	21°♊13'19	
	1653 Jun 24	20:30	0°♋	
max. Earth dist.	1653 Jul 05	09:54	12°♋58'32	1.73524 AU
superior conj	1653 Jul 07	09:52	15°♋26'02	0°44'32
minimum elong	1653 Jul 07	02:06	15°♋02'08	0°44'13
	1653 Jul 19	05:51	0°♌	
evening rise	1653 Aug 12	05:11	29°♌35'01	
	1653 Aug 12	13:17	0°♍	
	1653 Sep 05	19:41	0°♎	
	1653 Sep 30	02:22	0°♏	
desc. node	1653 Oct 07	06:16	8°♏50'20	
	1653 Oct 24	10:22	0°♐	
	1653 Nov 17	20:53	0°♑	
	1653 Dec 12	12:53	0°♒	
	1654 Jan 06	18:08	0°♓	
asc. node	1654 Jan 28	09:29	24°♓36'24	
	1654 Feb 02	08:26	0°♈	
evening max el	1654 Feb 14	04:32	12°♈20'51	46°36'47
	1654 Mar 05	09:41	0°♉	
greatest brilliancy	1654 Mar 25	16:32	12°♉35'57	-4.8m
retrograde	1654 Apr 05	07:43	14°♉42'22	
evening set	1654 Apr 21	14:27	9°♉33'28	
inferior conj	1654 Apr 26	15:44	6°♉27'06	5°10'35
minimum elong	1654 Apr 27	01:01	6°♉12'25	5°08'22
min. Earth dist.	1654 Apr 26	16:44	6°♉25'30	0.28642 AU
morning rise	1654 May 02	11:49	2°♉53'59	
	1654 May 08	14:25	30°℞♈	
direct	1654 May 17	23:43	28°♈14'39	
desc. node	1654 May 19	22:47	28°♈19'04	
	1654 May 27	20:29	0°♉	
greatest brilliancy	1654 May 27	23:42	0°♉02'46	-4.7m
morning max el	1654 Jul 05	17:17	27°♉57'30	45°43'38
	1654 Jul 07	20:20	0°♊	
	1654 Aug 05	16:09	0°♋	
	1654 Sep 01	03:17	0°♌	
asc. node	1654 Sep 10	02:25	10°♌30'55	
	1654 Sep 26	10:00	0°♍	
	1654 Oct 20	23:32	0°♎	
	1654 Nov 14	03:03	0°♏	
	1654 Dec 08	01:39	0°♐	
desc. node	1654 Dec 30	15:38	28°♐22'50	
	1654 Dec 31	22:33	0°♑	
morning set	1655 Jan 03	09:08	3°♑04'10	
	1655 Jan 24	19:33	0°♒	
superior conj	1655 Feb 14	00:57	25°♒21'40	-1°21'59
minimum elong	1655 Feb 13	18:05	25°♒00'09	1°21'53
max. Earth dist.	1655 Feb 17	17:26	29°♒58'30	1.71638 AU
	1655 Feb 17	17:55	0°♓	
	1655 Mar 13	18:56	0°♈	
evening rise	1655 Mar 26	02:44	15°♈18'15	

	1655 Apr 06 23:50	0°♉	
asc. node	1655 Apr 22 19:19	19°♉27'58	
	1655 May 01 09:37	0°♊	
	1655 May 26 01:01	0°♋	
	1655 Jun 19 23:26	0°♌	
	1655 Jul 15 08:01	0°♍	
	1655 Aug 10 09:34	0°♎	
desc. node	1655 Aug 12 08:19	2°♎11'40	
	1655 Sep 06 20:29	0°♏	
evening max el	1655 Sep 20 07:05	13°♏37'52	46°34'19
	1655 Oct 08 11:00	0°♐	
greatest brilliancy	1655 Oct 30 18:13	13°♐32'18	-4.9m
retrograde	1655 Nov 09 05:12	15°♐13'14	
evening set	1655 Nov 23 16:24	11°♐05'49	
inferior conj	1655 Nov 29 18:16	7°♐34'07	-0°58'08
minimum elong	1655 Nov 29 20:29	7°♐30'44	0°57'24
min. Earth dist.	1655 Nov 29 22:25	7°♐27'49	0.26462 AU
asc. node	1655 Dec 03 11:45	5°♐20'31	
morning rise	1655 Dec 06 00:16	3°♐56'27	
	1655 Dec 18 05:27	30°℞♏	
direct	1655 Dec 20 04:02	29°♏55'20	
	1655 Dec 22 03:02	0°♐	
greatest brilliancy	1655 Dec 30 12:36	1°♐57'50	-4.9m
	1656 Feb 05 17:20	0°♑	
morning max el	1656 Feb 08 17:00	2°♑58'28	46°51'20
	1656 Mar 04 23:55	0°♒	
desc. node	1656 Mar 24 01:20	21°♒39'28	
	1656 Mar 31 06:04	0°♓	
	1656 Apr 25 18:13	0°♈	
	1656 May 20 21:53	0°♉	
	1656 Jun 14 20:15	0°♊	
	1656 Jul 09 13:41	0°♋	
asc. node	1656 Jul 15 04:40	6°♋51'39	
	1656 Aug 03 01:44	0°♌	
morning set	1656 Aug 07 13:25	5°♌31'22	
	1656 Aug 27 08:33	0°♍	
max. Earth dist.	1656 Sep 09 21:40	16°♍49'44	1.72375 AU
superior conj	1656 Sep 13 05:51	20°♍59'20	1°24'14
minimum elong	1656 Sep 13 08:09	21°♍06'28	1°24'13
	1656 Sep 20 11:22	0°♎	
	1656 Oct 14 11:55	0°♏	
evening rise	1656 Oct 21 12:07	8°♏45'51	
desc. node	1656 Nov 03 18:12	25°♏20'17	
	1656 Nov 07 11:40	0°♐	
	1656 Dec 01 11:35	0°♑	
	1656 Dec 25 12:51	0°♒	
	1657 Jan 18 17:58	0°♓	
	1657 Feb 12 07:32	0°♈	
asc. node	1657 Feb 24 21:25	15°♈05'05	
	1657 Mar 09 13:28	0°♉	
	1657 Apr 05 03:17	0°♊	
evening max el	1657 Apr 26 03:05	21°♊40'27	45°34'02
	1657 May 05 01:44	0°♋	
greatest brilliancy	1657 Jun 02 20:43	19°♋31'32	-4.7m
retrograde	1657 Jun 13 20:42	21°♋41'22	
desc. node	1657 Jun 16 10:42	21°♋33'31	
evening set	1657 Jun 29 03:43	17°♋10'49	
inferior conj	1657 Jul 05 07:47	13°♋28'42	-4°14'53
minimum elong	1657 Jul 04 23:26	13°♋41'44	4°12'45
min. Earth dist.	1657 Jul 05 05:47	13°♋31'49	0.28994 AU
morning rise	1657 Jul 10 19:11	10°♋09'57	
direct	1657 Jul 27 00:04	5°♋11'13	
greatest brilliancy	1657 Aug 06 11:00	7°♋09'38	-4.7m
	1657 Sep 08 06:02	0°♌	
morning max el	1657 Sep 14 06:28	5°♌42'58	46°04'46
	1657 Oct 07 11:59	0°♍	
asc. node	1657 Oct 07 14:19	0°♍06'25	
	1657 Nov 02 16:09	0°♎	
	1657 Nov 27 14:44	0°♏	
	1657 Dec 21 23:45	0°♐	
	1658 Jan 15 03:08	0°♑	
desc. node	1658 Jan 27 03:35	14°♑58'26	
	1658 Feb 08 04:52	0°♒	
	1658 Mar 04 07:00	0°♓	
morning set	1658 Mar 20 16:00	20°♓20'57	
	1658 Mar 28 10:44	0°♈	
	1658 Apr 21 16:43	0°♉	
superior conj	1658 Apr 28 00:20	7°♉47'39	-0°49'45
minimum elong	1658 Apr 28 09:29	8°♉15'53	0°49'24
max. Earth dist.	1658 Apr 30 10:01	10°♉45'31	1.73158 AU
	1658 May 16 01:04	0°♊	
asc. node	1658 May 20 07:05	5°♊13'33	
evening rise	1658 Jun 04 05:35	23°♊34'17	
	1658 Jun 09 11:20	0°♋	
	1658 Jul 03 23:14	0°♌	
	1658 Jul 28 13:11	0°♍	
	1658 Aug 22 06:37	0°♎	
desc. node	1658 Sep 08 20:25	21°♎09'45	
	1658 Sep 16 05:41	0°♏	
	1658 Oct 11 13:46	0°♐	
	1658 Nov 06 15:09	0°♑	
evening max el	1658 Dec 02 05:46	27°♑38'11	47°19'40
	1658 Dec 04 13:57	0°♒	
asc. node	1658 Dec 30 23:42	22°♒54'07	
greatest brilliancy	1659 Jan 11 18:36	29°♒15'52	-4.9m
	1659 Jan 13 21:49	0°♓	
retrograde	1659 Jan 22 04:13	1°♓19'24	
	1659 Jan 30 03:20	30°℞♒	
evening set	1659 Feb 08 05:38	25°♒35'37	
min. Earth dist.	1659 Feb 11 02:10	23°♒50'12	0.27358 AU
inferior conj	1659 Feb 11 23:04	23°♒17'31	8°22'29
minimum elong	1659 Feb 11 16:38	23°♒27'35	8°21'51
morning rise	1659 Feb 15 03:57	21°♒19'07	
direct	1659 Mar 04 14:47	15°♒28'10	
greatest brilliancy	1659 Mar 13 12:17	16°♒57'43	-4.8m
	1659 Apr 04 12:04	0°♓	
desc. node	1659 Apr 21 13:06	15°♓07'27	
morning max el	1659 Apr 23 01:12	16°♓34'47	46°09'52
	1659 May 06 08:09	0°♈	
	1659 Jun 02 21:51	0°♉	
	1659 Jun 29 02:51	0°♊	
	1659 Jul 24 14:14	0°♋	
asc. node	1659 Aug 12 16:35	22°♋55'29	
	1659 Aug 18 12:39	0°♌	
	1659 Sep 12 00:31	0°♍	
	1659 Oct 06 04:30	0°♎	
morning set	1659 Oct 17 13:45	14°♎13'56	
	1659 Oct 30 03:38	0°♏	
	1659 Nov 23 00:31	0°♐	
max. Earth dist.	1659 Nov 25 09:28	2°♐59'04	1.71143 AU
superior conj	1659 Nov 26 03:47	3°♐56'40	0°14'32
minimum elong	1659 Nov 26 07:31	4°♐08'25	0°14'20
behind sun begin	1659 Nov 25 18:58	3°♐28'58	
behind sun end	1659 Nov 26 20:04	4°♐47'52	
desc. node	1659 Dec 02 05:56	11°♐36'17	
	1659 Dec 16 20:52	0°♑	
evening rise	1660 Jan 06 14:32	26°♑03'45	
	1660 Jan 09 17:48	0°♒	
	1660 Feb 02 16:38	0°♓	
	1660 Feb 26 19:29	0°♈	
	1660 Mar 22 05:11	0°♉	

asc. node	1660 Mar 24 09:27	2°♉39'16	
	1660 Apr 16 01:14	0°♊	
	1660 May 11 12:42	0°♋	
	1660 Jun 07 02:21	0°♌	
evening max el	1660 Jul 05 22:42	29°♌49'56	45°30'24
	1660 Jul 06 02:55	0°♍	
desc. node	1660 Jul 13 22:37	7°♍13'00	
greatest brilliancy	1660 Aug 14 05:35	27°♍55'08	-4.7m
retrograde	1660 Aug 23 15:15	29°♍31'20	
evening set	1660 Sep 10 17:03	23°♍29'49	
inferior conj	1660 Sep 13 19:57	21°♍35'47	-8°41'19
minimum elong	1660 Sep 13 22:26	21°♍31'58	8°41'15
min. Earth dist.	1660 Sep 14 14:09	21°♍07'42	0.28175 AU
morning rise	1660 Sep 17 03:34	19°♍34'01	
direct	1660 Oct 05 01:54	13°♍29'12	
greatest brilliancy	1660 Oct 16 05:41	15°♍46'36	-4.8m
asc. node	1660 Nov 04 01:56	27°♍28'26	
	1660 Nov 07 03:36	0°♎	
morning max el	1660 Nov 24 14:05	16°♎21'35	46°47'17
	1660 Dec 07 12:10	0°♏	
	1661 Jan 02 21:35	0°♐	
	1661 Jan 28 02:14	0°♑	
	1661 Feb 21 19:44	0°♒	
desc. node	1661 Feb 23 15:30	2°♒13'27	
	1661 Mar 18 08:51	0°♓	
	1661 Apr 11 20:37	0°♈	
	1661 May 06 08:23	0°♉	
morning set	1661 May 29 15:19	28°♉31'31	
	1661 May 30 20:12	0°♊	
asc. node	1661 Jun 16 18:53	20°♊46'29	
	1661 Jun 24 07:15	0°♋	
max. Earth dist.	1661 Jul 03 07:00	11°♋02'54	1.73543 AU
superior conj	1661 Jul 05 04:18	13°♋22'07	0°41'51
minimum elong	1661 Jul 04 20:50	12°♋59'10	0°41'31
	1661 Jul 18 16:36	0°♌	
evening rise	1661 Aug 09 23:28	27°♌29'43	
	1661 Aug 12 00:09	0°♍	
	1661 Sep 05 06:46	0°♎	
	1661 Sep 29 13:46	0°♏	
desc. node	1661 Oct 06 08:19	8°♏21'17	
	1661 Oct 23 22:11	0°♐	
	1661 Nov 17 09:15	0°♑	
	1661 Dec 12 02:06	0°♒	
	1662 Jan 06 08:57	0°♓	
asc. node	1662 Jan 27 11:35	23°♓53'56	
	1662 Feb 02 03:04	0°♈	
evening max el	1662 Feb 11 19:02	10°♈01'53	46°39'08
	1662 Mar 05 21:36	0°♉	
greatest brilliancy	1662 Mar 23 08:55	10°♉23'06	-4.8m
retrograde	1662 Apr 03 00:06	12°♉29'57	
evening set	1662 Apr 19 09:05	7°♉16'45	
inferior conj	1662 Apr 24 07:41	4°♉14'33	5°26'49
minimum elong	1662 Apr 24 17:11	3°♉59'34	5°24'37
min. Earth dist.	1662 Apr 24 08:32	4°♉13'13	0.28622 AU
morning rise	1662 Apr 30 01:31	0°♉44'53	
	1662 May 01 10:16	30°℞♈	
direct	1662 May 15 14:57	26°♈02'15	
desc. node	1662 May 19 00:44	26°♈15'33	
greatest brilliancy	1662 May 25 14:51	27°♈50'36	-4.7m
	1662 May 30 18:47	0°♉	
morning max el	1662 Jul 03 09:39	25°♉48'10	45°43'49
	1662 Jul 07 17:47	0°♊	
	1662 Aug 05 07:34	0°♋	
	1662 Aug 31 16:30	0°♌	
asc. node	1662 Sep 09 04:30	9°♌59'15	
	1662 Sep 25 22:12	0°♍	
	1662 Oct 20 11:13	0°♎	
	1662 Nov 13 14:28	0°♏	
	1662 Dec 07 12:55	0°♐	
desc. node	1662 Dec 29 17:47	27°♐54'30	
	1662 Dec 31 09:42	0°♑	
morning set	1662 Dec 31 19:13	0°♑29'55	
	1663 Jan 24 06:38	0°♒	
superior conj	1663 Feb 11 12:11	22°♒51'57	-1°20'44
minimum elong	1663 Feb 11 04:27	22°♒27'45	1°20'36
max. Earth dist.	1663 Feb 15 01:56	27°♒20'24	1.71595 AU
	1663 Feb 17 04:57	0°♓	
	1663 Mar 13 05:58	0°♈	
evening rise	1663 Mar 23 16:07	12°♈56'45	
	1663 Apr 06 10:56	0°♉	
asc. node	1663 Apr 21 21:16	18°♉59'45	
	1663 Apr 30 20:50	0°♊	
	1663 May 25 12:33	0°♋	
	1663 Jun 19 11:32	0°♌	
	1663 Jul 14 21:11	0°♍	
	1663 Aug 10 00:45	0°♎	
desc. node	1663 Aug 11 10:29	1°♎34'38	
	1663 Sep 06 16:14	0°♏	
evening max el	1663 Sep 17 21:24	11°♏17'46	46°31'53
	1663 Oct 09 02:03	0°♐	
greatest brilliancy	1663 Oct 28 06:39	11°♐04'07	-4.9m
retrograde	1663 Nov 06 17:52	12°♐44'38	
evening set	1663 Nov 21 06:07	8°♐35'25	
inferior conj	1663 Nov 27 06:27	5°♐05'31	-1°22'29
minimum elong	1663 Nov 27 09:36	5°♐00'44	1°21'28
min. Earth dist.	1663 Nov 27 11:47	4°♐57'25	0.26482 AU
asc. node	1663 Dec 02 13:50	1°♐58'33	
morning rise	1663 Dec 03 12:50	1°♐27'34	
	1663 Dec 06 12:46	30°℞♏	
direct	1663 Dec 17 17:17	27°♏26'28	
greatest brilliancy	1663 Dec 28 02:07	29°♏29'40	-4.9m
	1663 Dec 29 08:38	0°♐	
	1664 Feb 05 17:12	0°♑	
morning max el	1664 Feb 06 07:18	0°♑35'27	46°52'14
	1664 Mar 04 16:39	0°♒	
desc. node	1664 Mar 23 03:25	21°♒03'03	
	1664 Mar 30 20:10	0°♓	
	1664 Apr 25 06:59	0°♈	
	1664 May 20 09:52	0°♉	
	1664 Jun 14 07:44	0°♊	
	1664 Jul 09 00:51	0°♋	
asc. node	1664 Jul 14 06:51	6°♋24'20	
	1664 Aug 02 12:44	0°♌	
morning set	1664 Aug 05 06:56	3°♌23'41	
	1664 Aug 26 19:30	0°♍	
max. Earth dist.	1664 Sep 07 12:17	14°♍31'51	1.72425 AU
superior conj	1664 Sep 10 22:16	18°♍46'49	1°24'33
minimum elong	1664 Sep 10 23:48	18°♍51'37	1°24'34
	1664 Sep 19 22:23	0°♎	
	1664 Oct 13 23:04	0°♏	
evening rise	1664 Oct 19 01:12	6°♏21'40	
desc. node	1664 Nov 02 20:09	24°♏51'05	
	1664 Nov 06 23:00	0°♐	
	1664 Nov 30 23:07	0°♑	
	1664 Dec 25 00:39	0°♒	
	1665 Jan 18 06:07	0°♓	
	1665 Feb 11 20:17	0°♈	
asc. node	1665 Feb 23 23:32	14°♈32'04	
	1665 Mar 09 03:26	0°♉	
	1665 Apr 04 20:11	0°♊	
evening max el	1665 Apr 23 19:27	19°♊30'12	45°35'16

	1665 May 05	05:15	0°♋	
greatest brilliancy	1665 May 31	13:05	17°♋22'34	-4.7m
retrograde	1665 Jun 11	12:44	19°♋32'02	
desc. node	1665 Jun 15	12:49	19°♋13'09	
evening set	1665 Jun 26	18:42	15°♋03'40	
inferior conj	1665 Jul 03	00:08	11°♋19'19	-3°57'30
minimum elong	1665 Jul 02	16:13	11°♋31'42	3°55'26
min. Earth dist.	1665 Jul 02	22:07	11°♋22'29	0.28993 AU
morning rise	1665 Jul 08	13:46	7°♋57'04	
direct	1665 Jul 24	16:38	3°♋01'59	
greatest brilliancy	1665 Aug 04	02:35	4°♋59'15	-4.7m
	1665 Sep 08	06:27	0°♌	
morning max el	1665 Sep 11	21:14	3°♌27'58	46°03'19
asc. node	1665 Oct 06	16:18	29°♌26'24	
	1665 Oct 07	04:25	0°♍	
	1665 Nov 02	06:05	0°♎	
	1665 Nov 27	03:31	0°♏	
	1665 Dec 21	11:56	0°♐	
	1666 Jan 14	14:56	0°♑	
desc. node	1666 Jan 26	05:40	14°♑28'36	
	1666 Feb 07	16:24	0°♒	
	1666 Mar 03	18:18	0°♓	
morning set	1666 Mar 18	05:38	17°♓59'40	
	1666 Mar 27	21:50	0°♈	
	1666 Apr 21	03:41	0°♉	
superior conj	1666 Apr 25	16:31	5°♉35'46	-0°52'28
minimum elong	1666 Apr 26	01:57	6°♉04'51	0°52'06
max. Earth dist.	1666 Apr 28	07:11	8°♉49'00	1.73115 AU
	1666 May 15	11:59	0°♊	
asc. node	1666 May 19	09:09	4°♊46'20	
evening rise	1666 Jun 01	23:52	21°♊29'25	
	1666 Jun 08	22:20	0°♋	
	1666 Jul 03	10:26	0°♌	
	1666 Jul 28	00:45	0°♍	
	1666 Aug 21	18:45	0°♎	
desc. node	1666 Sep 07	22:23	20°♎37'36	
	1666 Sep 15	18:40	0°♏	
	1666 Oct 11	04:11	0°♐	
	1666 Nov 06	08:17	0°♑	
evening max el	1666 Nov 29	19:32	25°♑12'42	47°19'24
	1666 Dec 04	14:22	0°♒	
asc. node	1666 Dec 30	01:51	21°♒28'22	
greatest brilliancy	1667 Jan 09	09:40	26°♒51'37	-4.9m
retrograde	1667 Jan 19	17:41	28°♒53'52	
evening set	1667 Feb 05	15:51	23°♒16'22	
min. Earth dist.	1667 Feb 08	15:50	21°♒25'55	0.27297 AU
inferior conj	1667 Feb 09	12:43	20°♒53'15	8°15'06
minimum elong	1667 Feb 09	05:35	21°♒04'24	8°14'17
morning rise	1667 Feb 12	19:38	18°♒51'43	
direct	1667 Mar 02	03:25	13°♒04'50	
greatest brilliancy	1667 Mar 11	01:55	14°♒34'52	-4.8m
	1667 Apr 04	23:06	0°♓	
morning max el	1667 Apr 20	13:58	14°♓12'23	46°11'28
desc. node	1667 Apr 20	15:01	14°♓14'57	
	1667 May 06	02:56	0°♈	
	1667 Jun 02	12:34	0°♉	
	1667 Jun 28	15:48	0°♊	
	1667 Jul 24	02:16	0°♋	
asc. node	1667 Aug 11	18:39	22°♋26'34	
	1667 Aug 18	00:11	0°♌	
	1667 Sep 11	11:48	0°♍	
	1667 Oct 05	15:40	0°♎	
morning set	1667 Oct 15	03:54	11°♎53'03	
	1667 Oct 29	14:46	0°♏	
	1667 Nov 22	11:41	0°♐	
max. Earth dist.	1667 Nov 22	15:22	0°♐11'36	1.71165 AU
superior conj	1667 Nov 23	14:37	1°♐24'42	0°18'21
minimum elong	1667 Nov 23	19:17	1°♐39'22	0°18'08
desc. node	1667 Dec 01	08:03	11°♐07'46	
	1667 Dec 16	08:05	0°♑	
evening rise	1668 Jan 04	00:25	23°♑28'45	
	1668 Jan 09	05:04	0°♒	
	1668 Feb 02	03:59	0°♓	
	1668 Feb 26	06:59	0°♈	
	1668 Mar 21	17:00	0°♉	
asc. node	1668 Mar 23	11:24	2°♉09'09	
	1668 Apr 15	13:37	0°♊	
	1668 May 11	02:13	0°♋	
	1668 Jun 06	18:23	0°♌	
evening max el	1668 Jul 03	12:27	27°♌33'23	45°29'16
	1668 Jul 06	02:30	0°♍	
desc. node	1668 Jul 13	00:43	6°♍16'32	
greatest brilliancy	1668 Aug 11	17:58	25°♍37'42	-4.7m
retrograde	1668 Aug 21	05:32	27°♍15'40	
evening set	1668 Sep 08	07:27	21°♍13'11	
inferior conj	1668 Sep 11	10:34	19°♍18'57	-8°42'54
minimum elong	1668 Sep 11	12:11	19°♍16'27	8°42'52
min. Earth dist.	1668 Sep 12	04:02	18°♍52'01	0.28239 AU
morning rise	1668 Sep 14	16:41	17°♍19'33	
direct	1668 Oct 02	16:59	11°♍11'16	
greatest brilliancy	1668 Oct 13	21:13	13°♍29'10	-4.8m
asc. node	1668 Nov 03	04:02	26°♍20'07	
	1668 Nov 07	11:30	0°♎	
morning max el	1668 Nov 22	05:02	14°♎00'55	46°46'14
	1668 Dec 07	06:39	0°♏	
	1669 Jan 02	12:35	0°♐	
	1669 Jan 27	15:38	0°♑	
	1669 Feb 21	08:12	0°♒	
desc. node	1669 Feb 22	17:32	1°♒41'45	
	1669 Mar 17	20:42	0°♓	
	1669 Apr 11	08:03	0°♈	
	1669 May 05	19:31	0°♉	
morning set	1669 May 27	09:07	26°♉25'24	
	1669 May 30	07:08	0°♊	
asc. node	1669 Jun 15	21:04	20°♊19'58	
	1669 Jun 23	18:04	0°♋	
max. Earth dist.	1669 Jul 01	05:38	9°♋11'42	1.73558 AU
superior conj	1669 Jul 02	22:51	11°♋18'23	0°39'06
minimum elong	1669 Jul 02	15:43	10°♋56'29	0°38'47
	1669 Jul 18	03:24	0°♌	
evening rise	1669 Aug 07	17:58	25°♌25'03	
	1669 Aug 11	11:03	0°♍	
	1669 Sep 04	17:55	0°♎	
	1669 Sep 29	01:16	0°♏	
desc. node	1669 Oct 05	10:18	7°♏51'37	
	1669 Oct 23	10:09	0°♐	
	1669 Nov 16	21:49	0°♑	
	1669 Dec 11	15:34	0°♒	
	1670 Jan 06	00:05	0°♓	
asc. node	1670 Jan 26	13:39	23°♓10'37	
	1670 Feb 01	22:17	0°♈	
evening max el	1670 Feb 09	10:18	7°♈44'42	46°41'40
	1670 Mar 06	13:36	0°♉	
greatest brilliancy	1670 Mar 21	00:44	8°♉09'37	-4.8m
retrograde	1670 Mar 31	16:48	10°♉17'20	
evening set	1670 Apr 17	03:46	4°♉59'49	
inferior conj	1670 Apr 21	23:35	2°♉01'45	5°42'42
minimum elong	1670 Apr 22	09:15	1°♉46'31	5°40'32
min. Earth dist.	1670 Apr 21	23:52	2°♉01'18	0.28599 AU
	1670 Apr 25	05:48	30°℞♈	
morning rise	1670 Apr 27	14:59	28°♈35'51	
direct	1670 May 13	06:39	23°♈49'49	

desc. node	1670 May 18 02:56	24°♈16'34	
greatest brilliancy	1670 May 23 05:22	25°♈37'44	-4.7m
	1670 Jun 01 12:57	0°♉	
morning max el	1670 Jul 01 02:28	23°♉40'10	45°44'02
	1670 Jul 07 14:24	0°♊	
	1670 Aug 04 22:41	0°♋	
	1670 Aug 31 05:31	0°♌	
asc. node	1670 Sep 08 06:30	9°♌27'44	
	1670 Sep 25 10:14	0°♍	
	1670 Oct 19 22:47	0°♎	
	1670 Nov 13 01:50	0°♏	
	1670 Dec 07 00:10	0°♐	
desc. node	1670 Dec 28 19:53	27°♐26'02	
morning set	1670 Dec 29 04:55	27°♐54'25	
	1670 Dec 30 20:52	0°♑	
	1671 Jan 23 17:42	0°♒	
superior conj	1671 Feb 08 22:45	20°♒20'09	-1°19'17
minimum elong	1671 Feb 08 14:12	19°♒53'20	1°19'07
max. Earth dist.	1671 Feb 12 11:51	24°♒46'41	1.71548 AU
	1671 Feb 16 15:57	0°♓	
	1671 Mar 12 16:55	0°♈	
evening rise	1671 Mar 21 05:02	10°♈34'03	
	1671 Apr 05 21:54	0°♉	
asc. node	1671 Apr 20 23:22	18°♉32'21	
	1671 Apr 30 07:56	0°♊	
	1671 May 24 23:58	0°♋	
	1671 Jun 18 23:33	0°♌	
	1671 Jul 14 10:16	0°♍	
	1671 Aug 09 15:55	0°♎	
desc. node	1671 Aug 10 12:29	0°♎57'30	
	1671 Sep 06 12:18	0°♏	
evening max el	1671 Sep 15 11:46	8°♏58'40	46°29'21
	1671 Oct 09 21:37	0°♐	
greatest brilliancy	1671 Oct 25 19:13	8°♐37'08	-4.9m
retrograde	1671 Nov 04 06:02	10°♐16'41	
evening set	1671 Nov 18 20:02	6°♐05'39	
inferior conj	1671 Nov 24 18:38	2°♐37'41	-1°46'38
minimum elong	1671 Nov 24 22:41	2°♐31'33	1°45'21
min. Earth dist.	1671 Nov 25 01:14	2°♐27'40	0.26510 AU
	1671 Nov 29 04:55	30°℞♏	
morning rise	1671 Dec 01 01:06	28°♏59'29	
asc. node	1671 Dec 01 15:59	28°♏40'10	
direct	1671 Dec 15 06:30	24°♏58'20	
greatest brilliancy	1671 Dec 25 15:48	27°♏02'02	-4.9m
	1671 Dec 31 23:10	0°♐	
morning max el	1672 Feb 03 20:40	28°♐10'07	46°52'55
	1672 Feb 05 15:59	0°♑	
	1672 Mar 04 09:02	0°♒	
desc. node	1672 Mar 22 05:22	20°♒26'46	
	1672 Mar 30 10:02	0°♓	
	1672 Apr 24 19:31	0°♈	
	1672 May 19 21:35	0°♉	
	1672 Jun 13 18:55	0°♊	
	1672 Jul 08 11:43	0°♋	
asc. node	1672 Jul 13 08:49	5°♋57'19	
	1672 Aug 01 23:26	0°♌	
morning set	1672 Aug 03 00:33	1°♌17'16	
	1672 Aug 26 06:11	0°♍	
max. Earth dist.	1672 Sep 05 02:14	12°♍12'47	1.72475 AU
superior conj	1672 Sep 08 15:04	16°♍36'30	1°24'45
minimum elong	1672 Sep 08 15:52	16°♍39'00	1°24'45
	1672 Sep 19 09:07	0°♎	
	1672 Oct 13 09:55	0°♏	
evening rise	1672 Oct 16 14:45	4°♏00'00	
desc. node	1672 Nov 01 22:18	24°♏23'32	
	1672 Nov 06 10:00	0°♐	
	1672 Nov 30 10:21	0°♑	
	1672 Dec 24 12:10	0°♒	
	1673 Jan 17 18:03	0°♓	
	1673 Feb 11 08:53	0°♈	
asc. node	1673 Feb 23 01:28	13°♈58'53	
	1673 Mar 08 17:20	0°♉	
	1673 Apr 04 13:11	0°♊	
evening max el	1673 Apr 21 10:55	17°♊18'19	45°36'47
	1673 May 05 10:12	0°♋	
greatest brilliancy	1673 May 29 05:50	15°♋14'57	-4.7m
retrograde	1673 Jun 09 04:33	17°♋23'58	
desc. node	1673 Jun 14 14:52	16°♋49'12	
evening set	1673 Jun 24 09:55	12°♋57'21	
inferior conj	1673 Jun 30 16:34	9°♋11'13	-3°39'50
minimum elong	1673 Jun 30 09:08	9°♋22'53	3°37'51
min. Earth dist.	1673 Jun 30 14:47	9°♋14'02	0.28990 AU
morning rise	1673 Jul 06 08:20	5°♋45'35	
direct	1673 Jul 22 08:50	0°♋53'56	
greatest brilliancy	1673 Aug 01 18:48	2°♋50'45	-4.7m
	1673 Sep 08 05:20	0°♌	
morning max el	1673 Sep 09 11:29	1°♌12'51	46°02'00
asc. node	1673 Oct 05 18:20	28°♌48'01	
	1673 Oct 06 20:11	0°♍	
	1673 Nov 01 19:29	0°♎	
	1673 Nov 26 15:50	0°♏	
	1673 Dec 20 23:39	0°♐	
	1674 Jan 14 02:18	0°♑	
desc. node	1674 Jan 25 07:39	13°♑59'42	
	1674 Feb 07 03:32	0°♒	
	1674 Mar 03 05:15	0°♓	
morning set	1674 Mar 15 18:51	15°♓37'58	
	1674 Mar 27 08:37	0°♈	
	1674 Apr 20 14:21	0°♉	
superior conj	1674 Apr 23 08:19	3°♉23'34	-0°55'08
minimum elong	1674 Apr 23 17:58	3°♉53'20	0°54'45
max. Earth dist.	1674 Apr 26 01:51	6°♉45'42	1.73068 AU
	1674 May 14 22:36	0°♊	
asc. node	1674 May 18 11:17	4°♊20'17	
evening rise	1674 May 30 17:44	19°♊24'20	
	1674 Jun 08 09:00	0°♋	
	1674 Jul 02 21:18	0°♌	
	1674 Jul 27 11:59	0°♍	
	1674 Aug 21 06:33	0°♎	
desc. node	1674 Sep 07 00:24	20°♎06'34	
	1674 Sep 15 07:23	0°♏	
	1674 Oct 10 18:23	0°♐	
	1674 Nov 06 01:18	0°♑	
evening max el	1674 Nov 27 08:40	22°♑46'59	47°19'09
	1674 Dec 04 15:25	0°♒	
asc. node	1674 Dec 29 03:49	20°♒00'56	
greatest brilliancy	1675 Jan 07 00:34	24°♒28'33	-4.9m
retrograde	1675 Jan 17 07:13	26°♒30'06	
evening set	1675 Feb 03 01:56	20°♒58'41	
min. Earth dist.	1675 Feb 06 05:36	19°♒03'04	0.27241 AU
inferior conj	1675 Feb 07 02:27	18°♒30'32	8°06'40
minimum elong	1675 Feb 06 18:41	18°♒42'40	8°05'41
morning rise	1675 Feb 10 11:41	16°♒25'38	
direct	1675 Feb 27 15:59	10°♒42'48	
greatest brilliancy	1675 Mar 08 15:52	12°♒13'50	-4.8m
	1675 Apr 05 06:40	0°♓	
morning max el	1675 Apr 18 03:12	11°♓52'10	46°12'59
desc. node	1675 Apr 19 17:13	13°♓25'13	
	1675 May 05 20:52	0°♈	
	1675 Jun 02 02:48	0°♉	
	1675 Jun 28 04:20	0°♊	

	1675 Jul 23	13:54	0°♋	
asc. node	1675 Aug 10	20:38	21°♋58'37	
	1675 Aug 17	11:19	0°♌	
	1675 Sep 10	22:40	0°♍	
	1675 Oct 05	02:26	0°♎	
morning set	1675 Oct 12	18:13	9°♎34'00	
	1675 Oct 29	01:32	0°♏	
max. Earth dist.	1675 Nov 19	23:52	27°♏33'21	1.71190 AU
superior conj	1675 Nov 21	01:42	28°♏54'34	0°22'08
minimum elong	1675 Nov 21	07:15	29°♏12'00	0°21'52
	1675 Nov 21	22:30	0°♐	
desc. node	1675 Nov 30	10:08	10°♐40'17	
	1675 Dec 15	18:58	0°♑	
evening rise	1676 Jan 01	10:37	20°♑55'52	
	1676 Jan 08	16:00	0°♒	
	1676 Feb 01	14:58	0°♓	
	1676 Feb 25	18:07	0°♈	
	1676 Mar 21	04:26	0°♉	
asc. node	1676 Mar 22	13:31	1°♉40'42	
	1676 Apr 15	01:41	0°♊	
	1676 May 10	15:30	0°♋	
	1676 Jun 06	10:22	0°♌	
evening max el	1676 Jul 01	03:12	25°♌20'16	45°28'20
	1676 Jul 06	02:49	0°♍	
desc. node	1676 Jul 12	02:43	5°♍19'34	
greatest brilliancy	1676 Aug 09	06:10	23°♍21'31	-4.7m
retrograde	1676 Aug 18	20:26	25°♍01'29	
evening set	1676 Sep 05	21:39	18°♍58'43	
inferior conj	1676 Sep 09	01:19	17°♍03'39	-8°43'37
minimum elong	1676 Sep 09	02:07	17°♍02'26	8°43'36
min. Earth dist.	1676 Sep 09	17:40	16°♍38'28	0.28298 AU
morning rise	1676 Sep 12	06:23	15°♍05'59	
direct	1676 Sep 30	08:40	8°♍55'08	
greatest brilliancy	1676 Oct 11	12:09	11°♍12'40	-4.8m
asc. node	1676 Nov 02	06:12	25°♍14'58	
	1676 Nov 07	16:36	0°♎	
morning max el	1676 Nov 19	20:38	11°♎43'18	46°45'00
	1676 Dec 07	00:20	0°♏	
	1677 Jan 02	03:04	0°♐	
	1677 Jan 27	04:38	0°♑	
	1677 Feb 20	20:19	0°♒	
desc. node	1677 Feb 21	19:31	1°♒10'56	
	1677 Mar 17	08:13	0°♓	
	1677 Apr 10	19:09	0°♈	
	1677 May 05	06:20	0°♉	
morning set	1677 May 25	02:57	24°♉20'20	
	1677 May 29	17:47	0°♊	
asc. node	1677 Jun 14	23:03	19°♊53'38	
	1677 Jun 23	04:37	0°♋	
max. Earth dist.	1677 Jun 29	04:41	7°♋22'33	1.73573 AU
superior conj	1677 Jun 30	17:17	9°♋15'04	0°36'17
minimum elong	1677 Jun 30	10:33	8°♋54'21	0°35'59
	1677 Jul 17	13:58	0°♌	
evening rise	1677 Aug 05	12:22	23°♌20'47	
	1677 Aug 10	21:45	0°♍	
	1677 Sep 04	04:51	0°♎	
	1677 Sep 28	12:33	0°♏	
desc. node	1677 Oct 04	12:26	7°♏23'08	
	1677 Oct 22	21:54	0°♐	
	1677 Nov 16	10:13	0°♑	
	1677 Dec 11	04:56	0°♒	
	1678 Jan 05	15:14	0°♓	
asc. node	1678 Jan 25	15:40	22°♓27'07	
	1678 Feb 01	17:52	0°♈	
evening max el	1678 Feb 07	02:18	5°♈29'46	46°44'08
	1678 Mar 07	10:54	0°♉	
greatest brilliancy	1678 Mar 18	16:46	5°♉56'56	-4.8m
retrograde	1678 Mar 29	09:36	8°♉05'04	
evening set	1678 Apr 14	22:33	2°♉43'30	
	1678 Apr 19	08:47	30°℞♈	
inferior conj	1678 Apr 19	15:28	29°♈49'28	5°58'01
minimum elong	1678 Apr 20	01:15	29°♈34'03	5°55'54
min. Earth dist.	1678 Apr 19	14:57	29°♈50'17	0.28570 AU
morning rise	1678 Apr 25	04:18	26°♈27'29	
direct	1678 May 10	22:37	21°♈38'12	
desc. node	1678 May 17	04:56	22°♈22'36	
greatest brilliancy	1678 May 20	19:16	23°♈24'51	-4.7m
	1678 Jun 02	17:31	0°♉	
morning max el	1678 Jun 28	18:58	21°♉31'59	45°44'09
	1678 Jul 07	10:08	0°♊	
	1678 Aug 04	13:25	0°♋	
	1678 Aug 30	18:20	0°♌	
asc. node	1678 Sep 07	08:36	8°♌56'58	
	1678 Sep 24	22:09	0°♍	
	1678 Oct 19	10:15	0°♎	
	1678 Nov 12	13:03	0°♏	
	1678 Dec 06	11:16	0°♐	
morning set	1678 Dec 26	14:43	25°♐19'41	
desc. node	1678 Dec 27	21:49	26°♐57'24	
	1678 Dec 30	07:54	0°♑	
	1679 Jan 23	04:41	0°♒	
superior conj	1679 Feb 06	09:14	17°♒48'11	-1°17'40
minimum elong	1679 Feb 05	23:56	17°♒19'03	1°17'29
max. Earth dist.	1679 Feb 09	23:02	22°♒17'02	1.71505 AU
	1679 Feb 16	02:55	0°♓	
	1679 Mar 12	03:51	0°♈	
evening rise	1679 Mar 18	17:48	8°♈10'49	
	1679 Apr 05	08:51	0°♉	
asc. node	1679 Apr 20	01:29	18°♉05'06	
	1679 Apr 29	19:01	0°♊	
	1679 May 24	11:20	0°♋	
	1679 Jun 18	11:33	0°♌	
	1679 Jul 13	23:27	0°♍	
	1679 Aug 09	07:20	0°♎	
desc. node	1679 Aug 09	14:29	0°♎19'54	
	1679 Sep 06	09:09	0°♏	
evening max el	1679 Sep 13	01:29	6°♏37'47	46°26'42
	1679 Oct 11	00:24	0°♐	
greatest brilliancy	1679 Oct 23	08:24	6°♐10'41	-4.9m
retrograde	1679 Nov 01	17:41	7°♐48'36	
evening set	1679 Nov 16	10:08	3°♐35'33	
inferior conj	1679 Nov 22	06:52	0°♐09'53	-2°10'31
minimum elong	1679 Nov 22	11:46	0°♐02'26	2°08'57
min. Earth dist.	1679 Nov 22	15:00	29°♏57'31	0.26540 AU
	1679 Nov 22	13:22	30°℞♏	
morning rise	1679 Nov 28	13:06	26°♏31'33	
asc. node	1679 Nov 30	17:55	25°♏25'41	
direct	1679 Dec 12	19:10	22°♏30'07	
greatest brilliancy	1679 Dec 23	05:52	24°♏34'41	-4.9m
	1680 Jan 02	14:35	0°♐	
morning max el	1680 Feb 01	08:59	25°♐41'50	46°53'33
	1680 Feb 05	13:56	0°♑	
	1680 Mar 04	01:12	0°♒	
desc. node	1680 Mar 21	07:32	19°♒51'05	
	1680 Mar 29	23:53	0°♓	
	1680 Apr 24	08:06	0°♈	
	1680 May 19	09:23	0°♉	
	1680 Jun 13	06:12	0°♊	
	1680 Jul 07	22:41	0°♋	
asc. node	1680 Jul 12	10:52	5°♋30'11	
morning set	1680 Jul 31	18:18	29°♋10'54	

	1680 Aug 01 10:15	0°♌	
	1680 Aug 25 17:00	0°♍	
max. Earth dist.	1680 Sep 02 17:29	9°♍57'25	1.72531 AU
superior conj	1680 Sep 06 07:58	14°♍26'10	1°24'49
minimum elong	1680 Sep 06 08:02	14°♍26'20	1°24'49
	1680 Sep 18 20:01	0°♎	
	1680 Oct 12 20:58	0°♏	
evening rise	1680 Oct 14 04:19	1°♏37'51	
desc. node	1680 Nov 01 00:21	23°♏54'56	
	1680 Nov 05 21:15	0°♐	
	1680 Nov 29 21:49	0°♑	
	1680 Dec 23 23:56	0°♒	
	1681 Jan 17 06:13	0°♓	
	1681 Feb 10 21:45	0°♈	
asc. node	1681 Feb 22 03:35	13°♈25'28	
	1681 Mar 08 07:36	0°♉	
	1681 Apr 04 06:51	0°♊	
evening max el	1681 Apr 19 01:38	15°♊03'45	45°38'22
	1681 May 05 17:46	0°♋	
greatest brilliancy	1681 May 26 22:30	13°♋06'19	-4.7m
retrograde	1681 Jun 06 20:34	15°♋15'19	
desc. node	1681 Jun 13 16:52	14°♋19'50	
evening set	1681 Jun 22 01:16	10°♋49'55	
inferior conj	1681 Jun 28 09:01	7°♋02'27	-3°21'46
minimum elong	1681 Jun 28 02:05	7°♋13'19	3°19'53
min. Earth dist.	1681 Jun 28 07:34	7°♋04'44	0.28985 AU
morning rise	1681 Jul 04 02:49	3°♋33'43	
	1681 Jul 12 01:06	30°℞♊	
direct	1681 Jul 20 00:39	28°♊45'07	
	1681 Jul 28 07:31	0°♋	
greatest brilliancy	1681 Jul 30 11:20	0°♋42'06	-4.7m
morning max el	1681 Sep 07 01:55	28°♋57'39	46°00'45
	1681 Sep 08 03:32	0°♌	
asc. node	1681 Oct 04 20:31	28°♌09'43	
	1681 Oct 06 11:56	0°♍	
	1681 Nov 01 09:04	0°♎	
	1681 Nov 26 04:26	0°♏	
	1681 Dec 20 11:43	0°♐	
	1682 Jan 13 14:01	0°♑	
desc. node	1682 Jan 24 09:46	13°♑30'09	
	1682 Feb 06 15:00	0°♒	
	1682 Mar 02 16:31	0°♓	
morning set	1682 Mar 13 07:37	13°♓13'45	
	1682 Mar 26 19:43	0°♈	
	1682 Apr 20 01:20	0°♉	
superior conj	1682 Apr 20 23:53	1°♉09'35	-0°57'43
minimum elong	1682 Apr 21 09:42	1°♉39'54	0°57'22
max. Earth dist.	1682 Apr 23 18:45	4°♉35'56	1.73023 AU
	1682 May 14 09:34	0°♊	
asc. node	1682 May 17 13:14	3°♊52'36	
evening rise	1682 May 28 11:29	17°♊17'47	
	1682 Jun 07 20:03	0°♋	
	1682 Jul 02 08:32	0°♌	
	1682 Jul 26 23:33	0°♍	
	1682 Aug 20 18:42	0°♎	
desc. node	1682 Sep 06 02:34	19°♎34'57	
	1682 Sep 14 20:29	0°♏	
	1682 Oct 10 09:05	0°♐	
	1682 Nov 05 19:10	0°♑	
evening max el	1682 Nov 24 21:47	20°♑19'53	47°18'39
	1682 Dec 04 18:33	0°♒	
asc. node	1682 Dec 28 05:53	18°♒28'25	
greatest brilliancy	1683 Jan 04 14:40	22°♒02'08	-4.9m
retrograde	1683 Jan 14 20:48	24°♒03'43	
evening set	1683 Jan 31 11:27	18°♒38'18	
min. Earth dist.	1683 Feb 03 18:47	16°♒37'39	0.27185 AU
inferior conj	1683 Feb 04 15:47	16°♒05'00	7°57'07
minimum elong	1683 Feb 04 07:25	16°♒18'02	7°55'57
morning rise	1683 Feb 08 03:38	13°♒56'31	
direct	1683 Feb 25 04:21	8°♒17'54	
greatest brilliancy	1683 Mar 06 05:10	9°♒49'52	-4.8m
	1683 Apr 05 12:42	0°♓	
morning max el	1683 Apr 15 16:55	9°♓31'31	46°14'36
desc. node	1683 Apr 18 19:16	12°♓34'35	
	1683 May 05 14:52	0°♈	
	1683 Jun 01 17:17	0°♉	
	1683 Jun 27 17:13	0°♊	
	1683 Jul 23 01:54	0°♋	
asc. node	1683 Aug 09 22:45	21°♋29'54	
	1683 Aug 16 22:49	0°♌	
	1683 Sep 10 09:53	0°♍	
	1683 Oct 04 13:32	0°♎	
morning set	1683 Oct 10 08:59	7°♎15'23	
	1683 Oct 28 12:39	0°♏	
max. Earth dist.	1683 Nov 17 11:25	25°♏03'37	1.71218 AU
superior conj	1683 Nov 18 13:04	26°♏24'16	0°25'50
minimum elong	1683 Nov 18 19:26	26°♏44'15	0°25'31
	1683 Nov 21 09:41	0°♐	
desc. node	1683 Nov 29 12:06	10°♐11'15	
	1683 Dec 15 06:14	0°♑	
evening rise	1683 Dec 29 20:45	18°♑21'29	
	1684 Jan 08 03:20	0°♒	
	1684 Feb 01 02:24	0°♓	
	1684 Feb 25 05:43	0°♈	
	1684 Mar 20 16:23	0°♉	
asc. node	1684 Mar 21 15:36	1°♉10'37	
	1684 Apr 14 14:16	0°♊	
	1684 May 10 05:23	0°♋	
	1684 Jun 06 03:08	0°♌	
evening max el	1684 Jun 28 18:42	23°♌07'39	45°27'26
	1684 Jul 06 05:02	0°♍	
desc. node	1684 Jul 11 04:48	4°♍20'05	
greatest brilliancy	1684 Aug 06 18:27	21°♍04'14	-4.7m
retrograde	1684 Aug 16 11:16	22°♍45'53	
evening set	1684 Sep 03 11:28	16°♍43'44	
inferior conj	1684 Sep 06 16:02	14°♍47'09	-8°43'30
minimum elong	1684 Sep 06 16:00	14°♍47'13	8°43'31
min. Earth dist.	1684 Sep 07 07:05	14°♍23'57	0.28350 AU
morning rise	1684 Sep 09 20:21	12°♍50'34	
direct	1684 Sep 28 00:33	6°♍38'05	
greatest brilliancy	1684 Oct 09 02:16	8°♍54'13	-4.8m
asc. node	1684 Nov 01 08:05	24°♍09'56	
	1684 Nov 07 20:18	0°♎	
morning max el	1684 Nov 17 12:05	9°♎24'33	46°43'48
	1684 Dec 06 17:57	0°♏	
	1685 Jan 01 17:42	0°♐	
	1685 Jan 26 17:52	0°♑	
	1685 Feb 20 08:45	0°♒	
desc. node	1685 Feb 20 21:39	0°♒39'29	
	1685 Mar 16 20:07	0°♓	
	1685 Apr 10 06:40	0°♈	
	1685 May 04 17:34	0°♉	
morning set	1685 May 22 20:26	22°♉12'52	
	1685 May 29 04:49	0°♊	
asc. node	1685 Jun 14 01:03	19°♊26'13	
	1685 Jun 22 15:33	0°♋	
max. Earth dist.	1685 Jun 27 03:41	5°♋32'07	1.73584 AU
superior conj	1685 Jun 28 11:26	7°♋09'42	0°33'24
minimum elong	1685 Jun 28 05:07	6°♋50'19	0°33'07
	1685 Jul 17 00:55	0°♌	

evening rise	1685 Aug 03 06:40	21°♌15'04	
	1685 Aug 10 08:50	0°♍	
	1685 Sep 03 16:12	0°♎	
	1685 Sep 28 00:14	0°♏	
desc. node	1685 Oct 03 14:28	6°♏53'08	
	1685 Oct 22 10:01	0°♐	
	1685 Nov 15 22:55	0°♑	
	1685 Dec 10 18:37	0°♒	
	1686 Jan 05 06:49	0°♓	
asc. node	1686 Jan 24 17:45	21°♓42'32	
	1686 Feb 01 14:22	0°♈	
evening max el	1686 Feb 04 18:14	3°♈13'40	46°46'19
	1686 Mar 08 17:15	0°♉	
greatest brilliancy	1686 Mar 16 09:16	3°♉43'29	-4.8m
retrograde	1686 Mar 27 01:57	5°♉51'07	
evening set	1686 Apr 12 17:18	0°♉25'45	
	1686 Apr 13 10:31	30°℞♈	
inferior conj	1686 Apr 17 07:16	27°♈35'43	6°12'50
minimum elong	1686 Apr 17 17:05	27°♈20'13	6°10'48
min. Earth dist.	1686 Apr 17 06:03	27°♈37'37	0.28543 AU
morning rise	1686 Apr 22 17:17	24°♈17'40	
direct	1686 May 08 14:31	19°♈25'12	
desc. node	1686 May 16 06:54	20°♈31'20	
greatest brilliancy	1686 May 18 09:05	21°♈10'19	-4.7m
	1686 Jun 03 14:57	0°♉	
morning max el	1686 Jun 26 10:32	19°♉20'25	45°44'17
	1686 Jul 07 05:41	0°♊	
	1686 Aug 04 04:18	0°♋	
	1686 Aug 30 07:21	0°♌	
asc. node	1686 Sep 06 10:39	8°♌25'23	
	1686 Sep 24 10:17	0°♍	
	1686 Oct 18 21:56	0°♎	
	1686 Nov 12 00:30	0°♏	
	1686 Dec 05 22:34	0°♐	
morning set	1686 Dec 24 00:59	22°♐45'49	
desc. node	1686 Dec 26 23:57	26°♐28'56	
	1686 Dec 29 19:05	0°♑	
	1687 Jan 22 15:48	0°♒	
superior conj	1687 Feb 03 20:06	15°♒17'03	-1°15'55
minimum elong	1687 Feb 03 10:10	14°♒45'55	1°15'41
max. Earth dist.	1687 Feb 07 10:37	19°♒48'14	1.71460 AU
	1687 Feb 15 13:58	0°♓	
	1687 Mar 11 14:54	0°♈	
evening rise	1687 Mar 16 06:40	5°♈47'25	
	1687 Apr 04 19:57	0°♉	
asc. node	1687 Apr 19 03:25	17°♉36'43	
	1687 Apr 29 06:16	0°♊	
	1687 May 23 22:57	0°♋	
	1687 Jun 17 23:50	0°♌	
	1687 Jul 13 12:56	0°♍	
desc. node	1687 Aug 08 16:39	29°♍41'52	
	1687 Aug 08 23:12	0°♎	
	1687 Sep 06 06:56	0°♏	
evening max el	1687 Sep 10 14:06	4°♏13'50	46°24'02
	1687 Oct 12 14:34	0°♐	
greatest brilliancy	1687 Oct 20 22:02	3°♐44'21	-4.9m
retrograde	1687 Oct 30 05:00	5°♐20'20	
evening set	1687 Nov 14 00:22	1°♐04'45	
	1687 Nov 15 22:44	30°℞♏	
inferior conj	1687 Nov 19 19:06	27°♏41'52	-2°34'01
minimum elong	1687 Nov 20 00:49	27°♏33'10	2°32'15
min. Earth dist.	1687 Nov 20 05:05	27°♏26'39	0.26571 AU
morning rise	1687 Nov 26 00:50	24°♏03'43	
asc. node	1687 Nov 29 20:00	22°♏15'05	
direct	1687 Dec 10 07:19	20°♏01'20	
greatest brilliancy	1687 Dec 20 20:28	22°♏07'39	-4.9m
	1688 Jan 03 18:21	0°♐	
morning max el	1688 Jan 29 21:04	23°♐12'38	46°54'28
	1688 Feb 05 11:08	0°♑	
	1688 Mar 03 17:04	0°♒	
desc. node	1688 Mar 20 09:34	19°♒15'30	
	1688 Mar 29 13:31	0°♓	
	1688 Apr 23 20:33	0°♈	
	1688 May 18 21:06	0°♉	
	1688 Jun 12 17:27	0°♊	
	1688 Jul 07 09:39	0°♋	
asc. node	1688 Jul 11 13:00	5°♋03'19	
morning set	1688 Jul 29 11:55	27°♋04'06	
	1688 Jul 31 21:06	0°♌	
	1688 Aug 25 03:49	0°♍	
max. Earth dist.	1688 Aug 31 10:37	7°♍47'58	1.72585 AU
superior conj	1688 Sep 04 00:49	12°♍15'42	1°24'45
minimum elong	1688 Sep 04 00:08	12°♍13'35	1°24'45
	1688 Sep 18 06:54	0°♎	
evening rise	1688 Oct 11 18:00	29°♎16'17	
	1688 Oct 12 08:00	0°♏	
desc. node	1688 Oct 31 02:19	23°♏26'03	
	1688 Nov 05 08:29	0°♐	
	1688 Nov 29 09:18	0°♑	
	1688 Dec 23 11:41	0°♒	
	1689 Jan 16 18:21	0°♓	
	1689 Feb 10 10:33	0°♈	
asc. node	1689 Feb 21 05:40	12°♈52'16	
	1689 Mar 07 21:48	0°♉	
	1689 Apr 04 00:38	0°♊	
evening max el	1689 Apr 16 16:15	12°♊49'43	45°40'02
	1689 May 06 03:41	0°♋	
greatest brilliancy	1689 May 24 14:45	10°♋58'03	-4.7m
retrograde	1689 Jun 04 13:04	13°♋07'47	
desc. node	1689 Jun 12 18:58	11°♋46'56	
evening set	1689 Jun 19 16:54	8°♋43'02	
inferior conj	1689 Jun 26 01:37	4°♋54'33	-3°03'31
minimum elong	1689 Jun 25 19:13	5°♋04'34	3°01'46
min. Earth dist.	1689 Jun 26 00:23	4°♋56'29	0.28986 AU
morning rise	1689 Jul 01 21:24	1°♋23'03	
	1689 Jul 04 12:02	30°℞♊	
direct	1689 Jul 17 16:34	26°♊36'59	
greatest brilliancy	1689 Jul 28 04:14	28°♊34'34	-4.7m
	1689 Jul 31 16:13	0°♋	
morning max el	1689 Sep 04 17:28	26°♋45'42	45°59'30
	1689 Sep 08 00:45	0°♌	
asc. node	1689 Oct 03 22:27	27°♌31'29	
	1689 Oct 06 03:19	0°♍	
	1689 Oct 31 22:23	0°♎	
	1689 Nov 25 16:47	0°♏	
	1689 Dec 19 23:33	0°♐	
	1690 Jan 13 01:32	0°♑	
desc. node	1690 Jan 23 11:50	13°♑01'03	
	1690 Feb 06 02:16	0°♒	
	1690 Mar 02 03:34	0°♓	
morning set	1690 Mar 10 20:24	10°♓50'07	
	1690 Mar 26 06:33	0°♈	
superior conj	1690 Apr 18 15:40	28°♈57'04	-1°00'12
minimum elong	1690 Apr 19 01:37	29°♈27'47	0°59'51
	1690 Apr 19 12:03	0°♉	
max. Earth dist.	1690 Apr 21 11:36	2°♉26'48	1.72975 AU
	1690 May 13 20:14	0°♊	
asc. node	1690 May 16 15:20	3°♊26'16	
evening rise	1690 May 26 05:33	15°♊13'10	
	1690 Jun 07 06:48	0°♋	
	1690 Jul 01 19:30	0°♌	

	1690 Jul 26 10:54	0°♍	
	1690 Aug 20 06:41	0°♎	
desc. node	1690 Sep 05 04:31	19°♎03'13	
	1690 Sep 14 09:27	0°♏	
	1690 Oct 09 23:44	0°♐	
	1690 Nov 05 13:08	0°♑	
evening max el	1690 Nov 22 11:42	17°♑55'48	47°18'10
	1690 Dec 04 23:00	0°♒	
asc. node	1690 Dec 27 07:59	16°♒53'30	
greatest brilliancy	1691 Jan 02 04:13	19°♒35'52	-4.9m
retrograde	1691 Jan 12 10:56	21°♒38'02	
evening set	1691 Jan 28 20:56	16°♒18'29	
min. Earth dist.	1691 Feb 01 07:41	14°♒13'08	0.27128 AU
inferior conj	1691 Feb 02 05:03	13°♒40'00	7°46'44
minimum elong	1691 Feb 01 20:09	13°♒53'49	7°45'22
morning rise	1691 Feb 05 19:42	11°♒27'47	
direct	1691 Feb 22 17:09	5°♒53'37	
greatest brilliancy	1691 Mar 03 18:00	7°♒26'02	-4.9m
	1691 Apr 05 16:26	0°♓	
morning max el	1691 Apr 13 07:37	7°♓14'10	46°16'20
desc. node	1691 Apr 17 21:12	11°♓45'30	
	1691 May 05 08:05	0°♈	
	1691 Jun 01 07:13	0°♉	
	1691 Jun 27 05:36	0°♊	
	1691 Jul 22 13:28	0°♋	
asc. node	1691 Aug 09 00:48	21°♋02'13	
	1691 Aug 16 09:56	0°♌	
	1691 Sep 09 20:47	0°♍	
	1691 Oct 04 00:21	0°♎	
morning set	1691 Oct 07 23:50	4°♎58'00	
	1691 Oct 27 23:29	0°♏	
max. Earth dist.	1691 Nov 14 21:42	22°♏30'53	1.71244 AU
superior conj	1691 Nov 16 00:27	23°♏54'58	0°29'28
minimum elong	1691 Nov 16 07:34	24°♏17'17	0°29'08
	1691 Nov 20 20:35	0°♐	
desc. node	1691 Nov 28 14:15	9°♐43'45	
	1691 Dec 14 17:11	0°♑	
evening rise	1691 Dec 27 06:46	15°♑47'42	
	1692 Jan 07 14:21	0°♒	
	1692 Jan 31 13:31	0°♓	
	1692 Feb 24 17:02	0°♈	
	1692 Mar 20 04:02	0°♉	
asc. node	1692 Mar 20 17:33	0°♉41'06	
	1692 Apr 14 02:32	0°♊	
	1692 May 09 18:56	0°♋	
	1692 Jun 05 19:42	0°♌	
evening max el	1692 Jun 26 10:39	20°♌57'42	45°26'35
	1692 Jul 06 08:02	0°♍	
desc. node	1692 Jul 10 06:54	3°♍20'59	
greatest brilliancy	1692 Aug 04 07:21	18°♍49'47	-4.7m
retrograde	1692 Aug 14 01:58	20°♍32'28	
evening set	1692 Sep 01 01:13	14°♍31'46	
inferior conj	1692 Sep 04 07:03	12°♍32'58	-8°42'35
minimum elong	1692 Sep 04 06:10	12°♍34'20	8°42'34
min. Earth dist.	1692 Sep 04 20:54	12°♍11'35	0.28403 AU
morning rise	1692 Sep 07 10:58	10°♍36'46	
direct	1692 Sep 25 16:40	4°♍23'25	
greatest brilliancy	1692 Oct 06 16:33	6°♍37'39	-4.8m
asc. node	1692 Oct 31 10:13	23°♍08'08	
	1692 Nov 07 22:02	0°♎	
morning max el	1692 Nov 15 03:10	7°♎05'59	46°42'22
	1692 Dec 06 10:54	0°♏	
	1693 Jan 01 07:54	0°♐	
	1693 Jan 26 06:43	0°♑	
desc. node	1693 Feb 19 23:42	0°♒08'55	
	1693 Feb 19 20:47	0°♒	
	1693 Mar 16 07:37	0°♓	
	1693 Apr 09 17:48	0°♈	
	1693 May 04 04:26	0°♉	
morning set	1693 May 20 14:04	20°♉07'01	
	1693 May 28 15:28	0°♊	
asc. node	1693 Jun 13 03:14	19°♊00'31	
	1693 Jun 22 02:05	0°♋	
max. Earth dist.	1693 Jun 25 01:50	3°♋40'19	1.73587 AU
superior conj	1693 Jun 26 05:54	5°♋06'36	0°30'31
minimum elong	1693 Jun 26 00:04	4°♋48'38	0°30'14
	1693 Jul 16 11:27	0°♌	
evening rise	1693 Aug 01 01:24	19°♌12'03	
	1693 Aug 09 19:30	0°♍	
	1693 Sep 03 03:07	0°♎	
	1693 Sep 27 11:32	0°♏	
desc. node	1693 Oct 02 16:29	6°♏24'16	
	1693 Oct 21 21:49	0°♐	
	1693 Nov 15 11:25	0°♑	
	1693 Dec 10 08:11	0°♒	
	1694 Jan 04 22:24	0°♓	
asc. node	1694 Jan 23 19:48	20°♓57'58	
	1694 Feb 01 11:17	0°♈	
evening max el	1694 Feb 02 09:26	0°♈56'11	46°48'32
	1694 Mar 10 13:31	0°♉	
greatest brilliancy	1694 Mar 14 02:17	1°♉31'09	-4.8m
retrograde	1694 Mar 24 17:46	3°♉37'36	
	1694 Apr 07 04:10	30°♈R	
evening set	1694 Apr 10 11:59	28°♈08'32	
inferior conj	1694 Apr 14 23:00	25°♈22'35	6°27'15
minimum elong	1694 Apr 15 08:47	25°♈07'07	6°25'18
min. Earth dist.	1694 Apr 14 21:22	25°♈25'10	0.28512 AU
morning rise	1694 Apr 20 05:59	22°♈08'35	
direct	1694 May 06 05:56	17°♈12'49	
desc. node	1694 May 15 09:07	18°♈44'57	
greatest brilliancy	1694 May 15 23:09	18°♈56'37	-4.7m
	1694 Jun 04 06:27	0°♉	
morning max el	1694 Jun 24 01:25	17°♉07'58	45°44'39
	1694 Jul 07 00:19	0°♊	
	1694 Aug 03 18:36	0°♋	
	1694 Aug 29 19:54	0°♌	
asc. node	1694 Sep 05 12:39	7°♌54'57	
	1694 Sep 23 21:59	0°♍	
	1694 Oct 18 09:13	0°♎	
	1694 Nov 11 11:36	0°♏	
	1694 Dec 05 09:34	0°♐	
morning set	1694 Dec 21 10:59	20°♐11'48	
desc. node	1694 Dec 26 02:03	26°♐01'05	
	1694 Dec 29 06:02	0°♑	
	1695 Jan 22 02:43	0°♒	
superior conj	1695 Feb 01 06:22	12°♒44'35	-1°13'59
minimum elong	1695 Jan 31 19:51	12°♒11'37	1°13'42
max. Earth dist.	1695 Feb 04 17:46	17°♒06'03	1.71416 AU
	1695 Feb 15 00:51	0°♓	
	1695 Mar 11 01:46	0°♈	
evening rise	1695 Mar 13 18:50	3°♈22'20	
	1695 Apr 04 06:51	0°♉	
asc. node	1695 Apr 18 05:32	17°♉09'32	
	1695 Apr 28 17:19	0°♊	
	1695 May 23 10:22	0°♋	
	1695 Jun 17 11:56	0°♌	
	1695 Jul 13 02:15	0°♍	
desc. node	1695 Aug 07 18:39	29°♍04'01	
	1695 Aug 08 14:58	0°♎	
	1695 Sep 06 05:04	0°♏	
evening max el	1695 Sep 08 02:20	1°♏50'22	46°21'34

	1695 Oct 15 00:07	0°♐	
greatest brilliancy	1695 Oct 18 11:40	1°♐19'53	-4.9m
retrograde	1695 Oct 27 16:37	2°♐54'27	
	1695 Nov 08 19:48	30°℞♏	
evening set	1695 Nov 11 14:58	28°♏35'36	
inferior conj	1695 Nov 17 07:38	25°♏15'53	-2°56'56
minimum elong	1695 Nov 17 14:06	25°♏06'01	2°54'57
min. Earth dist.	1695 Nov 17 19:23	24°♏57'59	0.26612 AU
morning rise	1695 Nov 23 12:41	21°♏38'22	
asc. node	1695 Nov 28 22:08	19°♏11'46	
direct	1695 Dec 07 19:42	17°♏34'15	
greatest brilliancy	1695 Dec 18 11:36	19°♏42'49	-4.9m
	1696 Jan 04 14:09	0°♐	
morning max el	1696 Jan 27 10:03	20°♐46'13	46°55'03
	1696 Feb 05 07:27	0°♑	
	1696 Mar 03 08:36	0°♒	
desc. node	1696 Mar 19 11:33	18°♒40'15	
	1696 Mar 29 03:00	0°♓	
	1696 Apr 23 08:52	0°♈	
	1696 May 18 08:41	0°♉	
	1696 Jun 12 04:35	0°♊	
	1696 Jul 06 20:30	0°♋	
asc. node	1696 Jul 10 14:59	4°♋36'20	
morning set	1696 Jul 27 05:32	24°♋57'42	
	1696 Jul 31 07:49	0°♌	
	1696 Aug 24 14:31	0°♍	
max. Earth dist.	1696 Aug 29 05:06	5°♍43'04	1.72634 AU
superior conj	1696 Sep 01 17:54	10°♍06'23	1°24'33
minimum elong	1696 Sep 01 16:31	10°♍02'04	1°24'33
	1696 Sep 17 17:39	0°♎	
evening rise	1696 Oct 09 08:13	26°♎57'00	
	1696 Oct 11 18:52	0°♏	
desc. node	1696 Oct 30 04:29	22°♏58'25	
	1696 Nov 04 19:32	0°♐	
	1696 Nov 28 20:36	0°♑	
	1696 Dec 22 23:19	0°♒	
	1697 Jan 16 06:25	0°♓	
	1697 Feb 09 23:24	0°♈	
asc. node	1697 Feb 20 07:37	12°♈18'25	
	1697 Mar 07 12:14	0°♉	
	1697 Apr 03 19:01	0°♊	
evening max el	1697 Apr 14 07:26	10°♊36'38	45°41'50
	1697 May 06 17:26	0°♋	
greatest brilliancy	1697 May 22 06:20	8°♋48'18	-4.7m
retrograde	1697 Jun 02 05:46	10°♋59'18	
desc. node	1697 Jun 11 21:02	9°♋08'33	
evening set	1697 Jun 17 08:28	6°♋34'58	
inferior conj	1697 Jun 23 17:56	2°♋45'37	-2°44'53
minimum elong	1697 Jun 23 12:07	2°♋54'43	2°43'15
min. Earth dist.	1697 Jun 23 16:41	2°♋47'34	0.28984 AU
	1697 Jun 28 06:00	30°℞♊	
morning rise	1697 Jun 29 15:39	29°♊11'39	
direct	1697 Jul 15 08:37	24°♊27'52	
greatest brilliancy	1697 Jul 25 20:28	26°♊25'50	-4.7m
	1697 Aug 02 14:13	0°♋	
morning max el	1697 Sep 02 09:47	24°♋35'37	45°58'23
	1697 Sep 07 21:19	0°♌	
asc. node	1697 Oct 03 00:33	26°♌54'04	
	1697 Oct 05 18:29	0°♍	
	1697 Oct 31 11:35	0°♎	
	1697 Nov 25 05:02	0°♏	
	1697 Dec 19 11:17	0°♐	
	1698 Jan 12 12:58	0°♑	
desc. node	1698 Jan 22 13:49	12°♑31'59	
	1698 Feb 05 13:29	0°♒	
	1698 Mar 01 14:35	0°♓	
morning set	1698 Mar 08 08:58	8°♓25'37	
	1698 Mar 25 17:28	0°♈	
superior conj	1698 Apr 16 06:59	26°♈42'39	-1°02'37
minimum elong	1698 Apr 16 17:00	27°♈13'33	1°02'16
	1698 Apr 18 22:52	0°♉	
max. Earth dist.	1698 Apr 19 03:56	0°♉15'38	1.72932 AU
	1698 May 13 07:03	0°♊	
asc. node	1698 May 15 17:26	2°♊59'29	
evening rise	1698 May 23 23:06	13°♊06'30	
	1698 Jun 06 17:42	0°♋	
	1698 Jul 01 06:37	0°♌	
	1698 Jul 25 22:25	0°♍	
	1698 Aug 19 18:51	0°♎	
desc. node	1698 Sep 04 06:34	18°♎31'13	
	1698 Sep 13 22:40	0°♏	
	1698 Oct 09 14:41	0°♐	
	1698 Nov 05 07:38	0°♑	
evening max el	1698 Nov 20 02:48	15°♑34'43	47°17'45
	1698 Dec 05 05:24	0°♒	
asc. node	1698 Dec 26 09:59	15°♒15'14	
greatest brilliancy	1698 Dec 30 17:39	17°♒09'46	-4.9m
retrograde	1699 Jan 10 01:25	19°♒12'33	
evening set	1699 Jan 26 06:34	13°♒59'00	
min. Earth dist.	1699 Jan 29 20:33	11°♒49'08	0.27071 AU
inferior conj	1699 Jan 30 18:26	11°♒15'14	7°35'27
minimum elong	1699 Jan 30 09:06	11°♒29'42	7°33'54
morning rise	1699 Feb 03 11:59	8°♒59'05	
direct	1699 Feb 20 06:33	3°♒29'50	
greatest brilliancy	1699 Mar 01 06:32	5°♒02'01	-4.9m
	1699 Apr 05 18:36	0°♓	
morning max el	1699 Apr 10 22:27	4°♓56'57	46°17'44
desc. node	1699 Apr 16 23:26	10°♓57'49	
	1699 May 05 01:06	0°♈	
	1699 May 31 21:15	0°♉	
	1699 Jun 26 18:12	0°♊	
	1699 Jul 22 01:16	0°♋	
asc. node	1699 Aug 08 02:49	20°♋33'40	
	1699 Aug 15 21:15	0°♌	
	1699 Sep 09 07:52	0°♍	
	1699 Oct 03 11:22	0°♎	
morning set	1699 Oct 05 14:33	2°♎39'45	
	1699 Oct 27 10:32	0°♏	
max. Earth dist.	1699 Nov 12 05:20	19°♏49'15	1.71270 AU
superior conj	1699 Nov 13 11:58	21°♏25'28	0°33'03
minimum elong	1699 Nov 13 19:45	21°♏49'56	0°32'42
	1699 Nov 20 07:41	0°♐	
desc. node	1699 Nov 27 16:18	9°♐15'14	
	1699 Dec 14 04:20	0°♑	
evening rise	1699 Dec 24 16:51	13°♑13'29	
	1700 Jan 07 01:33	0°♒	
	1700 Jan 31 00:48	0°♓	
	1700 Feb 24 04:30	0°♈	
asc. node	1700 Mar 20 19:41	0°♉11'38	
	1700 Mar 20 15:51	0°♉	
	1700 Apr 14 15:04	0°♊	
	1700 May 10 08:54	0°♋	
	1700 Jun 06 12:59	0°♌	
evening max el	1700 Jun 25 02:09	18°♌45'28	45°25'40
	1700 Jul 07 13:25	0°♍	
desc. node	1700 Jul 10 08:54	2°♍19'02	
greatest brilliancy	1700 Aug 02 20:51	16°♍34'39	-4.7m
retrograde	1700 Aug 12 16:06	18°♍17'42	
evening set	1700 Aug 30 14:32	12°♍19'12	
inferior conj	1700 Sep 02 22:00	10°♍17'42	-8°40'53
minimum elong	1700 Sep 02 20:17	10°♍20'22	8°40'50

min. Earth dist.	1700 Sep 03 11:01	9°♍57'32	0.28452 AU
morning rise	1700 Sep 06 01:52	8°♍21'16	
direct	1700 Sep 24 08:16	2°♍07'39	
greatest brilliancy	1700 Oct 05 07:11	4°♍20'25	-4.8m
asc. node	1700 Oct 31 12:23	22°♍06'59	
	1700 Nov 08 22:52	0°♎	
morning max el	1700 Nov 13 17:06	4°♎43'37	46°40'56
	1700 Dec 07 03:50	0°♏	
	1701 Jan 01 22:13	0°♐	
	1701 Jan 26 19:45	0°♑	
desc. node	1701 Feb 20 01:41	29°♑37'29	
	1701 Feb 20 09:02	0°♒	
	1701 Mar 16 19:20	0°♓	
	1701 Apr 10 05:08	0°♈	
	1701 May 04 15:29	0°♉	
morning set	1701 May 19 07:47	18°♉00'40	
	1701 May 29 02:22	0°♊	
asc. node	1701 Jun 13 05:12	18°♊33'12	
	1701 Jun 22 12:56	0°♋	
max. Earth dist.	1701 Jun 23 22:24	1°♋42'47	1.73595 AU
superior conj	1701 Jun 25 00:21	3°♋02'29	0°27'34
minimum elong	1701 Jun 24 19:00	2°♋46'02	0°27'19
	1701 Jul 16 22:20	0°♌	
evening rise	1701 Jul 30 19:57	17°♌07'26	
	1701 Aug 10 06:33	0°♍	
	1701 Sep 03 14:26	0°♎	
	1701 Sep 27 23:13	0°♏	
desc. node	1701 Oct 02 18:36	5°♏54'36	
	1701 Oct 22 10:00	0°♐	
	1701 Nov 16 00:19	0°♑	
	1701 Dec 10 22:12	0°♒	
	1702 Jan 05 14:36	0°♓	
asc. node	1702 Jan 23 21:50	20°♓11'45	
evening max el	1702 Jan 31 23:53	28°♓35'39	46°50'47
	1702 Feb 02 09:22	0°♈	
greatest brilliancy	1702 Mar 12 19:43	29°♈18'26	-4.8m
	1702 Mar 14 19:44	0°♉	
retrograde	1702 Mar 23 09:26	1°♉23'33	
	1702 Mar 31 15:39	30°℞♈	
evening set	1702 Apr 09 06:47	25°♈50'39	
inferior conj	1702 Apr 13 14:51	23°♈08'59	6°41'01
minimum elong	1702 Apr 14 00:33	22°♈53'38	6°39'09
min. Earth dist.	1702 Apr 13 13:02	23°♈11'52	0.28479 AU
morning rise	1702 Apr 18 18:41	19°♈59'12	
direct	1702 May 04 20:49	14°♈59'52	
greatest brilliancy	1702 May 14 13:45	16°♈42'58	-4.7m
desc. node	1702 May 15 11:05	17°♈01'48	
	1702 Jun 05 18:16	0°♉	
morning max el	1702 Jun 22 15:58	14°♉53'58	45°45'00
	1702 Jul 07 18:44	0°♊	
	1702 Aug 04 09:05	0°♋	
	1702 Aug 30 08:46	0°♌	
asc. node	1702 Sep 05 14:46	7°♌23'48	
	1702 Sep 24 10:03	0°♍	
	1702 Oct 18 20:54	0°♎	
	1702 Nov 11 23:03	0°♏	
	1702 Dec 05 20:54	0°♐	
morning set	1702 Dec 19 20:54	17°♐36'25	
desc. node	1702 Dec 26 03:59	25°♐31'38	
	1702 Dec 29 17:19	0°♑	
	1703 Jan 22 13:57	0°♒	
superior conj	1703 Jan 30 16:33	10°♒10'47	-1°11'52
minimum elong	1703 Jan 30 05:32	9°♒36'13	1°11'34
max. Earth dist.	1703 Feb 02 22:10	14°♒14'13	1.71375 AU
	1703 Feb 15 12:04	0°♓	
	1703 Mar 11 12:57	0°♈	
evening rise	1703 Mar 12 07:00	0°♈56'09	
	1703 Apr 04 18:03	0°♉	
asc. node	1703 Apr 18 07:39	16°♉41'24	
	1703 Apr 29 04:40	0°♊	
	1703 May 23 22:05	0°♋	
	1703 Jun 18 00:21	0°♌	
	1703 Jul 13 15:59	0°♍	
desc. node	1703 Aug 07 20:40	28°♍24'51	
	1703 Aug 09 07:23	0°♎	
evening max el	1703 Sep 06 14:37	29°♎25'57	46°18'58
	1703 Sep 07 04:42	0°♏	
greatest brilliancy	1703 Oct 17 00:42	28°♏53'10	-4.9m
	1703 Oct 21 08:24	0°♐	
retrograde	1703 Oct 26 04:30	0°♐27'04	
	1703 Oct 30 22:14	30°℞♏	
evening set	1703 Nov 10 05:33	26°♏04'25	
inferior conj	1703 Nov 15 19:59	22°♏48'09	-3°19'36
minimum elong	1703 Nov 16 03:11	22°♏37'12	3°17'26
min. Earth dist.	1703 Nov 16 09:19	22°♏27'53	0.26657 AU
morning rise	1703 Nov 22 00:10	19°♏11'53	
asc. node	1703 Nov 29 00:04	16°♏12'19	
direct	1703 Dec 06 08:19	15°♏05'22	
greatest brilliancy	1703 Dec 17 02:24	17°♏16'14	-4.9m
	1704 Jan 06 05:32	0°♐	
morning max el	1704 Jan 25 23:51	18°♐20'47	46°55'41
	1704 Feb 06 03:31	0°♑	
	1704 Mar 04 00:13	0°♒	
desc. node	1704 Mar 19 13:43	18°♒04'54	
	1704 Mar 29 16:39	0°♓	
	1704 Apr 23 21:23	0°♈	
	1704 May 18 20:29	0°♉	
	1704 Jun 12 15:54	0°♊	
	1704 Jul 07 07:33	0°♋	
asc. node	1704 Jul 10 17:03	4°♋08'59	
morning set	1704 Jul 25 23:33	22°♋51'58	
	1704 Jul 31 18:44	0°♌	
	1704 Aug 25 01:25	0°♍	
max. Earth dist.	1704 Aug 28 00:59	3°♍41'57	1.72688 AU
superior conj	1704 Aug 31 11:12	7°♍57'07	1°24'15
minimum elong	1704 Aug 31 09:07	7°♍50'37	1°24'14
	1704 Sep 18 04:40	0°♎	
evening rise	1704 Oct 07 22:32	24°♎37'06	
	1704 Oct 12 06:03	0°♏	
desc. node	1704 Oct 30 06:31	22°♏29'18	
	1704 Nov 05 06:57	0°♐	
	1704 Nov 29 08:16	0°♑	
	1704 Dec 23 11:17	0°♒	
	1705 Jan 16 18:50	0°♓	
	1705 Feb 10 12:36	0°♈	
asc. node	1705 Feb 20 09:46	11°♈44'13	
	1705 Mar 08 03:05	0°♉	
	1705 Apr 04 14:08	0°♊	
evening max el	1705 Apr 12 23:39	8°♊25'31	45°43'46
	1705 May 08 12:09	0°♋	
greatest brilliancy	1705 May 20 22:01	6°♋38'32	-4.7m
retrograde	1705 May 31 22:55	8°♋50'47	
desc. node	1705 Jun 11 23:01	6°♋26'24	
evening set	1705 Jun 16 00:27	4°♋26'55	
inferior conj	1705 Jun 22 10:25	0°♋36'45	-2°26'01
minimum elong	1705 Jun 22 05:12	0°♋44'53	2°24'33
min. Earth dist.	1705 Jun 22 08:54	0°♋39'06	0.28977 AU
	1705 Jun 23 09:57	30°℞♊	
morning rise	1705 Jun 28 09:58	27°♊00'33	
direct	1705 Jul 14 01:17	22°♊19'06	
greatest brilliancy	1705 Jul 24 12:11	24°♊16'42	-4.7m

	1705 Aug 04 21:11	0°♋	
morning max el	1705 Sep 01 02:34	22°♋26'52	45°57'10
	1705 Sep 08 17:15	0°♌	
asc. node	1705 Oct 03 02:40	26°♌16'52	
	1705 Oct 06 09:32	0°♍	
	1705 Nov 01 00:50	0°♎	
	1705 Nov 25 17:26	0°♏	
	1705 Dec 19 23:15	0°♐	
	1706 Jan 13 00:38	0°♑	
desc. node	1706 Jan 22 15:57	12°♑02'32	
	1706 Feb 06 00:54	0°♒	
	1706 Mar 02 01:48	0°♓	
morning set	1706 Mar 06 21:08	5°♓59'17	
	1706 Mar 26 04:30	0°♈	
superior conj	1706 Apr 14 22:04	24°♈26'59	-1°04'57
minimum elong	1706 Apr 15 08:04	24°♈57'54	1°04'37
max. Earth dist.	1706 Apr 17 22:01	28°♈09'22	1.72885 AU
	1706 Apr 19 09:49	0°♉	
	1706 May 13 17:59	0°♊	
asc. node	1706 May 15 19:24	2°♊31'57	
evening rise	1706 May 22 16:40	10°♊59'32	
	1706 Jun 07 04:42	0°♋	
	1706 Jul 01 17:48	0°♌	
	1706 Jul 26 09:58	0°♍	
	1706 Aug 20 07:04	0°♎	
desc. node	1706 Sep 04 08:43	17°♎59'34	
	1706 Sep 14 11:57	0°♏	
	1706 Oct 10 05:50	0°♐	
	1706 Nov 06 02:42	0°♑	
evening max el	1706 Nov 18 18:15	13°♑14'03	47°16'48
	1706 Dec 06 14:37	0°♒	
asc. node	1706 Dec 26 12:02	13°♒32'02	
greatest brilliancy	1706 Dec 29 07:01	14°♒42'14	-4.9m
retrograde	1707 Jan 08 15:19	16°♒44'56	
evening set	1707 Jan 24 15:49	11°♒37'49	
min. Earth dist.	1707 Jan 28 09:18	9°♒22'49	0.27014 AU
inferior conj	1707 Jan 29 07:24	8°♒48'36	7°23'00
minimum elong	1707 Jan 28 21:42	9°♒03'37	7°21'18
morning rise	1707 Feb 02 04:01	6°♒28'07	
direct	1707 Feb 18 19:43	1°♒04'20	
greatest brilliancy	1707 Feb 27 18:55	2°♒36'09	-4.9m
	1707 Apr 06 19:42	0°♓	
morning max el	1707 Apr 09 12:22	2°♓36'44	46°19'17
desc. node	1707 Apr 17 01:26	10°♓09'54	
	1707 May 05 17:54	0°♈	
	1707 Jun 01 11:10	0°♉	
	1707 Jun 27 06:42	0°♊	
	1707 Jul 22 12:57	0°♋	
asc. node	1707 Aug 08 04:56	20°♋05'44	
	1707 Aug 16 08:29	0°♌	
	1707 Sep 09 18:51	0°♍	
	1707 Oct 03 22:16	0°♎	
morning set	1707 Oct 04 05:51	0°♎23'41	
	1707 Oct 27 21:26	0°♏	
max. Earth dist.	1707 Nov 10 11:55	17°♏04'47	1.71302 AU
superior conj	1707 Nov 12 00:06	18°♏58'27	0°36'30
minimum elong	1707 Nov 12 08:29	19°♏24'45	0°36'07
	1707 Nov 20 18:40	0°♐	
desc. node	1707 Nov 27 18:17	8°♐46'52	
	1707 Dec 14 15:24	0°♑	
evening rise	1707 Dec 23 03:03	10°♑39'48	
	1708 Jan 07 12:43	0°♒	
	1708 Jan 31 12:07	0°♓	
	1708 Feb 24 16:01	0°♈	
asc. node	1708 Mar 19 21:45	29°♈41'50	
	1708 Mar 20 03:44	0°♉	
	1708 Apr 14 03:39	0°♊	
	1708 May 09 22:56	0°♋	
	1708 Jun 06 06:32	0°♌	
evening max el	1708 Jun 22 16:56	16°♌32'00	45°24'57
	1708 Jul 07 20:43	0°♍	
desc. node	1708 Jul 09 10:58	1°♍16'22	
greatest brilliancy	1708 Jul 31 10:54	14°♍21'06	-4.7m
retrograde	1708 Aug 10 06:11	16°♍04'29	
evening set	1708 Aug 28 03:46	10°♍08'32	
inferior conj	1708 Aug 31 13:12	8°♍04'00	-8°38'22
minimum elong	1708 Aug 31 10:41	8°♍07'55	8°38'16
min. Earth dist.	1708 Sep 01 01:41	7°♍44'39	0.28496 AU
morning rise	1708 Sep 03 17:26	6°♍06'49	
	1708 Sep 19 14:51	30°℞♌	
direct	1708 Sep 21 23:36	29°♌53'21	
	1708 Sep 24 08:55	0°♍	
greatest brilliancy	1708 Oct 02 22:37	2°♍05'29	-4.8m
asc. node	1708 Oct 30 14:16	21°♍07'42	
	1708 Nov 08 22:09	0°♎	
morning max el	1708 Nov 11 06:36	2°♎21'16	46°39'37
	1708 Dec 06 20:07	0°♏	
	1709 Jan 01 12:06	0°♐	
	1709 Jan 26 08:28	0°♑	
desc. node	1709 Feb 19 03:50	29°♑07'11	
	1709 Feb 19 21:03	0°♒	
	1709 Mar 16 06:54	0°♓	
	1709 Apr 09 16:21	0°♈	
	1709 May 04 02:26	0°♉	
morning set	1709 May 17 01:02	15°♉53'12	
	1709 May 28 13:06	0°♊	
asc. node	1709 Jun 12 07:15	18°♊06'47	
	1709 Jun 21 23:34	0°♋	
max. Earth dist.	1709 Jun 21 18:09	29°♊43'21	1.73598 AU
superior conj	1709 Jun 22 18:32	0°♋58'14	0°24'33
minimum elong	1709 Jun 22 13:42	0°♋43'23	0°24'20
	1709 Jul 16 09:00	0°♌	
evening rise	1709 Jul 28 14:32	15°♌03'43	
	1709 Aug 09 17:22	0°♍	
	1709 Sep 03 01:31	0°♎	
	1709 Sep 27 10:39	0°♏	
desc. node	1709 Oct 01 20:37	5°♏25'21	
	1709 Oct 21 21:55	0°♐	
	1709 Nov 15 12:56	0°♑	
	1709 Dec 10 11:58	0°♒	
	1710 Jan 05 06:40	0°♓	
asc. node	1710 Jan 22 23:56	19°♓26'06	
evening max el	1710 Jan 29 13:33	26°♓13'57	46°52'46
	1710 Feb 02 07:58	0°♈	
greatest brilliancy	1710 Mar 10 12:38	27°♈05'10	-4.8m
retrograde	1710 Mar 21 00:50	29°♈09'31	
evening set	1710 Apr 07 01:18	23°♈32'28	
inferior conj	1710 Apr 11 06:30	20°♈55'18	6°54'10
minimum elong	1710 Apr 11 16:04	20°♈40'11	6°52'26
min. Earth dist.	1710 Apr 11 04:39	20°♈58'14	0.28451 AU
morning rise	1710 Apr 16 07:05	17°♈50'02	
direct	1710 May 02 11:19	12°♈46'30	
greatest brilliancy	1710 May 12 04:45	14°♈29'44	-4.7m
desc. node	1710 May 14 13:05	15°♈22'26	
	1710 Jun 06 02:52	0°♉	
morning max el	1710 Jun 20 06:47	12°♉40'55	45°45'33
	1710 Jul 07 12:29	0°♊	
	1710 Aug 03 23:07	0°♋	
	1710 Aug 29 21:12	0°♌	
asc. node	1710 Sep 04 16:50	6°♌53'40	
	1710 Sep 23 21:44	0°♍	

	1710 Oct 18 08:11	0°♎	
	1710 Nov 11 10:08	0°♏	
	1710 Dec 05 07:51	0°♐	
morning set	1710 Dec 17 07:21	15°♐03'56	
desc. node	1710 Dec 25 06:08	25°♐04'09	
	1710 Dec 29 04:11	0°♑	
	1711 Jan 22 00:47	0°♒	
superior conj	1711 Jan 28 03:04	7°♒39'19	-1°09'37
minimum elong	1711 Jan 27 15:39	7°♒03'29	1°09'18
max. Earth dist.	1711 Jan 31 02:54	11°♒24'43	1.71338 AU
	1711 Feb 14 22:51	0°♓	
evening rise	1711 Mar 09 19:21	28°♓31'43	
	1711 Mar 10 23:44	0°♈	
	1711 Apr 04 04:54	0°♉	
asc. node	1711 Apr 17 09:35	16°♉13'41	
	1711 Apr 28 15:43	0°♊	
	1711 May 23 09:32	0°♋	
	1711 Jun 17 12:32	0°♌	
	1711 Jul 13 05:32	0°♍	
desc. node	1711 Aug 06 22:49	27°♍46'42	
	1711 Aug 08 23:43	0°♎	
evening max el	1711 Sep 04 03:32	27°♎04'33	46°16'35
	1711 Sep 07 04:57	0°♏	
greatest brilliancy	1711 Oct 14 13:04	26°♏27'22	-4.8m
retrograde	1711 Oct 23 16:54	28°♏01'15	
evening set	1711 Nov 07 20:22	23°♏34'33	
inferior conj	1711 Nov 13 08:20	20°♏21'43	-3°41'45
minimum elong	1711 Nov 13 16:13	20°♏09'47	3°39'26
min. Earth dist.	1711 Nov 13 22:51	19°♏59'44	0.26704 AU
morning rise	1711 Nov 19 11:27	16°♏47'13	
asc. node	1711 Nov 28 02:11	13°♏19'59	
direct	1711 Dec 03 21:35	12°♏37'57	
greatest brilliancy	1711 Dec 14 16:42	14°♏50'27	-4.9m
	1712 Jan 06 16:30	0°♐	
morning max el	1712 Jan 23 14:27	15°♐58'41	46°56'19
	1712 Feb 05 22:31	0°♑	
	1712 Mar 03 15:09	0°♒	
desc. node	1712 Mar 18 15:43	17°♒30'42	
	1712 Mar 29 05:43	0°♓	
	1712 Apr 23 09:25	0°♈	
	1712 May 18 07:52	0°♉	
	1712 Jun 12 02:53	0°♊	
	1712 Jul 06 18:17	0°♋	
asc. node	1712 Jul 09 19:10	3°♋42'44	
morning set	1712 Jul 23 17:17	20°♋46'21	
	1712 Jul 31 05:21	0°♌	
	1712 Aug 24 12:01	0°♍	
max. Earth dist.	1712 Aug 25 19:57	1°♍39'00	1.72734 AU
superior conj	1712 Aug 29 04:16	5°♍48'10	1°23'48
minimum elong	1712 Aug 29 01:30	5°♍39'33	1°23'47
	1712 Sep 17 15:20	0°♎	
evening rise	1712 Oct 05 12:46	22°♎18'07	
	1712 Oct 11 16:53	0°♏	
desc. node	1712 Oct 29 08:28	22°♏01'03	
	1712 Nov 04 18:01	0°♐	
	1712 Nov 28 19:36	0°♑	
	1712 Dec 22 22:55	0°♒	
	1713 Jan 16 06:55	0°♓	
	1713 Feb 10 01:29	0°♈	
asc. node	1713 Feb 19 11:50	11°♈10'53	
	1713 Mar 07 17:41	0°♉	
	1713 Apr 04 09:17	0°♊	
evening max el	1713 Apr 10 16:13	6°♊16'29	45°45'36
	1713 May 09 13:00	0°♋	
greatest brilliancy	1713 May 18 13:53	4°♋30'02	-4.7m
retrograde	1713 May 29 15:49	6°♋42'49	
desc. node	1713 Jun 11 01:08	3°♋40'43	
evening set	1713 Jun 13 16:32	2°♋19'30	
	1713 Jun 17 15:54	30°℞♊	
inferior conj	1713 Jun 20 02:47	28°♊28'29	-2°06'55
minimum elong	1713 Jun 19 22:13	28°♊35'37	2°05'37
min. Earth dist.	1713 Jun 20 01:00	28°♊31'17	0.28972 AU
morning rise	1713 Jun 26 04:01	24°♊50'04	
direct	1713 Jul 11 18:12	20°♊11'01	
greatest brilliancy	1713 Jul 22 03:33	22°♊07'39	-4.7m
	1713 Aug 05 19:10	0°♋	
morning max el	1713 Aug 29 18:54	20°♋17'38	45°55'56
	1713 Sep 08 12:22	0°♌	
asc. node	1713 Oct 02 04:37	25°♌40'08	
	1713 Oct 06 00:08	0°♍	
	1713 Oct 31 13:42	0°♎	
	1713 Nov 25 05:29	0°♏	
	1713 Dec 19 10:51	0°♐	
	1714 Jan 12 11:58	0°♑	
desc. node	1714 Jan 21 17:58	11°♑33'49	
	1714 Feb 05 12:00	0°♒	
	1714 Mar 01 12:42	0°♓	
morning set	1714 Mar 04 09:17	3°♓33'40	
	1714 Mar 25 15:15	0°♈	
superior conj	1714 Apr 12 13:09	22°♈12'08	-1°07'10
minimum elong	1714 Apr 12 23:05	22°♈42'51	1°06'52
max. Earth dist.	1714 Apr 15 17:52	26°♈09'25	1.72835 AU
	1714 Apr 18 20:29	0°♉	
	1714 May 13 04:37	0°♊	
asc. node	1714 May 14 21:30	2°♊05'41	
evening rise	1714 May 20 10:11	8°♊53'19	
	1714 Jun 06 15:26	0°♋	
	1714 Jul 01 04:46	0°♌	
	1714 Jul 25 21:23	0°♍	
	1714 Aug 19 19:11	0°♎	
desc. node	1714 Sep 03 10:39	17°♎27'32	
	1714 Sep 14 01:13	0°♏	
	1714 Oct 09 21:02	0°♐	
	1714 Nov 05 22:05	0°♑	
evening max el	1714 Nov 16 09:05	10°♑52'26	47°15'53
	1714 Dec 07 02:37	0°♒	
asc. node	1714 Dec 25 14:09	11°♒45'33	
greatest brilliancy	1714 Dec 26 20:53	12°♒15'56	-4.9m
retrograde	1715 Jan 06 04:45	14°♒17'43	
evening set	1715 Jan 22 01:10	9°♒17'10	
min. Earth dist.	1715 Jan 25 22:25	6°♒56'38	0.26957 AU
inferior conj	1715 Jan 26 20:23	6°♒22'35	7°09'46
minimum elong	1715 Jan 26 10:23	6°♒38'05	7°07'54
morning rise	1715 Jan 30 20:03	3°♒57'35	
	1715 Feb 08 06:08	30°℞♑	
direct	1715 Feb 16 08:33	28°♑39'25	
	1715 Feb 24 17:47	0°♒	
greatest brilliancy	1715 Feb 25 07:51	0°♒11'13	-4.9m
	1715 Apr 06 19:24	0°♓	
morning max el	1715 Apr 07 01:22	0°♓14'36	46°20'51
desc. node	1715 Apr 16 03:23	9°♓23'11	
	1715 May 05 10:11	0°♈	
	1715 Jun 01 00:45	0°♉	
	1715 Jun 26 18:57	0°♊	
	1715 Jul 22 00:27	0°♋	
asc. node	1715 Aug 07 06:57	19°♋37'56	
	1715 Aug 15 19:34	0°♌	
	1715 Sep 09 05:45	0°♍	
morning set	1715 Oct 01 20:53	28°♍06'55	
	1715 Oct 03 09:08	0°♎	
	1715 Oct 27 08:21	0°♏	

max. Earth dist.	1715 Nov 07 16:54	14°♏15'26	1.71336 AU
superior conj	1715 Nov 09 12:05	16°♏31'00	0°39'54
minimum elong	1715 Nov 09 20:59	16°♏58'56	0°39'30
	1715 Nov 20 05:37	0°♐	
desc. node	1715 Nov 26 20:25	8°♐19'04	
	1715 Dec 14 02:25	0°♑	
evening rise	1715 Dec 20 13:01	8°♑05'36	
	1716 Jan 06 23:50	0°♒	
	1716 Jan 30 23:22	0°♓	
	1716 Feb 24 03:29	0°♈	
asc. node	1716 Mar 18 23:41	29°♈11'49	
	1716 Mar 19 15:35	0°♉	
	1716 Apr 13 16:14	0°♊	
	1716 May 09 13:03	0°♋	
	1716 Jun 06 00:24	0°♌	
evening max el	1716 Jun 20 06:52	14°♌16'41	45°24'19
	1716 Jul 08 06:39	0°♍	
desc. node	1716 Jul 08 13:04	0°♍12'20	
greatest brilliancy	1716 Jul 29 00:38	12°♍07'22	-4.7m
retrograde	1716 Aug 07 20:25	13°♍51'40	
evening set	1716 Aug 25 16:36	7°♍58'25	
inferior conj	1716 Aug 29 04:25	5°♍50'25	-8°34'56
minimum elong	1716 Aug 29 01:05	5°♍55'35	8°34'47
min. Earth dist.	1716 Aug 29 16:22	5°♍31'53	0.28545 AU
morning rise	1716 Sep 01 09:23	3°♍52'03	
	1716 Sep 08 17:29	30°℞♌	
direct	1716 Sep 19 14:45	27°♌38'54	
greatest brilliancy	1716 Sep 30 14:34	29°♌51'12	-4.8m
	1716 Sep 30 23:37	0°♍	
asc. node	1716 Oct 29 16:24	20°♍09'57	
	1716 Nov 08 20:40	0°♎	
morning max el	1716 Nov 08 20:19	29°♍59'07	46°38'14
	1716 Dec 06 12:19	0°♏	
	1717 Jan 01 02:02	0°♐	
	1717 Jan 25 21:14	0°♑	
desc. node	1717 Feb 18 05:50	28°♑36'14	
	1717 Feb 19 09:07	0°♒	
	1717 Mar 15 18:29	0°♓	
	1717 Apr 09 03:36	0°♈	
	1717 May 03 13:25	0°♉	
morning set	1717 May 14 18:13	13°♉45'12	
	1717 May 27 23:55	0°♊	
asc. node	1717 Jun 11 09:23	17°♊40'15	
max. Earth dist.	1717 Jun 19 13:54	27°♊43'39	1.73600 AU
superior conj	1717 Jun 20 12:49	28°♊53'59	0°21'32
minimum elong	1717 Jun 20 08:32	28°♊40'49	0°21'19
	1717 Jun 21 10:18	0°♋	
	1717 Jul 15 19:47	0°♌	
evening rise	1717 Jul 26 09:20	13°♌00'30	
	1717 Aug 09 04:18	0°♍	
	1717 Sep 02 12:43	0°♎	
	1717 Sep 26 22:16	0°♏	
desc. node	1717 Sep 30 22:38	4°♏55'40	
	1717 Oct 21 10:05	0°♐	
	1717 Nov 15 01:53	0°♑	
	1717 Dec 10 02:11	0°♒	
	1718 Jan 04 23:20	0°♓	
asc. node	1718 Jan 22 01:57	18°♓38'40	
evening max el	1718 Jan 27 03:19	23°♓51'35	46°55'02
	1718 Feb 02 07:54	0°♈	
greatest brilliancy	1718 Mar 08 04:52	24°♈50'15	-4.8m
retrograde	1718 Mar 18 16:32	26°♈54'49	
evening set	1718 Apr 04 19:45	21°♈13'17	
inferior conj	1718 Apr 08 22:07	18°♈40'40	7°06'44
minimum elong	1718 Apr 09 07:27	18°♈25'55	7°05'08
min. Earth dist.	1718 Apr 08 19:52	18°♈44'13	0.28420 AU
morning rise	1718 Apr 13 19:22	15°♈40'22	
direct	1718 Apr 30 01:55	10°♈32'10	
greatest brilliancy	1718 May 09 19:28	12°♈15'38	-4.7m
desc. node	1718 May 13 15:16	13°♈46'12	
	1718 Jun 06 09:17	0°♉	
morning max el	1718 Jun 17 22:25	10°♉29'13	45°46'09
	1718 Jul 07 06:04	0°♊	
	1718 Aug 03 13:13	0°♋	
	1718 Aug 29 09:48	0°♌	
asc. node	1718 Sep 03 18:47	6°♌22'40	
	1718 Sep 23 09:35	0°♍	
	1718 Oct 17 19:39	0°♎	
	1718 Nov 10 21:26	0°♏	
	1718 Dec 04 19:05	0°♐	
morning set	1718 Dec 14 17:43	12°♐30'13	
desc. node	1718 Dec 24 08:12	24°♐35'21	
	1718 Dec 28 15:24	0°♑	
	1719 Jan 21 11:58	0°♒	
superior conj	1719 Jan 25 12:59	5°♒04'41	-1°07'12
minimum elong	1719 Jan 25 01:16	4°♒27'53	1°06'50
max. Earth dist.	1719 Jan 28 07:51	8°♒34'34	1.71305 AU
	1719 Feb 14 10:00	0°♓	
evening rise	1719 Mar 07 07:09	26°♓04'29	
	1719 Mar 10 10:51	0°♈	
	1719 Apr 03 16:04	0°♉	
asc. node	1719 Apr 16 11:42	15°♉45'37	
	1719 Apr 28 03:06	0°♊	
	1719 May 22 21:20	0°♋	
	1719 Jun 17 01:06	0°♌	
	1719 Jul 12 19:31	0°♍	
desc. node	1719 Aug 06 00:48	27°♍06'50	
	1719 Aug 08 16:41	0°♎	
evening max el	1719 Sep 01 17:31	24°♎45'10	46°14'14
	1719 Sep 07 06:45	0°♏	
greatest brilliancy	1719 Oct 12 01:01	24°♏01'06	-4.8m
retrograde	1719 Oct 21 05:40	25°♏35'13	
evening set	1719 Nov 05 11:28	21°♏04'35	
inferior conj	1719 Nov 10 20:51	17°♏55'03	-4°03'11
minimum elong	1719 Nov 11 05:19	17°♏42'12	4°00'45
min. Earth dist.	1719 Nov 11 12:04	17°♏31'58	0.26755 AU
morning rise	1719 Nov 16 22:38	14°♏22'34	
asc. node	1719 Nov 27 04:15	10°♏33'30	
direct	1719 Dec 01 11:21	10°♏10'33	
greatest brilliancy	1719 Dec 12 06:29	12°♏23'33	-4.9m
	1720 Jan 07 00:57	0°♐	
morning max el	1720 Jan 21 05:11	13°♐35'54	46°56'37
	1720 Feb 05 17:29	0°♑	
	1720 Mar 03 06:22	0°♒	
desc. node	1720 Mar 17 17:42	16°♒55'14	
	1720 Mar 28 19:10	0°♓	
	1720 Apr 22 21:50	0°♈	
	1720 May 17 19:37	0°♉	
	1720 Jun 11 14:12	0°♊	
	1720 Jul 06 05:21	0°♋	
asc. node	1720 Jul 08 21:08	3°♋14'58	
morning set	1720 Jul 21 11:10	18°♋40'13	
	1720 Jul 30 16:18	0°♌	
max. Earth dist.	1720 Aug 23 13:26	29°♌30'29	1.72780 AU
	1720 Aug 23 22:58	0°♍	
superior conj	1720 Aug 26 21:40	3°♍39'11	1°23'14
minimum elong	1720 Aug 26 18:14	3°♍28'35	1°23'13
	1720 Sep 17 02:21	0°♎	
evening rise	1720 Oct 03 03:26	19°♎59'28	
	1720 Oct 11 04:04	0°♏	

desc. node	1720 Oct 28 10:38	21°♏32'30	
	1720 Nov 04 05:24	0°♐	
	1720 Nov 28 07:15	0°♑	
	1720 Dec 22 10:54	0°♒	
	1721 Jan 15 19:24	0°♓	
	1721 Feb 09 14:53	0°♈	
asc. node	1721 Feb 18 13:45	10°♈35'40	
	1721 Mar 07 08:57	0°♉	
	1721 Apr 04 05:37	0°♊	
evening max el	1721 Apr 08 08:51	4°♊06'01	45°47'32
	1721 May 11 01:25	0°♋	
greatest brilliancy	1721 May 16 06:36	2°♋21'12	-4.7m
retrograde	1721 May 27 08:27	4°♋33'38	
desc. node	1721 Jun 10 03:09	0°♋50'29	
evening set	1721 Jun 11 08:55	0°♋10'53	
	1721 Jun 11 16:48	30°℞♊	
inferior conj	1721 Jun 17 19:15	26°♊19'16	-1°47'46
minimum elong	1721 Jun 17 15:21	26°♊25'23	1°46'38
min. Earth dist.	1721 Jun 17 17:21	26°♊22'15	0.28962 AU
morning rise	1721 Jun 23 21:59	22°♊38'36	
direct	1721 Jul 09 11:03	18°♊02'10	
greatest brilliancy	1721 Jul 19 18:52	19°♊57'31	-4.7m
	1721 Aug 06 11:55	0°♋	
morning max el	1721 Aug 27 10:22	18°♋05'26	45°54'42
	1721 Sep 08 07:20	0°♌	
asc. node	1721 Oct 01 06:43	25°♌03'13	
	1721 Oct 05 14:54	0°♍	
	1721 Oct 31 02:49	0°♎	
	1721 Nov 24 17:48	0°♏	
	1721 Dec 18 22:43	0°♐	
	1722 Jan 11 23:32	0°♑	
desc. node	1722 Jan 20 19:59	11°♑04'12	
	1722 Feb 04 23:22	0°♒	
	1722 Feb 28 23:54	0°♓	
morning set	1722 Mar 01 21:24	1°♓07'01	
	1722 Mar 25 02:20	0°♈	
superior conj	1722 Apr 10 04:01	19°♈55'29	-1°09'18
minimum elong	1722 Apr 10 13:48	20°♈25'45	1°09'01
max. Earth dist.	1722 Apr 13 13:22	24°♈07'11	1.72786 AU
	1722 Apr 18 07:30	0°♉	
	1722 May 12 15:38	0°♊	
asc. node	1722 May 13 23:35	1°♊38'16	
evening rise	1722 May 18 03:20	6°♊44'43	
	1722 Jun 06 02:30	0°♋	
	1722 Jun 30 16:04	0°♌	
	1722 Jul 25 09:08	0°♍	
	1722 Aug 19 07:41	0°♎	
desc. node	1722 Sep 02 12:42	16°♎54'48	
	1722 Sep 13 14:54	0°♏	
	1722 Oct 09 12:46	0°♐	
	1722 Nov 05 18:22	0°♑	
evening max el	1722 Nov 13 23:08	8°♑28'01	47°14'53
	1722 Dec 07 18:57	0°♒	
greatest brilliancy	1722 Dec 24 11:24	9°♒49'52	-4.9m
asc. node	1722 Dec 24 16:07	9°♒54'15	
retrograde	1723 Jan 03 17:48	11°♒50'14	
evening set	1723 Jan 19 10:45	6°♒56'05	
min. Earth dist.	1723 Jan 23 12:03	4°♒29'47	0.26900 AU
inferior conj	1723 Jan 24 09:31	3°♒56'29	6°55'47
minimum elong	1723 Jan 23 23:17	4°♒12'21	6°53'44
morning rise	1723 Jan 28 12:15	1°♒26'55	
	1723 Jan 31 03:15	30°℞♑	
direct	1723 Feb 13 21:01	26°♑14'17	
greatest brilliancy	1723 Feb 22 21:28	27°♑46'43	-4.9m
	1723 Feb 28 07:19	0°♒	
morning max el	1723 Apr 04 13:35	27°♒49'52	46°22'21
	1723 Apr 06 18:16	0°♓	
desc. node	1723 Apr 15 05:37	8°♓37'23	
	1723 May 05 02:24	0°♈	
	1723 May 31 14:29	0°♉	
	1723 Jun 26 07:24	0°♊	
	1723 Jul 21 12:10	0°♋	
asc. node	1723 Aug 06 08:58	19°♋09'24	
	1723 Aug 15 06:52	0°♌	
	1723 Sep 08 16:51	0°♍	
morning set	1723 Sep 29 12:02	25°♍50'02	
	1723 Oct 02 20:11	0°♎	
	1723 Oct 26 19:26	0°♏	
max. Earth dist.	1723 Nov 05 00:46	11°♏34'35	1.71375 AU
superior conj	1723 Nov 07 00:18	14°♏03'47	0°43'10
minimum elong	1723 Nov 07 09:40	14°♏33'12	0°42'47
	1723 Nov 19 16:47	0°♐	
desc. node	1723 Nov 25 22:27	7°♐50'19	
	1723 Dec 13 13:39	0°♑	
evening rise	1723 Dec 17 23:14	5°♑31'35	
	1724 Jan 06 11:08	0°♒	
	1724 Jan 30 10:46	0°♓	
	1724 Feb 23 15:04	0°♈	
asc. node	1724 Mar 18 01:50	28°♈42'02	
	1724 Mar 19 03:33	0°♉	
	1724 Apr 13 05:00	0°♊	
	1724 May 09 03:29	0°♋	
	1724 Jun 05 18:56	0°♌	
evening max el	1724 Jun 17 20:56	12°♌01'17	45°23'47
desc. node	1724 Jul 07 15:03	29°♌05'57	
	1724 Jul 08 20:19	0°♍	
greatest brilliancy	1724 Jul 26 14:05	9°♍53'03	-4.7m
retrograde	1724 Aug 05 11:19	11°♍38'56	
evening set	1724 Aug 23 05:17	5°♍48'34	
inferior conj	1724 Aug 26 19:45	3°♍36'49	-8°30'46
minimum elong	1724 Aug 26 15:39	3°♍43'10	8°30'32
min. Earth dist.	1724 Aug 27 06:59	3°♍19'24	0.28591 AU
morning rise	1724 Aug 30 01:47	1°♍36'55	
	1724 Sep 01 20:33	30°℞♌	
direct	1724 Sep 17 06:06	25°♌24'29	
greatest brilliancy	1724 Sep 28 06:35	27°♌37'12	-4.8m
	1724 Oct 03 11:45	0°♍	
asc. node	1724 Oct 28 18:32	19°♍13'21	
morning max el	1724 Nov 06 10:50	27°♍39'01	46°36'49
	1724 Nov 08 18:23	0°♎	
	1724 Dec 06 04:18	0°♏	
	1724 Dec 31 15:53	0°♐	
	1725 Jan 25 10:00	0°♑	
desc. node	1725 Feb 17 07:51	28°♑05'13	
	1725 Feb 18 21:12	0°♒	
	1725 Mar 15 06:05	0°♓	
	1725 Apr 08 14:50	0°♈	
	1725 May 03 00:23	0°♉	
morning set	1725 May 12 11:34	11°♉37'41	
	1725 May 27 10:43	0°♊	
asc. node	1725 Jun 10 11:21	17°♊13'13	
max. Earth dist.	1725 Jun 17 11:01	25°♊48'03	1.73605 AU
superior conj	1725 Jun 18 07:13	26°♊50'05	0°18'29
minimum elong	1725 Jun 18 03:29	26°♊38'39	0°18'18
	1725 Jun 20 21:03	0°♋	
	1725 Jul 15 06:35	0°♌	
evening rise	1725 Jul 24 04:17	10°♌57'41	
	1725 Aug 08 15:16	0°♍	
	1725 Sep 01 23:57	0°♎	
	1725 Sep 26 09:53	0°♏	
desc. node	1725 Sep 30 00:46	4°♏26'19	

	1725 Oct 20 22:16	0°♐	
	1725 Nov 14 14:53	0°♑	
	1725 Dec 09 16:30	0°♒	
	1726 Jan 04 16:18	0°♓	
asc. node	1726 Jan 21 04:00	17°♓50'41	
evening max el	1726 Jan 24 17:57	21°♓31'26	46°57'11
	1726 Feb 02 09:00	0°♈	
greatest brilliancy	1726 Mar 05 20:39	22°♈34'46	-4.8m
retrograde	1726 Mar 16 08:48	24°♈40'06	
evening set	1726 Apr 02 14:10	18°♈54'05	
inferior conj	1726 Apr 06 13:40	16°♈25'57	7°18'43
minimum elong	1726 Apr 06 22:45	16°♈11'38	7°17'15
min. Earth dist.	1726 Apr 06 10:40	16°♈30'41	0.28386 AU
morning rise	1726 Apr 11 07:34	13°♈30'56	
direct	1726 Apr 27 16:51	8°♈17'57	
greatest brilliancy	1726 May 07 09:35	10°♈01'10	-4.8m
desc. node	1726 May 12 17:14	12°♈13'26	
	1726 Jun 06 13:30	0°♉	
morning max el	1726 Jun 15 14:39	8°♉19'26	45°46'47
	1726 Jul 06 23:05	0°♊	
	1726 Aug 03 03:03	0°♋	
	1726 Aug 28 22:14	0°♌	
asc. node	1726 Sep 02 20:56	5°♌52'36	
	1726 Sep 22 21:20	0°♍	
	1726 Oct 17 07:02	0°♎	
greatest brilliancy	1726 Nov 08 18:08	27°♎59'36	-3.9m
	1726 Nov 10 08:37	0°♏	
	1726 Dec 04 06:11	0°♐	
morning set	1726 Dec 12 04:13	9°♐57'28	
desc. node	1726 Dec 23 10:09	24°♐06'41	
	1726 Dec 28 02:27	0°♑	
	1727 Jan 20 23:00	0°♒	
superior conj	1727 Jan 22 22:45	2°♒30'00	-1°04'38
minimum elong	1727 Jan 22 10:50	1°♒52'33	1°04'14
max. Earth dist.	1727 Jan 25 15:46	5°♒54'09	1.71276 AU
	1727 Feb 13 21:01	0°♓	
evening rise	1727 Mar 04 18:53	23°♓37'20	
	1727 Mar 09 21:51	0°♈	
	1727 Apr 03 03:08	0°♉	
asc. node	1727 Apr 15 13:48	15°♉17'53	
	1727 Apr 27 14:21	0°♊	
	1727 May 22 08:59	0°♋	
	1727 Jun 16 13:30	0°♌	
	1727 Jul 12 09:24	0°♍	
desc. node	1727 Aug 05 02:51	26°♍27'26	
	1727 Aug 08 09:46	0°♎	
evening max el	1727 Aug 30 07:53	22°♎27'22	46°11'41
	1727 Sep 07 09:48	0°♏	
greatest brilliancy	1727 Oct 09 13:15	21°♏35'43	-4.8m
retrograde	1727 Oct 18 18:14	23°♏09'27	
evening set	1727 Nov 03 02:44	18°♏35'07	
inferior conj	1727 Nov 08 09:21	15°♏28'57	-4°24'12
minimum elong	1727 Nov 08 18:21	15°♏15'17	4°21'41
min. Earth dist.	1727 Nov 09 01:17	15°♏04'45	0.26806 AU
morning rise	1727 Nov 14 09:30	11°♏58'34	
asc. node	1727 Nov 26 06:13	7°♏53'28	
direct	1727 Nov 29 01:05	7°♏43'52	
greatest brilliancy	1727 Dec 09 20:02	9°♏56'50	-4.9m
	1728 Jan 07 06:48	0°♐	
morning max el	1728 Jan 18 19:09	11°♐11'48	46°56'50
	1728 Feb 05 11:41	0°♑	
	1728 Mar 02 21:06	0°♒	
desc. node	1728 Mar 16 19:53	16°♒21'22	
	1728 Mar 28 08:14	0°♓	
	1728 Apr 22 09:55	0°♈	
	1728 May 17 07:05	0°♉	
	1728 Jun 11 01:15	0°♊	
	1728 Jul 05 16:09	0°♋	
asc. node	1728 Jul 07 23:13	2°♋48'24	
morning set	1728 Jul 19 05:18	16°♋35'48	
	1728 Jul 30 02:57	0°♌	
max. Earth dist.	1728 Aug 21 06:24	27°♌21'25	1.72827 AU
	1728 Aug 23 09:36	0°♍	
superior conj	1728 Aug 24 15:19	1°♍32'06	1°22'34
minimum elong	1728 Aug 24 11:17	1°♍19'34	1°22'31
	1728 Sep 16 13:06	0°♎	
evening rise	1728 Sep 30 18:15	17°♎42'11	
	1728 Oct 10 15:00	0°♏	
desc. node	1728 Oct 27 12:39	21°♏04'11	
	1728 Nov 03 16:35	0°♐	
	1728 Nov 27 18:42	0°♑	
	1728 Dec 21 22:40	0°♒	
	1729 Jan 15 07:41	0°♓	
	1729 Feb 09 04:06	0°♈	
asc. node	1729 Feb 17 15:55	10°♈01'49	
	1729 Mar 07 00:09	0°♉	
	1729 Apr 04 02:19	0°♊	
evening max el	1729 Apr 06 00:37	1°♊54'03	45°49'25
	1729 May 13 09:51	0°♋	
greatest brilliancy	1729 May 13 23:53	0°♋13'36	-4.7m
retrograde	1729 May 25 00:36	2°♋25'02	
	1729 Jun 05 01:58	30°℞♊	
evening set	1729 Jun 09 01:22	28°♊02'40	
desc. node	1729 Jun 09 05:10	27°♊57'25	
inferior conj	1729 Jun 15 11:40	24°♊10'48	-1°28'17
minimum elong	1729 Jun 15 08:27	24°♊15'51	1°27'21
min. Earth dist.	1729 Jun 15 10:01	24°♊13'23	0.28949 AU
morning rise	1729 Jun 21 15:43	20°♊27'55	
direct	1729 Jul 07 03:21	15°♊54'01	
greatest brilliancy	1729 Jul 17 10:28	17°♊48'25	-4.7m
	1729 Aug 06 23:57	0°♋	
morning max el	1729 Aug 25 00:59	15°♋52'16	45°53'41
	1729 Sep 08 01:22	0°♌	
asc. node	1729 Sep 30 08:50	24°♌27'42	
	1729 Oct 05 05:07	0°♍	
	1729 Oct 30 15:31	0°♎	
	1729 Nov 24 05:47	0°♏	
	1729 Dec 18 10:19	0°♐	
	1730 Jan 11 10:52	0°♑	
desc. node	1730 Jan 19 22:06	10°♑35'39	
	1730 Feb 04 10:28	0°♒	
morning set	1730 Feb 27 08:57	28°♒39'21	
	1730 Feb 28 10:49	0°♓	
	1730 Mar 24 13:07	0°♈	
superior conj	1730 Apr 07 18:35	17°♈38'47	-1°11'21
minimum elong	1730 Apr 08 04:08	18°♈08'21	1°11'05
max. Earth dist.	1730 Apr 11 07:58	22°♈03'04	1.72733 AU
	1730 Apr 17 18:12	0°♉	
	1730 May 12 02:20	0°♊	
asc. node	1730 May 13 01:33	1°♊11'21	
evening rise	1730 May 15 20:16	4°♊36'23	
	1730 Jun 05 13:19	0°♋	
	1730 Jun 30 03:07	0°♌	
	1730 Jul 24 20:37	0°♍	
	1730 Aug 18 19:53	0°♎	
desc. node	1730 Sep 01 14:53	16°♎23'29	
	1730 Sep 13 04:17	0°♏	
	1730 Oct 09 04:19	0°♐	
	1730 Nov 05 14:54	0°♑	
evening max el	1730 Nov 11 12:02	6°♑01'41	47°13'37
	1730 Dec 08 16:30	0°♒	

greatest brilliancy	1730 Dec 22 01:48	7°♒23'45	-4.9m
asc. node	1730 Dec 23 18:12	7°♒58'42	
retrograde	1731 Jan 01 06:21	9°♒22'45	
evening set	1731 Jan 16 20:06	4°♒34'28	
min. Earth dist.	1731 Jan 21 01:42	2°♒02'17	0.26849 AU
inferior conj	1731 Jan 21 22:24	1°♒30'14	6°40'37
minimum elong	1731 Jan 21 12:02	1°♒46'18	6°38'26
	1731 Jan 24 09:09	30°℞♑	
morning rise	1731 Jan 26 04:21	28°♑56'01	
direct	1731 Feb 11 08:55	23°♑48'38	
greatest brilliancy	1731 Feb 20 11:23	25°♑22'26	-4.9m
	1731 Mar 02 07:10	0°♒	
morning max el	1731 Apr 02 01:48	25°♒25'23	46°24'00
	1731 Apr 06 16:03	0°♓	
desc. node	1731 Apr 14 07:35	7°♓52'09	
	1731 May 04 18:07	0°♈	
	1731 May 31 03:49	0°♉	
	1731 Jun 25 19:31	0°♊	
	1731 Jul 20 23:35	0°♋	
asc. node	1731 Aug 05 11:05	18°♋42'01	
	1731 Aug 14 17:53	0°♌	
	1731 Sep 08 03:39	0°♍	
morning set	1731 Sep 27 03:35	23°♍35'22	
	1731 Oct 02 06:55	0°♎	
	1731 Oct 26 06:11	0°♏	
max. Earth dist.	1731 Nov 02 12:32	9°♏07'02	1.71413 AU
superior conj	1731 Nov 04 12:57	11°♏39'01	0°46'21
minimum elong	1731 Nov 04 22:42	12°♏09'38	0°45'56
	1731 Nov 19 03:36	0°♐	
desc. node	1731 Nov 25 00:27	7°♐22'29	
	1731 Dec 13 00:34	0°♑	
evening rise	1731 Dec 15 09:44	2°♑59'31	
	1732 Jan 05 22:10	0°♒	
	1732 Jan 29 21:58	0°♓	
	1732 Feb 23 02:30	0°♈	
asc. node	1732 Mar 17 03:53	28°♈12'27	
	1732 Mar 18 15:24	0°♉	
	1732 Apr 12 17:39	0°♊	
	1732 May 08 17:52	0°♋	
	1732 Jun 05 13:45	0°♌	
evening max el	1732 Jun 15 11:34	9°♌48'00	45°23'26
desc. node	1732 Jul 06 17:09	27°♌58'29	
	1732 Jul 09 14:19	0°♍	
greatest brilliancy	1732 Jul 24 02:57	7°♍38'43	-4.7m
retrograde	1732 Aug 03 02:39	9°♍26'43	
evening set	1732 Aug 20 17:41	3°♍39'29	
inferior conj	1732 Aug 24 10:59	1°♍23'38	-8°25'51
minimum elong	1732 Aug 24 06:09	1°♍31'06	8°25'31
min. Earth dist.	1732 Aug 24 21:13	1°♍07'46	0.28634 AU
	1732 Aug 26 17:12	30°℞♌	
morning rise	1732 Aug 27 18:25	29°♌21'47	
direct	1732 Sep 14 21:44	23°♌10'36	
greatest brilliancy	1732 Sep 25 21:57	25°♌23'12	-4.8m
	1732 Oct 05 01:18	0°♍	
asc. node	1732 Oct 27 20:25	18°♍18'07	
morning max el	1732 Nov 04 02:20	25°♍22'27	46°35'35
	1732 Nov 08 15:01	0°♎	
	1732 Dec 05 19:43	0°♏	
	1732 Dec 31 05:18	0°♐	
	1733 Jan 24 22:24	0°♑	
desc. node	1733 Feb 16 09:59	27°♑35'20	
	1733 Feb 18 09:00	0°♒	
	1733 Mar 14 17:29	0°♓	
	1733 Apr 08 01:55	0°♈	
	1733 May 02 11:13	0°♉	
morning set	1733 May 10 04:30	9°♉29'09	
	1733 May 26 21:23	0°♊	
asc. node	1733 Jun 09 13:25	16°♊46'56	
max. Earth dist.	1733 Jun 15 09:25	23°♊56'50	1.73606 AU
superior conj	1733 Jun 16 01:11	24°♊45'17	0°15'22
minimum elong	1733 Jun 15 22:03	24°♊35'41	0°15'13
behind sun begin	1733 Jun 15 15:51	24°♊16'38	
behind sun end	1733 Jun 16 04:16	24°♊54'44	
	1733 Jun 20 07:39	0°♋	
	1733 Jul 14 17:15	0°♌	
evening rise	1733 Jul 21 23:03	8°♌54'45	
	1733 Aug 08 02:07	0°♍	
	1733 Sep 01 11:06	0°♎	
	1733 Sep 25 21:25	0°♏	
desc. node	1733 Sep 29 02:45	3°♏56'49	
	1733 Oct 20 10:21	0°♐	
	1733 Nov 14 03:46	0°♑	
	1733 Dec 09 06:43	0°♒	
	1734 Jan 04 09:18	0°♓	
asc. node	1734 Jan 20 06:06	17°♓02'51	
evening max el	1734 Jan 22 09:26	19°♓14'09	46°59'12
	1734 Feb 02 11:09	0°♈	
greatest brilliancy	1734 Mar 03 12:01	20°♈19'13	-4.8m
retrograde	1734 Mar 14 01:14	22°♈25'21	
evening set	1734 Mar 31 08:28	16°♈35'01	
inferior conj	1734 Apr 04 05:08	14°♈11'09	7°30'00
minimum elong	1734 Apr 04 13:54	13°♈57'20	7°28'40
min. Earth dist.	1734 Apr 04 01:05	14°♈17'32	0.28355 AU
morning rise	1734 Apr 08 19:37	11°♈21'26	
direct	1734 Apr 25 08:12	6°♈03'46	
greatest brilliancy	1734 May 04 23:06	7°♈45'59	-4.8m
desc. node	1734 May 11 19:15	10°♈43'55	
	1734 Jun 06 16:02	0°♉	
morning max el	1734 Jun 13 07:02	6°♉10'02	45°47'20
	1734 Jul 06 15:46	0°♊	
	1734 Aug 02 16:43	0°♋	
	1734 Aug 28 10:34	0°♌	
asc. node	1734 Sep 01 22:58	5°♌22'27	
	1734 Sep 22 08:59	0°♍	
	1734 Oct 16 18:20	0°♎	
	1734 Nov 09 19:45	0°♏	
greatest brilliancy	1734 Nov 14 19:11	6°♏14'09	-3.9m
	1734 Dec 03 17:14	0°♐	
morning set	1734 Dec 09 15:01	7°♐25'46	
desc. node	1734 Dec 22 12:19	23°♐38'47	
	1734 Dec 27 13:27	0°♑	
superior conj	1735 Jan 20 08:47	29°♑56'21	-1°01'55
minimum elong	1735 Jan 19 20:47	29°♑18'36	1°01'31
	1735 Jan 20 09:57	0°♒	
max. Earth dist.	1735 Jan 23 01:39	3°♒20'06	1.71242 AU
	1735 Feb 13 07:55	0°♓	
evening rise	1735 Mar 02 06:50	21°♓11'05	
	1735 Mar 09 08:45	0°♈	
	1735 Apr 02 14:08	0°♉	
asc. node	1735 Apr 14 15:44	14°♉49'52	
	1735 Apr 27 01:35	0°♊	
	1735 May 21 20:39	0°♋	
	1735 Jun 16 02:00	0°♌	
	1735 Jul 11 23:28	0°♍	
desc. node	1735 Aug 04 04:59	25°♍47'38	
	1735 Aug 08 03:17	0°♎	
evening max el	1735 Aug 27 21:54	20°♎08'40	46°09'09
	1735 Sep 07 14:40	0°♏	
greatest brilliancy	1735 Oct 07 02:02	19°♏11'06	-4.8m
retrograde	1735 Oct 16 06:14	20°♏43'41	
evening set	1735 Oct 31 18:10	16°♏05'36	

inferior conj	1735 Nov 05 21:55	13°♏03'00	-4°44'37
minimum elong	1735 Nov 06 07:22	12°♏48'37	4°42'03
min. Earth dist.	1735 Nov 06 14:50	12°♏37'15	0.26858 AU
morning rise	1735 Nov 11 20:06	9°♏34'46	
asc. node	1735 Nov 25 08:21	5°♏19'07	
direct	1735 Nov 26 14:31	5°♏17'11	
greatest brilliancy	1735 Dec 07 09:58	7°♏30'17	-4.9m
	1736 Jan 07 10:51	0°♐	
morning max el	1736 Jan 16 08:19	8°♐45'18	46°57'10
	1736 Feb 05 05:33	0°♑	
	1736 Mar 02 11:41	0°♒	
desc. node	1736 Mar 15 21:51	15°♒46'59	
	1736 Mar 27 21:12	0°♓	
	1736 Apr 21 21:57	0°♈	
	1736 May 16 18:32	0°♉	
	1736 Jun 10 12:21	0°♊	
	1736 Jul 05 03:02	0°♋	
asc. node	1736 Jul 07 01:20	2°♋21'39	
morning set	1736 Jul 16 23:22	14°♋30'49	
	1736 Jul 29 13:44	0°♌	
max. Earth dist.	1736 Aug 18 22:37	25°♌09'38	1.72874 AU
superior conj	1736 Aug 22 08:57	29°♌24'35	1°21'45
minimum elong	1736 Aug 22 04:18	29°♌10'11	1°21'42
	1736 Aug 22 20:23	0°♍	
	1736 Sep 15 23:59	0°♎	
evening rise	1736 Sep 28 09:06	15°♎24'41	
	1736 Oct 10 02:05	0°♏	
desc. node	1736 Oct 26 14:38	20°♏35'17	
	1736 Nov 03 03:55	0°♐	
	1736 Nov 27 06:20	0°♑	
	1736 Dec 21 10:40	0°♒	
	1737 Jan 14 20:12	0°♓	
	1737 Feb 08 17:35	0°♈	
asc. node	1737 Feb 16 17:58	9°♈26'57	
	1737 Mar 06 15:41	0°♉	
evening max el	1737 Apr 03 15:37	29°♉39'56	45°51'26
	1737 Apr 03 23:50	0°♊	
greatest brilliancy	1737 May 11 17:23	28°♊06'15	-4.7m
	1737 May 18 20:29	0°♋	
retrograde	1737 May 22 16:45	0°♋16'53	
	1737 May 26 11:23	30°℞♊	
evening set	1737 Jun 06 18:08	25°♊54'19	
desc. node	1737 Jun 08 07:16	25°♊01'55	
inferior conj	1737 Jun 13 04:18	22°♊02'40	-1°08'50
minimum elong	1737 Jun 13 01:47	22°♊06'37	1°08'06
min. Earth dist.	1737 Jun 13 03:09	22°♊04'29	0.28940 AU
morning rise	1737 Jun 19 09:32	18°♊17'45	
direct	1737 Jul 04 19:25	13°♊45'57	
greatest brilliancy	1737 Jul 15 02:53	15°♊40'08	-4.7m
	1737 Aug 07 09:01	0°♋	
morning max el	1737 Aug 22 15:41	13°♋38'39	45°52'37
	1737 Sep 07 19:15	0°♌	
asc. node	1737 Sep 29 10:46	23°♌51'13	
	1737 Oct 04 19:26	0°♍	
	1737 Oct 30 04:23	0°♎	
	1737 Nov 23 17:57	0°♏	
	1737 Dec 17 22:06	0°♐	
	1738 Jan 10 22:23	0°♑	
desc. node	1738 Jan 19 00:08	10°♑06'08	
	1738 Feb 03 21:48	0°♒	
morning set	1738 Feb 24 20:22	26°♒10'16	
	1738 Feb 27 22:00	0°♓	
	1738 Mar 24 00:10	0°♈	
superior conj	1738 Apr 05 09:17	15°♈21'39	-1°13'15
minimum elong	1738 Apr 05 18:32	15°♈50'20	1°13'01
max. Earth dist.	1738 Apr 09 00:30	19°♈51'44	1.72674 AU
	1738 Apr 17 05:09	0°♉	
	1738 May 11 13:15	0°♊	
asc. node	1738 May 12 03:41	0°♊44'22	
evening rise	1738 May 13 13:22	2°♊27'51	
	1738 Jun 05 00:19	0°♋	
	1738 Jun 29 14:23	0°♌	
	1738 Jul 24 08:23	0°♍	
	1738 Aug 18 08:26	0°♎	
desc. node	1738 Aug 31 16:47	15°♎50'17	
	1738 Sep 12 18:08	0°♏	
	1738 Oct 08 20:30	0°♐	
	1738 Nov 05 12:34	0°♑	
evening max el	1738 Nov 09 00:36	3°♑33'41	47°12'25
	1738 Dec 09 22:47	0°♒	
greatest brilliancy	1738 Dec 19 15:50	4°♒56'02	-4.9m
asc. node	1738 Dec 22 20:18	5°♒57'16	
retrograde	1738 Dec 29 19:10	6°♒54'18	
evening set	1739 Jan 14 05:27	2°♒11'15	
	1739 Jan 17 22:03	30°℞♑	
min. Earth dist.	1739 Jan 18 15:13	29°♑33'35	0.26803 AU
inferior conj	1739 Jan 19 11:12	29°♑02'42	6°24'36
minimum elong	1739 Jan 19 00:45	29°♑18'52	6°22'16
morning rise	1739 Jan 23 20:24	26°♑24'03	
direct	1739 Feb 08 20:43	21°♑21'28	
greatest brilliancy	1739 Feb 18 01:15	22°♑56'56	-4.9m
	1739 Mar 03 16:01	0°♒	
morning max el	1739 Mar 30 15:02	23°♒02'11	46°25'44
	1739 Apr 06 13:27	0°♓	
desc. node	1739 Apr 13 09:35	7°♓06'34	
	1739 May 04 09:56	0°♈	
	1739 May 30 17:21	0°♉	
	1739 Jun 25 07:50	0°♊	
	1739 Jul 20 11:12	0°♋	
asc. node	1739 Aug 04 13:07	18°♋13'39	
	1739 Aug 14 05:07	0°♌	
	1739 Sep 07 14:45	0°♍	
morning set	1739 Sep 24 19:11	21°♍19'59	
	1739 Oct 01 18:00	0°♎	
	1739 Oct 25 17:18	0°♏	
max. Earth dist.	1739 Oct 31 00:46	6°♏39'49	1.71453 AU
superior conj	1739 Nov 02 01:31	9°♏12'47	0°49'26
minimum elong	1739 Nov 02 11:34	9°♏44'18	0°49'01
	1739 Nov 18 14:47	0°♐	
desc. node	1739 Nov 24 02:36	6°♐53'59	
	1739 Dec 12 11:51	0°♑	
evening rise	1739 Dec 12 20:01	0°♑25'41	
	1740 Jan 05 09:34	0°♒	
	1740 Jan 29 09:31	0°♓	
	1740 Feb 22 14:18	0°♈	
asc. node	1740 Mar 16 05:50	27°♈41'25	
	1740 Mar 18 03:38	0°♉	
	1740 Apr 12 06:45	0°♊	
	1740 May 08 08:47	0°♋	
	1740 Jun 05 09:24	0°♌	
evening max el	1740 Jun 13 03:20	7°♌36'52	45°23'18
desc. node	1740 Jul 05 19:14	26°♌48'42	
	1740 Jul 10 15:01	0°♍	
greatest brilliancy	1740 Jul 21 15:49	5°♍24'30	-4.7m
retrograde	1740 Jul 31 18:23	7°♍14'39	
evening set	1740 Aug 18 06:13	1°♍30'58	
	1740 Aug 20 18:31	30°℞♌	
inferior conj	1740 Aug 22 02:29	29°♌10'39	-8°20'10
minimum elong	1740 Aug 21 20:59	29°♌19'10	8°19'44
min. Earth dist.	1740 Aug 22 11:25	28°♌56'49	0.28675 AU
morning rise	1740 Aug 25 11:34	27°♌06'25	

direct	1740 Sep 12 14:04	20°♌57'07	
greatest brilliancy	1740 Sep 23 12:55	23°♌08'43	-4.8m
	1740 Oct 06 03:47	0°♍	
asc. node	1740 Oct 26 22:36	17°♍23'54	
morning max el	1740 Nov 01 18:28	23°♍06'53	46°33'58
	1740 Nov 08 11:20	0°♎	
	1740 Dec 05 11:18	0°♏	
	1740 Dec 30 19:02	0°♐	
	1741 Jan 24 11:09	0°♑	
desc. node	1741 Feb 15 11:59	27°♑03'59	
	1741 Feb 17 21:09	0°♒	
	1741 Mar 14 05:12	0°♓	
	1741 Apr 07 13:18	0°♈	
	1741 May 01 22:21	0°♉	
morning set	1741 May 07 21:20	7°♉19'18	
	1741 May 26 08:22	0°♊	
asc. node	1741 Jun 08 15:33	16°♊19'51	
superior conj	1741 Jun 13 19:12	22°♊39'36	0°12'14
minimum elong	1741 Jun 13 16:41	22°♊31'54	0°12'07
behind sun begin	1741 Jun 13 01:59	21°♊46'44	
behind sun end	1741 Jun 14 07:23	23°♊17'03	
max. Earth dist.	1741 Jun 13 08:33	22°♊06'54	1.73600 AU
	1741 Jun 19 18:34	0°♋	
	1741 Jul 14 04:12	0°♌	
evening rise	1741 Jul 19 18:01	6°♌51'42	
	1741 Aug 07 13:12	0°♍	
	1741 Aug 31 22:27	0°♎	
	1741 Sep 25 09:13	0°♏	
desc. node	1741 Sep 28 04:48	3°♏26'49	
	1741 Oct 19 22:46	0°♐	
	1741 Nov 13 17:06	0°♑	
	1741 Dec 08 21:31	0°♒	
	1742 Jan 04 03:10	0°♓	
asc. node	1742 Jan 19 08:07	16°♓12'28	
evening max el	1742 Jan 20 01:23	16°♓56'28	47°01'08
	1742 Feb 02 15:33	0°♈	
greatest brilliancy	1742 Mar 01 03:32	18°♈02'06	-4.9m
retrograde	1742 Mar 11 17:22	20°♈08'22	
evening set	1742 Mar 29 02:31	14°♈14'13	
inferior conj	1742 Apr 01 20:20	11°♈54'26	7°40'42
minimum elong	1742 Apr 02 04:44	11°♈41'12	7°39'31
min. Earth dist.	1742 Apr 01 15:10	12°♈02'35	0.28317 AU
morning rise	1742 Apr 06 07:16	9°♈10'01	
direct	1742 Apr 22 23:27	3°♈47'56	
greatest brilliancy	1742 May 02 11:59	5°♈28'31	-4.8m
desc. node	1742 May 10 21:27	9°♈16'17	
	1742 Jun 06 17:36	0°♉	
morning max el	1742 Jun 10 22:51	3°♉58'16	45°47'59
	1742 Jul 06 08:26	0°♊	
	1742 Aug 02 06:30	0°♋	
	1742 Aug 27 23:02	0°♌	
asc. node	1742 Sep 01 00:57	4°♌51'39	
	1742 Sep 21 20:45	0°♍	
	1742 Oct 16 05:45	0°♎	
	1742 Nov 09 07:00	0°♏	
greatest brilliancy	1742 Nov 17 09:30	10°♏09'34	-3.9m
	1742 Dec 03 04:26	0°♐	
morning set	1742 Dec 07 01:59	4°♐54'07	
desc. node	1742 Dec 21 14:21	23°♐09'57	
	1742 Dec 27 00:40	0°♑	
superior conj	1743 Jan 17 18:31	27°♑20'53	-0°59'04
minimum elong	1743 Jan 17 06:33	26°♑43'18	0°58'38
	1743 Jan 19 21:09	0°♒	
max. Earth dist.	1743 Jan 20 09:43	0°♒39'29	1.71215 AU
	1743 Feb 12 19:05	0°♓	
evening rise	1743 Feb 27 18:06	18°♓41'42	
	1743 Mar 08 19:56	0°♈	
	1743 Apr 02 01:23	0°♉	
asc. node	1743 Apr 13 17:52	14°♉21'39	
	1743 Apr 26 13:04	0°♊	
	1743 May 21 08:36	0°♋	
	1743 Jun 15 14:48	0°♌	
	1743 Jul 11 13:53	0°♍	
desc. node	1743 Aug 03 06:57	25°♍06'31	
	1743 Aug 07 21:20	0°♎	
evening max el	1743 Aug 25 11:25	17°♎48'38	46°06'47
	1743 Sep 07 21:37	0°♏	
greatest brilliancy	1743 Oct 04 15:29	16°♏47'56	-4.8m
retrograde	1743 Oct 13 18:04	18°♏19'10	
evening set	1743 Oct 29 09:56	13°♏37'06	
inferior conj	1743 Nov 03 10:49	10°♏38'20	-5°04'04
minimum elong	1743 Nov 03 20:38	10°♏23'21	5°01'29
min. Earth dist.	1743 Nov 04 04:52	10°♏10'48	0.26912 AU
morning rise	1743 Nov 09 06:49	7°♏12'30	
direct	1743 Nov 24 03:42	2°♏51'37	
asc. node	1743 Nov 24 10:25	2°♏51'43	
greatest brilliancy	1743 Dec 05 00:37	5°♏05'28	-4.9m
	1744 Jan 07 13:13	0°♐	
morning max el	1744 Jan 13 21:01	6°♐17'31	46°57'11
	1744 Feb 04 23:04	0°♑	
	1744 Mar 02 02:15	0°♒	
desc. node	1744 Mar 14 23:52	15°♒12'24	
	1744 Mar 27 10:16	0°♓	
	1744 Apr 21 10:08	0°♈	
	1744 May 16 06:08	0°♉	
	1744 Jun 09 23:33	0°♊	
	1744 Jul 04 13:59	0°♋	
asc. node	1744 Jul 06 03:17	1°♋54'08	
morning set	1744 Jul 14 17:07	12°♋24'42	
	1744 Jul 29 00:34	0°♌	
max. Earth dist.	1744 Aug 16 15:27	22°♌59'40	1.72921 AU
superior conj	1744 Aug 20 02:33	27°♌16'54	1°20'50
minimum elong	1744 Aug 19 21:20	27°♌00'46	1°20'46
	1744 Aug 22 07:12	0°♍	
	1744 Sep 15 10:54	0°♎	
evening rise	1744 Sep 26 00:15	13°♎08'13	
	1744 Oct 09 13:10	0°♏	
desc. node	1744 Oct 25 16:48	20°♏07'08	
	1744 Nov 02 15:12	0°♐	
	1744 Nov 26 17:52	0°♑	
	1744 Dec 20 22:34	0°♒	
	1745 Jan 14 08:42	0°♓	
	1745 Feb 08 07:08	0°♈	
asc. node	1745 Feb 15 19:55	8°♈51'39	
	1745 Mar 06 07:29	0°♉	
evening max el	1745 Apr 01 06:03	27°♉23'56	45°53'26
	1745 Apr 03 22:21	0°♊	
greatest brilliancy	1745 May 09 10:18	25°♊57'20	-4.7m
retrograde	1745 May 20 08:49	28°♊07'50	
evening set	1745 Jun 04 10:46	23°♊44'33	
desc. node	1745 Jun 07 09:17	22°♊02'47	
inferior conj	1745 Jun 10 20:40	19°♊53'32	-0°49'10
minimum elong	1745 Jun 10 18:52	19°♊56'22	0°48'38
min. Earth dist.	1745 Jun 10 20:04	19°♊54'28	0.28931 AU
morning rise	1745 Jun 17 02:59	16°♊06'56	
direct	1745 Jul 02 10:55	11°♊36'47	
greatest brilliancy	1745 Jul 12 19:24	13°♊31'27	-4.7m
	1745 Aug 07 15:39	0°♋	
morning max el	1745 Aug 20 06:43	11°♋25'56	45°51'43
	1745 Sep 07 12:40	0°♌	
asc. node	1745 Sep 28 12:54	23°♌15'44	

	1745 Oct 04	09:30	0°♍		
	1745 Oct 29	17:04	0°♎		
	1745 Nov 23	05:56	0°♏		
	1745 Dec 17	09:40	0°♐		
	1746 Jan 10	09:40	0°♑		
desc. node	1746 Jan 18	02:08	9°♑37'16		
	1746 Feb 03	08:52	0°♒		
morning set	1746 Feb 22	07:50	23°♒41'58		
	1746 Feb 27	08:56	0°♓		
	1746 Mar 23	11:01	0°♈		
superior conj	1746 Apr 02	23:45	13°♈04'20	-1°15'03	
minimum elong	1746 Apr 03	08:40	13°♈31'59	1°14'50	
max. Earth dist.	1746 Apr 06	14:30	17°♈33'04	1.72623 AU	
	1746 Apr 16	15:56	0°♉		
evening rise	1746 May 11	05:59	0°♊18'17		
asc. node	1746 May 11	05:45	0°♊17'32		
	1746 May 11	00:02	0°♊		
	1746 Jun 04	11:13	0°♋		
	1746 Jun 29	01:33	0°♌		
	1746 Jul 23	20:02	0°♍		
	1746 Aug 17	20:54	0°♎		
desc. node	1746 Aug 30	18:51	15°♎17'56		
	1746 Sep 12	07:55	0°♏		
	1746 Oct 08	12:43	0°♐		
	1746 Nov 05	10:45	0°♑		
evening max el	1746 Nov 06	14:01	1°♑08'45	47°11'18	
	1746 Dec 11	17:53	0°♒		
greatest brilliancy	1746 Dec 17	05:25	2°♒28'47	-4.9m	
asc. node	1746 Dec 21	22:16	3°♒51'47		
retrograde	1746 Dec 27	08:31	4°♒27'01		
	1747 Jan 11	06:52	30°℞♑		
evening set	1747 Jan 11	15:00	29°♑48'44		
min. Earth dist.	1747 Jan 16	04:29	27°♑06'19	0.26754 AU	
inferior conj	1747 Jan 17	00:00	26°♑36'15	6°07'52	
minimum elong	1747 Jan 16	13:33	26°♑52'20	6°05'25	
morning rise	1747 Jan 21	12:27	23°♑53'22		
direct	1747 Feb 06	08:56	18°♑55'28		
greatest brilliancy	1747 Feb 15	14:38	20°♑32'15	-4.9m	
	1747 Mar 04	14:55	0°♒		
morning max el	1747 Mar 28	05:08	20°♒42'27	46°27'19	
	1747 Apr 06	09:38	0°♓		
desc. node	1747 Apr 12	11:47	6°♓23'22		
	1747 May 04	01:07	0°♈		
	1747 May 30	06:27	0°♉		
	1747 Jun 24	19:50	0°♊		
	1747 Jul 19	22:33	0°♋		
asc. node	1747 Aug 03	15:08	17°♋45'58		
	1747 Aug 13	16:07	0°♌		
	1747 Sep 07	01:34	0°♍		
morning set	1747 Sep 22	10:40	19°♍05'12		
	1747 Oct 01	04:46	0°♎		
	1747 Oct 25	04:07	0°♏		
max. Earth dist.	1747 Oct 28	12:44	4°♏12'47	1.71492 AU	
superior conj	1747 Oct 30	14:06	6°♏47'39	0°52'25	
minimum elong	1747 Oct 31	00:21	7°♏19'49	0°52'01	
	1747 Nov 18	01:40	0°♐		
desc. node	1747 Nov 23	04:36	6°♐26'01		
evening rise	1747 Dec 10	06:24	27°♐53'05		
	1747 Dec 11	22:49	0°♑		
	1748 Jan 04	20:39	0°♒		
	1748 Jan 28	20:43	0°♓		
	1748 Feb 22	01:42	0°♈		
asc. node	1748 Mar 15	08:00	27°♈12'20		
	1748 Mar 17	15:27	0°♉		
	1748 Apr 11	19:28	0°♊		
	1748 May 07	23:28	0°♋		
	1748 Jun 05	05:18	0°♌		
evening max el	1748 Jun 10	19:43	5°♌28'01	45°22'58	
desc. node	1748 Jul 04	21:12	25°♌37'17		
	1748 Jul 12	01:23	0°♍		
greatest brilliancy	1748 Jul 19	04:58	3°♍11'09	-4.7m	
retrograde	1748 Jul 29	09:45	5°♍02'48		
	1748 Aug 14	17:06	30°℞♌		
evening set	1748 Aug 15	18:28	29°♌23'18		
inferior conj	1748 Aug 19	17:50	26°♌58'08	-8°13'44	
minimum elong	1748 Aug 19	11:41	27°♌07'40	8°13'11	
min. Earth dist.	1748 Aug 20	01:31	26°♌46'14	0.28712 AU	
morning rise	1748 Aug 23	04:46	24°♌51'04		
direct	1748 Sep 10	06:31	18°♌44'19		
greatest brilliancy	1748 Sep 21	03:23	20°♌54'18	-4.8m	
	1748 Oct 06	22:49	0°♍		
asc. node	1748 Oct 26	00:40	16°♍31'18		
morning max el	1748 Oct 30	09:55	20°♍50'41	46°32'23	
	1748 Nov 08	06:41	0°♎		
	1748 Dec 05	02:18	0°♏		
	1748 Dec 30	08:17	0°♐		
	1749 Jan 23	23:28	0°♑		
desc. node	1749 Feb 14	14:00	26°♑33'55		
	1749 Feb 17	08:52	0°♒		
	1749 Mar 13	16:28	0°♓		
	1749 Apr 07	00:13	0°♈		
	1749 May 01	09:02	0°♉		
morning set	1749 May 05	14:26	5°♉11'40		
	1749 May 25	18:54	0°♊		
asc. node	1749 Jun 07	17:30	15°♊53'35		
superior conj	1749 Jun 11	13:20	20°♊35'35	0°09'07	
minimum elong	1749 Jun 11	11:27	20°♊29'49	0°09'00	
behind sun begin	1749 Jun 10	16:40	19°♊32'06		
behind sun end	1749 Jun 12	06:15	21°♊27'33		
max. Earth dist.	1749 Jun 11	08:12	20°♊19'49	1.73597 AU	
	1749 Jun 19	05:05	0°♋		
	1749 Jul 13	14:48	0°♌		
evening rise	1749 Jul 17	12:58	4°♌49'39		
	1749 Aug 06	23:59	0°♍		
	1749 Aug 31	09:32	0°♎		
	1749 Sep 24	20:44	0°♏		
desc. node	1749 Sep 27	06:55	2°♏57'52		
	1749 Oct 19	10:55	0°♐		
	1749 Nov 13	06:10	0°♑		
	1749 Dec 08	12:06	0°♒		
	1750 Jan 03	21:01	0°♓		
evening max el	1750 Jan 17	17:08	14°♓39'13	47°02'58	
asc. node	1750 Jan 18	10:09	15°♓22'24		
	1750 Feb 02	21:22	0°♈		
greatest brilliancy	1750 Feb 26	19:49	15°♈47'02	-4.9m	
retrograde	1750 Mar 09	09:11	17°♈52'35		
evening set	1750 Mar 26	20:36	11°♈55'01		
inferior conj	1750 Mar 30	11:40	9°♈39'11	7°50'46	
minimum elong	1750 Mar 30	19:37	9°♈26'39	7°49'43	
min. Earth dist.	1750 Mar 30	05:38	9°♈48'43	0.28274 AU	
morning rise	1750 Apr 03	18:57	7°♈00'00		
direct	1750 Apr 20	14:34	1°♈33'44		
greatest brilliancy	1750 Apr 30	01:12	3°♈12'44	-4.8m	
desc. node	1750 May 09	23:22	7°♈52'37		
	1750 Jun 06	17:18	0°♉		
morning max el	1750 Jun 08	13:50	1°♉45'51	45°48'39	
	1750 Jul 06	00:17	0°♊		
	1750 Aug 01	19:45	0°♋		
	1750 Aug 27	11:05	0°♌		
asc. node	1750 Aug 31	03:05	4°♌22'22		
	1750 Sep 21	08:12	0°♍		

	1750 Oct 15 16:54	0°♎	
	1750 Nov 08 18:00	0°♏	
greatest brilliancy	1750 Nov 18 23:44	12°♏50'27	-3.9m
	1750 Dec 02 15:23	0°♐	
morning set	1750 Dec 04 12:50	2°♐22'55	
desc. node	1750 Dec 20 16:19	22°♐41'48	
	1750 Dec 26 11:35	0°♑	
superior conj	1751 Jan 15 04:09	24°♑46'12	-0°56'04
minimum elong	1751 Jan 14 16:20	24°♑09'03	0°55'37
max. Earth dist.	1751 Jan 17 15:57	27°♑54'05	1.71186 AU
	1751 Jan 19 08:02	0°♒	
	1751 Feb 12 05:56	0°♓	
evening rise	1751 Feb 25 05:18	16°♓13'00	
	1751 Mar 08 06:48	0°♈	
	1751 Apr 01 12:21	0°♉	
asc. node	1751 Apr 12 19:55	13°♉54'10	
	1751 Apr 26 00:14	0°♊	
	1751 May 20 20:13	0°♋	
	1751 Jun 15 03:16	0°♌	
	1751 Jul 11 04:05	0°♍	
desc. node	1751 Aug 02 09:01	24°♍26'08	
	1751 Aug 07 15:30	0°♎	
evening max el	1751 Aug 22 23:54	15°♎26'58	46°04'10
	1751 Sep 08 06:53	0°♏	
greatest brilliancy	1751 Oct 02 04:52	14°♏24'55	-4.8m
retrograde	1751 Oct 11 05:38	15°♏54'55	
evening set	1751 Oct 27 01:33	11°♏08'21	
inferior conj	1751 Oct 31 23:34	8°♏13'45	-5°22'56
minimum elong	1751 Nov 01 09:41	7°♏58'18	5°20'23
min. Earth dist.	1751 Nov 01 18:59	7°♏44'07	0.26973 AU
morning rise	1751 Nov 06 17:11	4°♏50'45	
direct	1751 Nov 21 16:32	0°♏25'44	
asc. node	1751 Nov 23 12:21	0°♏29'44	
greatest brilliancy	1751 Dec 02 15:46	2°♏41'19	-4.9m
	1752 Jan 07 14:09	0°♐	
morning max el	1752 Jan 11 09:41	3°♐49'51	46°57'25
	1752 Feb 04 16:04	0°♑	
	1752 Mar 01 16:26	0°♒	
desc. node	1752 Mar 14 02:02	14°♒39'08	
	1752 Mar 26 23:01	0°♓	
	1752 Apr 20 22:02	0°♈	
	1752 May 15 17:28	0°♉	
	1752 Jun 09 10:30	0°♊	
	1752 Jul 04 00:41	0°♋	
asc. node	1752 Jul 05 05:22	1°♋27'46	
morning set	1752 Jul 12 11:18	10°♋20'36	
	1752 Jul 28 11:09	0°♌	
max. Earth dist.	1752 Aug 14 11:07	20°♌59'15	1.72969 AU
superior conj	1752 Aug 17 20:34	25°♌11'16	1°19'49
minimum elong	1752 Aug 17 14:50	24°♌53'31	1°19'43
	1752 Aug 21 17:49	0°♍	
	1752 Sep 14 21:39	0°♎	
evening rise	1752 Sep 23 15:50	10°♎53'40	
	1752 Oct 09 00:09	0°♏	
desc. node	1752 Oct 24 18:47	19°♏38'40	
	1752 Nov 02 02:27	0°♐	
	1752 Nov 26 05:25	0°♑	
	1752 Dec 20 10:31	0°♒	
	1753 Jan 13 21:14	0°♓	
	1753 Feb 07 20:45	0°♈	
asc. node	1753 Feb 14 22:04	8°♈16'52	
	1753 Mar 05 23:28	0°♉	
evening max el	1753 Mar 29 20:41	25°♉08'49	45°55'41
	1753 Apr 03 21:41	0°♊	
greatest brilliancy	1753 May 07 02:51	23°♊48'36	-4.7m
retrograde	1753 May 18 01:30	25°♊59'44	
evening set	1753 Jun 02 03:43	21°♊35'18	
desc. node	1753 Jun 06 11:18	19°♊03'04	
inferior conj	1753 Jun 08 13:12	17°♊45'10	-0°29'26
minimum elong	1753 Jun 08 12:07	17°♊46'52	0°29'07
min. Earth dist.	1753 Jun 08 12:57	17°♊45'35	0.28919 AU
morning rise	1753 Jun 14 20:31	13°♊57'18	
direct	1753 Jun 30 02:43	9°♊28'18	
greatest brilliancy	1753 Jul 10 11:56	11°♊23'37	-4.7m
	1753 Aug 07 19:56	0°♋	
morning max el	1753 Aug 17 22:51	9°♋16'33	45°50'56
	1753 Sep 07 05:32	0°♌	
asc. node	1753 Sep 27 14:58	22°♌40'45	
	1753 Oct 03 23:18	0°♍	
	1753 Oct 29 05:37	0°♎	
	1753 Nov 22 17:52	0°♏	
	1753 Dec 16 21:16	0°♐	
	1754 Jan 09 21:03	0°♑	
desc. node	1754 Jan 17 04:16	9°♑08'28	
	1754 Feb 02 20:05	0°♒	
morning set	1754 Feb 19 18:43	21°♒11'23	
	1754 Feb 26 19:59	0°♓	
	1754 Mar 22 21:57	0°♈	
superior conj	1754 Mar 31 13:50	10°♈45'26	-1°16'44
minimum elong	1754 Mar 31 22:19	11°♈11'47	1°16'32
max. Earth dist.	1754 Apr 04 04:02	15°♈12'42	1.72569 AU
	1754 Apr 16 02:47	0°♉	
evening rise	1754 May 08 22:33	28°♉08'20	
asc. node	1754 May 10 07:42	29°♉50'12	
	1754 May 10 10:53	0°♊	
	1754 Jun 03 22:11	0°♋	
	1754 Jun 28 12:48	0°♌	
	1754 Jul 23 07:46	0°♍	
	1754 Aug 17 09:27	0°♎	
desc. node	1754 Aug 29 21:01	14°♎45'40	
	1754 Sep 11 21:50	0°♏	
	1754 Oct 08 05:14	0°♐	
evening max el	1754 Nov 04 04:15	28°♐45'50	47°09'49
	1754 Nov 05 09:57	0°♑	
	1754 Dec 14 18:33	0°♒	
greatest brilliancy	1754 Dec 14 18:14	29°♑59'43	-4.9m
asc. node	1754 Dec 21 00:21	1°♒39'55	
retrograde	1754 Dec 24 21:55	1°♒58'17	
	1755 Jan 03 15:43	30°℞♑	
evening set	1755 Jan 09 00:31	27°♑24'33	
min. Earth dist.	1755 Jan 13 17:23	24°♑37'37	0.26713 AU
inferior conj	1755 Jan 14 12:33	24°♑08'09	5°50'04
minimum elong	1755 Jan 14 02:13	24°♑24'02	5°47'33
morning rise	1755 Jan 19 04:19	21°♑21'02	
direct	1755 Feb 03 21:39	16°♑27'54	
greatest brilliancy	1755 Feb 13 03:35	18°♑05'28	-4.9m
	1755 Mar 05 08:30	0°♒	
morning max el	1755 Mar 25 19:40	18°♒22'33	46°28'56
	1755 Apr 06 05:37	0°♓	
desc. node	1755 Apr 11 13:45	5°♓39'05	
	1755 May 03 16:23	0°♈	
	1755 May 29 19:41	0°♉	
	1755 Jun 24 07:58	0°♊	
	1755 Jul 19 10:03	0°♋	
asc. node	1755 Aug 02 17:14	17°♋18'04	
	1755 Aug 13 03:16	0°♌	
	1755 Sep 06 12:33	0°♍	
morning set	1755 Sep 20 02:45	16°♍51'58	
	1755 Sep 30 15:42	0°♎	
	1755 Oct 24 15:04	0°♏	
max. Earth dist.	1755 Oct 25 23:52	1°♏42'47	1.71530 AU

superior conj	1755 Oct 28 03:28	4°♏24'35	0°55'15
minimum elong	1755 Oct 28 13:50	4°♏57'08	0°54'52
	1755 Nov 17 12:43	0°♐	
desc. node	1755 Nov 22 06:37	5°♐57'34	
evening rise	1755 Dec 07 17:13	25°♐21'20	
	1755 Dec 11 09:59	0°♑	
	1756 Jan 04 07:58	0°♒	
	1756 Jan 28 08:13	0°♓	
	1756 Feb 21 13:28	0°♈	
asc. node	1756 Mar 14 10:00	26°♈41'31	
	1756 Mar 17 03:42	0°♉	
	1756 Apr 11 08:41	0°♊	
	1756 May 07 14:45	0°♋	
	1756 Jun 05 02:16	0°♌	
evening max el	1756 Jun 08 11:56	3°♌17'54	45°22'50
desc. node	1756 Jul 03 23:18	24°♌23'16	
	1756 Jul 14 06:32	0°♍	
greatest brilliancy	1756 Jul 16 18:55	0°♍58'15	-4.7m
retrograde	1756 Jul 27 00:55	2°♍50'40	
	1756 Aug 08 02:47	30°℞♌	
evening set	1756 Aug 13 06:52	27°♌15'39	
inferior conj	1756 Aug 17 09:24	24°♌45'30	-8°06'45
minimum elong	1756 Aug 17 02:39	24°♌55'59	8°06'03
min. Earth dist.	1756 Aug 17 16:04	24°♌35'08	0.28743 AU
morning rise	1756 Aug 20 22:17	22°♌35'16	
direct	1756 Sep 07 22:53	16°♌31'29	
greatest brilliancy	1756 Sep 18 18:04	18°♌39'42	-4.8m
	1756 Oct 07 13:14	0°♍	
asc. node	1756 Oct 25 02:35	15°♍38'41	
morning max el	1756 Oct 28 00:40	18°♍32'14	46°30'53
	1756 Nov 08 01:44	0°♎	
	1756 Dec 04 17:19	0°♏	
	1756 Dec 29 21:38	0°♐	
	1757 Jan 23 11:58	0°♑	
desc. node	1757 Feb 13 16:08	26°♑03'25	
	1757 Feb 16 20:50	0°♒	
	1757 Mar 13 04:04	0°♓	
	1757 Apr 06 11:32	0°♈	
	1757 Apr 30 20:07	0°♉	
morning set	1757 May 03 07:04	3°♉01'17	
	1757 May 25 05:50	0°♊	
asc. node	1757 Jun 06 19:35	15°♊26'31	
superior conj	1757 Jun 09 07:06	18°♊29'18	0°05'55
minimum elong	1757 Jun 09 05:53	18°♊25'31	0°05'52
behind sun begin	1757 Jun 08 08:41	17°♊20'25	
behind sun end	1757 Jun 10 03:04	19°♊30'38	
max. Earth dist.	1757 Jun 09 06:19	18°♊26'54	1.73586 AU
	1757 Jun 18 15:58	0°♋	
	1757 Jul 13 01:45	0°♌	
evening rise	1757 Jul 15 07:44	2°♌46'00	
	1757 Aug 06 11:07	0°♍	
	1757 Aug 30 20:58	0°♎	
	1757 Sep 24 08:38	0°♏	
desc. node	1757 Sep 26 08:53	2°♏27'24	
	1757 Oct 18 23:27	0°♐	
	1757 Nov 12 19:37	0°♑	
	1757 Dec 08 03:07	0°♒	
	1758 Jan 03 15:32	0°♓	
evening max el	1758 Jan 15 07:58	12°♓18'47	47°04'35
asc. node	1758 Jan 17 12:16	14°♓30'56	
	1758 Feb 03 05:55	0°♈	
greatest brilliancy	1758 Feb 24 12:20	13°♈31'08	-4.9m
retrograde	1758 Mar 07 00:24	15°♈35'33	
evening set	1758 Mar 24 14:31	9°♈34'47	
inferior conj	1758 Mar 28 03:00	7°♈22'45	8°00'03
minimum elong	1758 Mar 28 10:26	7°♈10'59	7°59'08
min. Earth dist.	1758 Mar 27 20:24	7°♈33'11	0.28236 AU
morning rise	1758 Apr 01 06:38	4°♈48'41	
	1758 Apr 12 07:44	30°℞♓	
direct	1758 Apr 18 05:17	29°♓18'07	
	1758 Apr 24 06:58	0°♈	
greatest brilliancy	1758 Apr 27 15:08	0°♈56'11	-4.8m
desc. node	1758 May 09 01:26	6°♈30'23	
morning max el	1758 Jun 06 04:07	29°♈30'04	45°49'21
	1758 Jun 06 16:36	0°♉	
	1758 Jul 05 16:24	0°♊	
	1758 Aug 01 09:21	0°♋	
	1758 Aug 26 23:29	0°♌	
asc. node	1758 Aug 30 05:06	3°♌51'43	
	1758 Sep 20 19:58	0°♍	
	1758 Oct 15 04:21	0°♎	
	1758 Nov 08 05:19	0°♏	
greatest brilliancy	1758 Nov 19 17:34	14°♏26'20	-3.9m
morning set	1758 Dec 01 23:59	29°♏51'36	
	1758 Dec 02 02:39	0°♐	
desc. node	1758 Dec 19 18:28	22°♐13'16	
	1758 Dec 25 22:48	0°♑	
superior conj	1759 Jan 12 14:07	22°♑11'31	-0°52'59
minimum elong	1759 Jan 12 02:31	21°♑35'04	0°52'31
max. Earth dist.	1759 Jan 14 19:40	24°♑59'51	1.71157 AU
	1759 Jan 18 19:12	0°♒	
	1759 Feb 11 17:05	0°♓	
evening rise	1759 Feb 22 16:42	13°♓43'56	
	1759 Mar 07 17:58	0°♈	
	1759 Mar 31 23:39	0°♉	
asc. node	1759 Apr 11 21:53	13°♉25'20	
	1759 Apr 25 11:48	0°♊	
	1759 May 20 08:16	0°♋	
	1759 Jun 14 16:15	0°♌	
	1759 Jul 10 18:54	0°♍	
desc. node	1759 Aug 01 11:09	23°♍44'12	
	1759 Aug 07 10:37	0°♎	
evening max el	1759 Aug 20 12:05	13°♎03'43	46°01'52
	1759 Sep 08 19:51	0°♏	
greatest brilliancy	1759 Sep 29 17:51	12°♏01'00	-4.8m
retrograde	1759 Oct 08 17:39	13°♏30'37	
evening set	1759 Oct 24 17:23	8°♏38'59	
inferior conj	1759 Oct 29 12:28	5°♏48'45	-5°41'07
minimum elong	1759 Oct 29 22:48	5°♏32'59	5°38'36
min. Earth dist.	1759 Oct 30 08:58	5°♏17'30	0.27036 AU
morning rise	1759 Nov 04 03:34	2°♏29'10	
	1759 Nov 09 07:41	30°℞♎	
direct	1759 Nov 19 05:42	27°♎59'22	
asc. node	1759 Nov 22 14:31	28°♎12'53	
	1759 Nov 29 13:25	0°♏	
greatest brilliancy	1759 Nov 30 07:01	0°♏16'55	-4.9m
	1760 Jan 07 14:14	0°♐	
morning max el	1760 Jan 08 23:19	1°♐23'50	46°57'38
	1760 Feb 04 09:00	0°♑	
	1760 Mar 01 06:42	0°♒	
desc. node	1760 Mar 13 03:59	14°♒04'39	
	1760 Mar 26 11:55	0°♓	
	1760 Apr 20 10:06	0°♈	
	1760 May 15 05:01	0°♉	
	1760 Jun 08 21:43	0°♊	
	1760 Jul 03 11:41	0°♋	
asc. node	1760 Jul 04 07:29	1°♋00'35	
morning set	1760 Jul 10 05:19	8°♋15'00	
	1760 Jul 27 22:04	0°♌	
max. Earth dist.	1760 Aug 12 07:29	19°♌00'00	1.73014 AU
superior conj	1760 Aug 15 14:22	23°♌03'59	1°18'41

minimum elong	1760 Aug 15 08:08	22°♌44'40	1°18'33
	1760 Aug 21 04:45	0°♍	
	1760 Sep 14 08:42	0°♎	
evening rise	1760 Sep 21 07:20	8°♎38'06	
	1760 Oct 08 11:23	0°♏	
desc. node	1760 Oct 23 20:47	19°♏09'30	
	1760 Nov 01 13:56	0°♐	
	1760 Nov 25 17:13	0°♑	
	1760 Dec 19 22:43	0°♒	
	1761 Jan 13 10:04	0°♓	
	1761 Feb 07 10:42	0°♈	
asc. node	1761 Feb 14 00:06	7°♈40'52	
	1761 Mar 05 15:54	0°♉	
evening max el	1761 Mar 27 11:59	22°♉54'52	45°58'00
	1761 Apr 03 22:19	0°♊	
greatest brilliancy	1761 May 04 18:50	21°♊38'46	-4.7m
retrograde	1761 May 15 18:31	23°♊51'02	
evening set	1761 May 30 20:49	19°♊25'17	
desc. node	1761 Jun 05 13:25	16°♊01'32	
inferior conj	1761 Jun 06 05:40	15°♊36'04	-0°09'36
minimum elong	1761 Jun 06 05:19	15°♊36'37	0°09'30
transit middle	1761 Jun 06 05:19	15°♊36'37	0°09'30
transit begin	1761 Jun 06 02:02	15°♊41'46	
transit end	1761 Jun 06 08:36	15°♊31'28	
min. Earth dist.	1761 Jun 06 05:25	15°♊36'28	0.28912 AU
morning rise	1761 Jun 12 13:52	11°♊47'17	
direct	1761 Jun 27 19:05	7°♊19'09	
greatest brilliancy	1761 Jul 08 04:04	9°♊14'44	-4.7m
	1761 Aug 07 22:52	0°♋	
morning max el	1761 Aug 15 15:36	7°♋08'02	45°50'03
	1761 Sep 06 22:23	0°♌	
asc. node	1761 Sep 26 16:55	22°♌04'53	
	1761 Oct 03 13:15	0°♍	
	1761 Oct 28 18:19	0°♎	
	1761 Nov 22 05:56	0°♏	
	1761 Dec 16 08:57	0°♐	
	1762 Jan 09 08:30	0°♑	
desc. node	1762 Jan 16 06:17	8°♑39'03	
	1762 Feb 02 07:22	0°♒	
morning set	1762 Feb 17 05:29	18°♒40'00	
	1762 Feb 26 07:08	0°♓	
	1762 Mar 22 08:58	0°♈	
superior conj	1762 Mar 29 03:49	8°♈25'49	-1°18'18
minimum elong	1762 Mar 29 11:49	8°♈50'40	1°18'08
max. Earth dist.	1762 Apr 01 18:45	12°♈55'31	1.72513 AU
	1762 Apr 15 13:43	0°♉	
evening rise	1762 May 06 15:08	25°♉58'14	
asc. node	1762 May 09 09:51	29°♉23'16	
	1762 May 09 21:48	0°♊	
	1762 Jun 03 09:13	0°♋	
	1762 Jun 28 00:08	0°♌	
	1762 Jul 22 19:39	0°♍	
	1762 Aug 16 22:12	0°♎	
desc. node	1762 Aug 28 22:55	14°♎12'02	
	1762 Sep 11 12:02	0°♏	
	1762 Oct 07 22:14	0°♐	
evening max el	1762 Nov 01 19:06	26°♐24'14	47°08'24
	1762 Nov 05 10:20	0°♑	
greatest brilliancy	1762 Dec 12 07:02	27°♑30'35	-4.9m
asc. node	1762 Dec 20 02:26	29°♑22'22	
retrograde	1762 Dec 22 11:20	29°♑29'12	
evening set	1763 Jan 06 10:16	25°♑00'05	
min. Earth dist.	1763 Jan 11 06:13	22°♑08'47	0.26669 AU
inferior conj	1763 Jan 12 01:04	21°♑39'52	5°31'32
minimum elong	1763 Jan 11 14:56	21°♑55'25	5°28'58
morning rise	1763 Jan 16 20:03	18°♑48'32	
direct	1763 Feb 01 10:37	14°♑00'27	
greatest brilliancy	1763 Feb 10 16:17	15°♑38'15	-4.9m
	1763 Mar 05 21:38	0°♒	
morning max el	1763 Mar 23 09:41	16°♒01'23	46°30'23
	1763 Apr 06 00:57	0°♓	
desc. node	1763 Apr 10 15:46	4°♓55'38	
	1763 May 03 07:25	0°♈	
	1763 May 29 08:46	0°♉	
	1763 Jun 23 19:59	0°♊	
	1763 Jul 18 21:28	0°♋	
asc. node	1763 Aug 01 19:16	16°♋50'12	
	1763 Aug 12 14:21	0°♌	
	1763 Sep 05 23:30	0°♍	
morning set	1763 Sep 17 18:44	14°♍38'31	
	1763 Sep 30 02:38	0°♎	
max. Earth dist.	1763 Oct 23 07:58	29°♎03'22	1.71572 AU
	1763 Oct 24 02:02	0°♏	
superior conj	1763 Oct 25 16:42	2°♏01'09	0°58'00
minimum elong	1763 Oct 26 03:06	2°♏33'47	0°57'36
	1763 Nov 16 23:46	0°♐	
desc. node	1763 Nov 21 08:47	5°♐29'37	
evening rise	1763 Dec 05 03:38	22°♐48'17	
	1763 Dec 10 21:09	0°♑	
	1764 Jan 03 19:14	0°♒	
	1764 Jan 27 19:38	0°♓	
	1764 Feb 21 01:09	0°♈	
asc. node	1764 Mar 13 11:59	26°♈10'51	
	1764 Mar 16 15:53	0°♉	
	1764 Apr 10 21:53	0°♊	
	1764 May 07 06:07	0°♋	
	1764 Jun 04 23:47	0°♌	
evening max el	1764 Jun 06 03:27	1°♌06'31	45°22'46
desc. node	1764 Jul 03 01:23	23°♌07'37	
greatest brilliancy	1764 Jul 14 09:30	28°♌46'49	-4.7m
	1764 Jul 18 16:16	0°♍	
retrograde	1764 Jul 24 15:47	0°♍39'34	
	1764 Jul 30 11:14	30°℞♌	
evening set	1764 Aug 10 19:17	25°♌09'13	
inferior conj	1764 Aug 15 01:04	22°♌34'02	-7°58'58
minimum elong	1764 Aug 14 17:47	22°♌45'23	7°58'08
min. Earth dist.	1764 Aug 15 07:04	22°♌24'42	0.28773 AU
morning rise	1764 Aug 18 16:07	20°♌20'17	
direct	1764 Sep 05 14:50	14°♌19'44	
greatest brilliancy	1764 Sep 16 09:20	16°♌26'40	-4.8m
	1764 Oct 07 23:40	0°♍	
asc. node	1764 Oct 24 04:47	14°♍48'08	
morning max el	1764 Oct 25 14:26	16°♍11'52	46°29'13
	1764 Nov 07 20:08	0°♎	
	1764 Dec 04 08:04	0°♏	
	1764 Dec 29 10:50	0°♐	
	1765 Jan 23 00:19	0°♑	
desc. node	1765 Feb 12 18:08	25°♑33'00	
	1765 Feb 16 08:38	0°♒	
	1765 Mar 12 15:26	0°♓	
	1765 Apr 05 22:35	0°♈	
	1765 Apr 30 06:57	0°♉	
morning set	1765 Apr 30 23:36	0°♉51'13	
	1765 May 24 16:33	0°♊	
asc. node	1765 Jun 05 21:42	15°♊00'15	
superior conj	1765 Jun 07 01:00	16°♊24'05	0°02'44
minimum elong	1765 Jun 07 00:26	16°♊22'19	0°02'43
behind sun begin	1765 Jun 06 02:03	15°♊13'36	
behind sun end	1765 Jun 07 22:48	17°♊31'03	
max. Earth dist.	1765 Jun 07 02:46	16°♊29'30	1.73573 AU
	1765 Jun 18 02:39	0°♋	

	1765 Jul 12 12:28	0°♌	
evening rise	1765 Jul 13 02:42	0°♌43'45	
	1765 Aug 05 22:00	0°♍	
	1765 Aug 30 08:09	0°♎	
	1765 Sep 23 20:17	0°♏	
desc. node	1765 Sep 25 10:58	1°♏58'05	
	1765 Oct 18 11:47	0°♐	
	1765 Nov 12 08:57	0°♑	
	1765 Dec 07 18:09	0°♒	
	1766 Jan 03 10:24	0°♓	
evening max el	1766 Jan 12 21:49	9°♓55'55	47°06'14
asc. node	1766 Jan 16 14:16	13°♓38'26	
	1766 Feb 03 17:21	0°♈	
greatest brilliancy	1766 Feb 22 04:55	11°♈15'16	-4.9m
retrograde	1766 Mar 04 15:21	13°♈18'41	
evening set	1766 Mar 22 08:09	7°♈14'49	
inferior conj	1766 Mar 25 18:12	5°♈06'32	8°08'32
minimum elong	1766 Mar 26 01:05	4°♈55'39	8°07'47
min. Earth dist.	1766 Mar 25 11:11	5°♈17'38	0.28194 AU
morning rise	1766 Mar 29 18:15	2°♈37'39	
	1766 Apr 03 14:56	30°♓	
direct	1766 Apr 15 19:23	27°♓02'36	
greatest brilliancy	1766 Apr 25 05:19	28°♓40'25	-4.8m
	1766 Apr 28 16:12	0°♈	
desc. node	1766 May 08 03:36	5°♈11'30	
morning max el	1766 Jun 03 18:12	27°♈14'33	45°50'12
	1766 Jun 06 14:34	0°♉	
	1766 Jul 05 07:55	0°♊	
	1766 Jul 31 22:29	0°♋	
	1766 Aug 26 11:28	0°♌	
asc. node	1766 Aug 29 07:06	3°♌22'04	
	1766 Sep 20 07:21	0°♍	
	1766 Oct 14 15:26	0°♎	
	1766 Nov 07 16:16	0°♏	
greatest brilliancy	1766 Nov 19 22:40	15°♏23'22	-3.9m
morning set	1766 Nov 29 11:19	27°♏21'56	
	1766 Dec 01 13:35	0°♐	
desc. node	1766 Dec 18 20:31	21°♐45'21	
	1766 Dec 25 09:44	0°♑	
superior conj	1767 Jan 09 23:46	19°♑36'41	-0°49'44
minimum elong	1767 Jan 09 12:31	19°♑01'17	0°49'17
max. Earth dist.	1767 Jan 11 21:32	22°♑00'33	1.71139 AU
	1767 Jan 18 06:07	0°♒	
	1767 Feb 11 04:00	0°♓	
evening rise	1767 Feb 20 03:35	11°♓13'56	
	1767 Mar 07 04:55	0°♈	
	1767 Mar 31 10:41	0°♉	
asc. node	1767 Apr 11 00:02	12°♉57'57	
	1767 Apr 24 23:04	0°♊	
	1767 May 19 20:02	0°♋	
	1767 Jun 14 04:59	0°♌	
	1767 Jul 10 09:33	0°♍	
desc. node	1767 Jul 31 13:06	23°♍02'23	
	1767 Aug 07 05:49	0°♎	
evening max el	1767 Aug 18 00:58	10°♎43'36	45°59'42
	1767 Sep 09 12:19	0°♏	
greatest brilliancy	1767 Sep 27 06:19	9°♏38'27	-4.8m
retrograde	1767 Oct 06 06:29	11°♏08'29	
evening set	1767 Oct 22 09:26	6°♏11'37	
inferior conj	1767 Oct 27 01:32	3°♏25'42	-5°58'22
minimum elong	1767 Oct 27 12:02	3°♏09'43	5°55'55
min. Earth dist.	1767 Oct 27 22:39	2°♏53'33	0.27101 AU
morning rise	1767 Nov 01 13:59	0°♏10'00	
	1767 Nov 01 21:15	30°♎	
direct	1767 Nov 16 19:29	25°♎35'05	
asc. node	1767 Nov 21 16:33	26°♎03'16	
greatest brilliancy	1767 Nov 27 21:47	27°♎53'57	-4.9m
	1767 Dec 02 10:49	0°♏	
morning max el	1768 Jan 06 13:54	29°♏01'42	46°57'36
	1768 Jan 07 12:44	0°♐	
	1768 Feb 04 01:14	0°♑	
	1768 Feb 29 20:32	0°♒	
desc. node	1768 Mar 12 06:02	13°♒31'28	
	1768 Mar 26 00:29	0°♓	
	1768 Apr 19 21:53	0°♈	
	1768 May 14 16:16	0°♉	
	1768 Jun 08 08:36	0°♊	
	1768 Jul 02 22:20	0°♋	
asc. node	1768 Jul 03 09:27	0°♋34'01	
morning set	1768 Jul 07 23:19	6°♋10'28	
	1768 Jul 27 08:37	0°♌	
max. Earth dist.	1768 Aug 10 04:39	17°♌04'19	1.73057 AU
superior conj	1768 Aug 13 08:14	20°♌58'01	1°17'25
minimum elong	1768 Aug 13 01:32	20°♌37'18	1°17'17
	1768 Aug 20 15:20	0°♍	
	1768 Sep 13 19:26	0°♎	
evening rise	1768 Sep 18 23:08	6°♎24'34	
	1768 Oct 07 22:17	0°♏	
desc. node	1768 Oct 22 22:57	18°♏41'53	
	1768 Nov 01 01:04	0°♐	
	1768 Nov 25 04:39	0°♑	
	1768 Dec 19 10:34	0°♒	
	1769 Jan 12 22:35	0°♓	
	1769 Feb 07 00:25	0°♈	
asc. node	1769 Feb 13 02:04	7°♈05'22	
	1769 Mar 05 08:21	0°♉	
evening max el	1769 Mar 25 04:10	20°♉43'39	46°00'15
	1769 Apr 03 24:00	0°♊	
greatest brilliancy	1769 May 02 10:57	19°♊29'32	-4.7m
retrograde	1769 May 13 11:39	21°♊42'30	
evening set	1769 May 28 14:03	17°♊15'34	
inferior conj	1769 Jun 03 22:03	13°♊27'14	0°10'16
minimum elong	1769 Jun 03 22:25	13°♊26'39	0°10'09
transit middle	1769 Jun 03 22:25	13°♊26'39	0°10'09
transit begin	1769 Jun 03 19:15	13°♊31'36	
transit end	1769 Jun 04 01:35	13°♊21'41	
min. Earth dist.	1769 Jun 03 21:32	13°♊28'02	0.28899 AU
desc. node	1769 Jun 04 15:25	13°♊00'03	
morning rise	1769 Jun 10 06:59	9°♊37'48	
direct	1769 Jun 25 11:43	5°♊10'36	
greatest brilliancy	1769 Jul 05 19:26	7°♊05'38	-4.7m
	1769 Aug 07 23:58	0°♋	
morning max el	1769 Aug 13 08:16	5°♋00'22	45°49'09
	1769 Sep 06 14:33	0°♌	
asc. node	1769 Sep 25 19:05	21°♌30'51	
	1769 Oct 03 02:44	0°♍	
	1769 Oct 28 06:38	0°♎	
	1769 Nov 21 17:39	0°♏	
	1769 Dec 15 20:19	0°♐	
	1770 Jan 08 19:37	0°♑	
desc. node	1770 Jan 15 08:17	8°♑10'39	
	1770 Feb 01 18:19	0°♒	
morning set	1770 Feb 14 16:31	16°♒10'30	
	1770 Feb 25 17:58	0°♓	
	1770 Mar 21 19:42	0°♈	
superior conj	1770 Mar 26 17:46	6°♈06'50	-1°19'43
minimum elong	1770 Mar 27 01:14	6°♈30'00	1°19'35
max. Earth dist.	1770 Mar 30 11:21	10°♈44'55	1.72464 AU
	1770 Apr 15 00:24	0°♉	
evening rise	1770 May 04 07:29	23°♉48'01	
asc. node	1770 May 08 11:54	28°♉56'41	

	1770 May 09 08:30	0°♊	
	1770 Jun 02 20:03	0°♋	
	1770 Jun 27 11:17	0°♌	
	1770 Jul 22 07:20	0°♍	
	1770 Aug 16 10:46	0°♎	
desc. node	1770 Aug 28 01:01	13°♎39'34	
	1770 Sep 11 02:07	0°♏	
	1770 Oct 07 15:18	0°♐	
evening max el	1770 Oct 30 10:02	24°♐03'32	47°06'47
	1770 Nov 05 11:40	0°♑	
greatest brilliancy	1770 Dec 09 20:23	25°♑02'54	-4.9m
asc. node	1770 Dec 19 04:26	26°♑59'50	
retrograde	1770 Dec 20 00:29	27°♑00'41	
evening set	1771 Jan 03 20:17	22°♑36'15	
min. Earth dist.	1771 Jan 08 19:23	19°♑40'22	0.26625 AU
inferior conj	1771 Jan 09 13:36	19°♑12'25	5°12'21
minimum elong	1771 Jan 09 03:44	19°♑27'34	5°09'46
morning rise	1771 Jan 14 11:41	16°♑16'49	
direct	1771 Jan 29 23:23	11°♑33'56	
greatest brilliancy	1771 Feb 08 05:15	13°♑11'57	-4.9m
	1771 Mar 06 07:01	0°♒	
morning max el	1771 Mar 20 22:39	13°♒38'18	46°31'53
	1771 Apr 05 19:28	0°♓	
desc. node	1771 Apr 09 17:58	4°♓13'58	
	1771 May 02 21:59	0°♈	
	1771 May 28 21:34	0°♉	
	1771 Jun 23 07:49	0°♊	
	1771 Jul 18 08:44	0°♋	
asc. node	1771 Jul 31 21:18	16°♋22'44	
	1771 Aug 12 01:18	0°♌	
	1771 Sep 05 10:18	0°♍	
morning set	1771 Sep 15 10:43	12°♍25'35	
	1771 Sep 29 13:24	0°♎	
max. Earth dist.	1771 Oct 20 16:26	26°♎25'38	1.71618 AU
superior conj	1771 Oct 23 06:08	29°♎38'56	1°00'36
minimum elong	1771 Oct 23 16:31	0°♏11'26	1°00'14
	1771 Oct 23 12:52	0°♏	
	1771 Nov 16 10:42	0°♐	
desc. node	1771 Nov 20 10:45	5°♐01'26	
evening rise	1771 Dec 02 14:12	20°♐16'09	
	1771 Dec 10 08:13	0°♑	
	1772 Jan 03 06:27	0°♒	
	1772 Jan 27 07:00	0°♓	
	1772 Feb 20 12:45	0°♈	
asc. node	1772 Mar 12 14:10	25°♈41'06	
	1772 Mar 16 04:00	0°♉	
	1772 Apr 10 11:02	0°♊	
	1772 May 06 21:36	0°♋	
evening max el	1772 Jun 03 18:17	28°♋53'39	45°22'40
	1772 Jun 04 22:06	0°♌	
desc. node	1772 Jul 02 03:22	21°♌49'33	
greatest brilliancy	1772 Jul 12 00:21	26°♌35'43	-4.7m
retrograde	1772 Jul 22 06:40	28°♌28'55	
evening set	1772 Aug 08 07:42	23°♌03'05	
inferior conj	1772 Aug 12 16:53	20°♌22'58	-7°50'27
minimum elong	1772 Aug 12 09:03	20°♌35'09	7°49'29
min. Earth dist.	1772 Aug 12 22:26	20°♌14'17	0.28802 AU
morning rise	1772 Aug 16 10:13	18°♌05'35	
direct	1772 Sep 03 06:29	12°♌08'13	
greatest brilliancy	1772 Sep 14 01:19	14°♌14'47	-4.8m
	1772 Oct 08 07:15	0°♍	
morning max el	1772 Oct 23 03:59	13°♍51'09	46°27'38
asc. node	1772 Oct 23 06:50	13°♍58'16	
	1772 Nov 07 14:02	0°♎	
	1772 Dec 03 22:35	0°♏	
	1772 Dec 28 23:56	0°♐	

	1773 Jan 22 12:38	0°♑	
desc. node	1773 Feb 11 20:10	25°♑02'40	
	1773 Feb 15 20:26	0°♒	
	1773 Mar 12 02:50	0°♓	
	1773 Apr 05 09:40	0°♈	
morning set	1773 Apr 28 16:13	28°♈41'11	
	1773 Apr 29 17:49	0°♉	
	1773 May 24 03:18	0°♊	
superior conj	1773 Jun 04 19:00	14°♊19'08	-0°00'28
minimum elong	1773 Jun 04 19:06	14°♊19'25	0°00'28
behind sun begin	1773 Jun 03 20:31	13°♊10'04	
behind sun end	1773 Jun 05 17:41	15°♊28'46	
asc. node	1773 Jun 04 23:39	14°♊33'26	
max. Earth dist.	1773 Jun 04 22:27	14°♊29'42	1.73562 AU
	1773 Jun 17 13:22	0°♋	
evening rise	1773 Jul 10 21:44	28°♋41'34	
	1773 Jul 11 23:16	0°♌	
	1773 Aug 05 08:59	0°♍	
	1773 Aug 29 19:29	0°♎	
	1773 Sep 23 08:07	0°♏	
desc. node	1773 Sep 24 13:04	1°♏28'19	
	1773 Oct 18 00:19	0°♐	
	1773 Nov 11 22:31	0°♑	
	1773 Dec 07 09:32	0°♒	
	1774 Jan 03 06:00	0°♓	
evening max el	1774 Jan 10 11:05	7°♓30'58	47°07'45
asc. node	1774 Jan 15 16:19	12°♓44'28	
	1774 Feb 04 09:06	0°♈	
greatest brilliancy	1774 Feb 19 21:02	8°♈57'43	-4.9m
retrograde	1774 Mar 02 06:20	11°♈00'46	
evening set	1774 Mar 20 01:24	4°♈53'46	
inferior conj	1774 Mar 23 09:14	2°♈49'05	8°16'17
minimum elong	1774 Mar 23 15:29	2°♈39'12	8°15'41
min. Earth dist.	1774 Mar 23 01:45	3°♈00'54	0.28152 AU
morning rise	1774 Mar 27 05:46	0°♈25'31	
	1774 Mar 27 23:00	30°℞♓	
direct	1774 Apr 13 09:11	24°♓45'40	
greatest brilliancy	1774 Apr 22 19:27	26°♓23'41	-4.8m
	1774 Apr 30 21:29	0°♈	
desc. node	1774 May 07 05:31	3°♈53'53	
morning max el	1774 Jun 01 08:42	24°♈59'23	45°51'17
	1774 Jun 06 11:57	0°♉	
	1774 Jul 04 23:22	0°♊	
	1774 Jul 31 11:42	0°♋	
	1774 Aug 25 23:37	0°♌	
asc. node	1774 Aug 28 09:14	2°♌52'20	
	1774 Sep 19 18:57	0°♍	
	1774 Oct 14 02:46	0°♎	
	1774 Nov 07 03:30	0°♏	
greatest brilliancy	1774 Nov 19 22:57	16°♏04'31	-3.9m
morning set	1774 Nov 26 22:45	24°♏51'47	
	1774 Dec 01 00:45	0°♐	
desc. node	1774 Dec 17 22:30	21°♐16'31	
	1774 Dec 24 20:52	0°♑	
superior conj	1775 Jan 07 09:19	17°♑00'45	-0°46'24
minimum elong	1775 Jan 06 22:30	16°♑26'43	0°45'56
max. Earth dist.	1775 Jan 09 01:53	19°♑08'17	1.71124 AU
	1775 Jan 17 17:15	0°♒	
	1775 Feb 10 15:09	0°♓	
evening rise	1775 Feb 17 14:28	8°♓43'09	
	1775 Mar 06 16:08	0°♈	
	1775 Mar 30 22:01	0°♉	
asc. node	1775 Apr 10 02:04	12°♉29'13	
	1775 Apr 24 10:39	0°♊	
	1775 May 19 08:07	0°♋	

	1775 Jun 13	18:03	0°♌		
	1775 Jul 10	00:40	0°♍		
desc. node	1775 Jul 30	15:11	22°♍19'34		
	1775 Aug 07	01:58	0°♎		
evening max el	1775 Aug 15	14:35	8°♎24'37	45°57'28	
	1775 Sep 10	11:10	0°♏		
greatest brilliancy	1775 Sep 24	18:11	7°♏14'20	-4.8m	
retrograde	1775 Oct 03	19:37	8°♏44'59		
evening set	1775 Oct 20	01:27	3°♏42'58		
inferior conj	1775 Oct 24	14:29	1°♏01'14	-6°14'55	
minimum elong	1775 Oct 25	01:03	0°♏45'09	6°12'33	
min. Earth dist.	1775 Oct 25	11:51	0°♏28'43	0.27168 AU	
	1775 Oct 26	06:48	30℞♎		
morning rise	1775 Oct 30	00:06	27°♎49'39		
direct	1775 Nov 14	09:39	23°♎09'33		
asc. node	1775 Nov 20	18:31	23°♎57'16		
greatest brilliancy	1775 Nov 25	11:54	25°♎28'51	-4.9m	
	1775 Dec 04	05:34	0°♏		
morning max el	1776 Jan 04	04:54	26°♏39'23	46°57'30	
	1776 Jan 07	10:52	0°♐		
	1776 Feb 03	17:35	0°♑		
	1776 Feb 29	10:35	0°♒		
desc. node	1776 Mar 11	08:12	12°♒57'48		
	1776 Mar 25	13:20	0°♓		
	1776 Apr 19	09:59	0°♈		
	1776 May 14	03:52	0°♉		
	1776 Jun 07	19:50	0°♊		
asc. node	1776 Jul 02	11:33	0°♋06'46		
	1776 Jul 02	09:20	0°♋		
morning set	1776 Jul 05	17:27	4°♋05'21		
	1776 Jul 26	19:31	0°♌		
max. Earth dist.	1776 Aug 08	01:41	15°♌07'16	1.73095 AU	
superior conj	1776 Aug 11	02:16	18°♌51'37	1°16'04	
minimum elong	1776 Aug 10	19:10	18°♌29'41	1°15'55	
	1776 Aug 20	02:16	0°♍		
	1776 Sep 13	06:30	0°♎		
evening rise	1776 Sep 16	15:08	4°♎10'36		
	1776 Oct 07	09:34	0°♏		
desc. node	1776 Oct 22	00:56	18°♏12'28		
	1776 Oct 31	12:38	0°♐		
	1776 Nov 24	16:32	0°♑		
	1776 Dec 18	22:55	0°♒		
	1777 Jan 12	11:37	0°♓		
	1777 Feb 06	14:43	0°♈		
asc. node	1777 Feb 12	04:14	6°♈28'52		
	1777 Mar 05	01:34	0°♉		
evening max el	1777 Mar 22	20:28	18°♉31'22	46°02'31	
	1777 Apr 04	03:47	0°♊		
greatest brilliancy	1777 Apr 30	03:34	17°♊19'32	-4.7m	
retrograde	1777 May 11	04:34	19°♊32'16		
evening set	1777 May 26	07:23	15°♊04'17		
inferior conj	1777 Jun 01	14:19	11°♊16'54	0°30'13	
minimum elong	1777 Jun 01	15:26	11°♊15'10	0°29'53	
min. Earth dist.	1777 Jun 01	13:39	11°♊17'58	0.28884 AU	
desc. node	1777 Jun 03	17:27	9°♊57'08		
morning rise	1777 Jun 07	23:47	7°♊26'48		
direct	1777 Jun 23	04:18	3°♊00'41		
greatest brilliancy	1777 Jul 03	10:19	4°♊54'29	-4.7m	
	1777 Aug 08	00:22	0°♋		
morning max el	1777 Aug 11	00:24	2°♋50'17	45°48'24	
	1777 Sep 06	06:49	0°♌		
asc. node	1777 Sep 24	21:06	20°♌55'38		
	1777 Oct 02	16:27	0°♍		
	1777 Oct 27	19:13	0°♎		
	1777 Nov 21	05:41	0°♏		
	1777 Dec 15	08:02	0°♐		
	1778 Jan 08	07:09	0°♑		
desc. node	1778 Jan 14	10:25	7°♑41'21		
	1778 Feb 01	05:42	0°♒		
morning set	1778 Feb 12	03:02	13°♒37'56		
	1778 Feb 25	05:13	0°♓		
	1778 Mar 21	06:50	0°♈		
superior conj	1778 Mar 24	07:12	3°♈44'56	-1°21'01	
minimum elong	1778 Mar 24	14:02	4°♈06'10	1°20'54	
max. Earth dist.	1778 Mar 28	05:00	8°♈36'14	1.72408 AU	
	1778 Apr 14	11:28	0°♉		
evening rise	1778 May 01	23:27	21°♉35'19		
asc. node	1778 May 07	13:51	28°♉28'39		
	1778 May 08	19:36	0°♊		
	1778 Jun 02	07:18	0°♋		
	1778 Jun 26	22:51	0°♌		
	1778 Jul 21	19:26	0°♍		
	1778 Aug 15	23:45	0°♎		
desc. node	1778 Aug 27	03:09	13°♎05'59		
	1778 Sep 10	16:41	0°♏		
	1778 Oct 07	09:03	0°♐		
evening max el	1778 Oct 27	23:58	21°♐39'34	47°04'57	
	1778 Nov 05	14:46	0°♑		
greatest brilliancy	1778 Dec 07	10:05	22°♑34'26	-4.9m	
retrograde	1778 Dec 17	12:53	24°♑30'38		
asc. node	1778 Dec 18	06:29	24°♑29'59		
evening set	1779 Jan 01	06:22	20°♑10'36		
min. Earth dist.	1779 Jan 06	08:54	17°♑09'51	0.26588 AU	
inferior conj	1779 Jan 07	02:00	16°♑43'33	4°52'25	
minimum elong	1779 Jan 06	16:30	16°♑58'09	4°49'50	
morning rise	1779 Jan 12	03:07	13°♑43'33		
direct	1779 Jan 27	11:32	9°♑05'44		
greatest brilliancy	1779 Feb 05	18:48	10°♑44'34	-4.9m	
	1779 Mar 06	14:27	0°♒		
morning max el	1779 Mar 18	10:46	11°♒11'26	46°33'21	
	1779 Apr 05	14:00	0°♓		
desc. node	1779 Apr 08	19:54	3°♓30'47		
	1779 May 02	12:48	0°♈		
	1779 May 28	10:38	0°♉		
	1779 Jun 22	19:55	0°♊		
	1779 Jul 17	20:17	0°♋		
asc. node	1779 Jul 30	23:24	15°♋54'39		
	1779 Aug 11	12:32	0°♌		
	1779 Sep 04	21:22	0°♍		
morning set	1779 Sep 13	02:48	10°♍12'09		
	1779 Sep 29	00:25	0°♎		
max. Earth dist.	1779 Oct 18	02:33	23°♎52'27	1.71662 AU	
superior conj	1779 Oct 20	19:59	27°♎17'22	1°03'04	
minimum elong	1779 Oct 21	06:16	27°♎49'34	1°02'44	
	1779 Oct 22	23:54	0°♏		
	1779 Nov 15	21:50	0°♐		
desc. node	1779 Nov 19	12:47	4°♐32'49		
evening rise	1779 Nov 30	01:12	17°♐44'51		
	1779 Dec 09	19:29	0°♑		
	1780 Jan 02	17:50	0°♒		
	1780 Jan 26	18:34	0°♓		
	1780 Feb 20	00:37	0°♈		
asc. node	1780 Mar 11	16:07	25°♈09'43		
	1780 Mar 15	16:27	0°♉		
	1780 Apr 10	00:36	0°♊		
	1780 May 06	13:39	0°♋		
evening max el	1780 Jun 01	08:31	26°♋38'34	45°22'49	
	1780 Jun 04	21:44	0°♌		
desc. node	1780 Jul 01	05:27	20°♌28'24		
greatest brilliancy	1780 Jul 09	14:43	24°♌23'16	-4.7m	
retrograde	1780 Jul 19	21:45	26°♌17'37		

evening set	1780 Aug 05 19:57	20°♌55'58	
inferior conj	1780 Aug 10 08:34	18°♌11'01	-7°41'19
minimum elong	1780 Aug 10 00:16	18°♌23'56	7°40'12
min. Earth dist.	1780 Aug 10 13:43	18°♌03'00	0.28831 AU
morning rise	1780 Aug 14 04:21	15°♌49'59	
direct	1780 Aug 31 21:51	9°♌55'39	
greatest brilliancy	1780 Sep 11 17:30	12°♌02'29	-4.8m
	1780 Oct 08 12:53	0°♍	
morning max el	1780 Oct 20 18:21	11°♍32'05	46°26'17
asc. node	1780 Oct 22 08:45	13°♍08'20	
	1780 Nov 07 07:43	0°♎	
	1780 Dec 03 13:03	0°♏	
	1780 Dec 28 12:59	0°♐	
	1781 Jan 22 00:55	0°♑	
desc. node	1781 Feb 10 22:17	24°♑32'39	
	1781 Feb 15 08:12	0°♒	
	1781 Mar 11 14:16	0°♓	
	1781 Apr 04 20:50	0°♈	
morning set	1781 Apr 26 08:24	26°♈29'25	
	1781 Apr 29 04:48	0°♉	
	1781 May 23 14:09	0°♊	
superior conj	1781 Jun 02 12:37	12°♊12'39	-0°03'43
minimum elong	1781 Jun 02 13:23	12°♊15'01	0°03'40
behind sun begin	1781 Jun 01 15:10	11°♊06'44	
behind sun end	1781 Jun 03 11:37	13°♊23'17	
max. Earth dist.	1781 Jun 02 17:36	12°♊27'57	1.73549 AU
asc. node	1781 Jun 04 01:45	14°♊06'42	
	1781 Jun 17 00:10	0°♋	
evening rise	1781 Jul 08 16:32	26°♋38'30	
	1781 Jul 11 10:08	0°♌	
	1781 Aug 04 20:03	0°♍	
	1781 Aug 29 06:54	0°♎	
	1781 Sep 22 20:03	0°♏	
desc. node	1781 Sep 23 15:01	0°♏57'46	
	1781 Oct 17 12:57	0°♐	
	1781 Nov 11 12:11	0°♑	
	1781 Dec 07 01:02	0°♒	
	1782 Jan 03 01:59	0°♓	
evening max el	1782 Jan 08 01:03	5°♓08'22	47°09'24
asc. node	1782 Jan 14 18:25	11°♓50'09	
	1782 Feb 05 05:51	0°♈	
greatest brilliancy	1782 Feb 17 12:31	6°♈40'06	-4.9m
retrograde	1782 Feb 27 21:54	8°♈43'43	
evening set	1782 Mar 17 18:34	2°♈33'34	
min. Earth dist.	1782 Mar 20 16:03	0°♈45'21	0.28113 AU
inferior conj	1782 Mar 21 00:22	0°♈32'14	8°23'17
minimum elong	1782 Mar 21 05:59	0°♈23'24	8°22'47
	1782 Mar 21 20:51	30°♓	
morning rise	1782 Mar 24 17:36	28°♓13'56	
direct	1782 Apr 10 23:26	22°♓29'21	
greatest brilliancy	1782 Apr 20 09:22	24°♓07'20	-4.8m
	1782 May 02 08:03	0°♈	
desc. node	1782 May 06 07:36	2°♈39'22	
morning max el	1782 May 30 00:16	22°♈46'59	45°52'13
	1782 Jun 06 08:30	0°♉	
	1782 Jul 04 14:32	0°♊	
	1782 Jul 31 00:45	0°♋	
	1782 Aug 25 11:37	0°♌	
asc. node	1782 Aug 27 11:15	2°♌22'35	
	1782 Sep 19 06:24	0°♍	
	1782 Oct 13 13:57	0°♎	
	1782 Nov 06 14:36	0°♏	
greatest brilliancy	1782 Nov 19 17:13	16°♏27'12	-3.9m
morning set	1782 Nov 24 10:20	22°♏22'36	
	1782 Nov 30 11:49	0°♐	
desc. node	1782 Dec 17 00:39	20°♐48'38	
	1782 Dec 24 07:53	0°♑	
superior conj	1783 Jan 04 19:00	14°♑25'38	-0°42'57
minimum elong	1783 Jan 04 08:42	13°♑53'14	0°42'30
max. Earth dist.	1783 Jan 06 08:44	16°♑24'19	1.71105 AU
	1783 Jan 17 04:13	0°♒	
	1783 Feb 10 02:05	0°♓	
evening rise	1783 Feb 15 01:39	6°♓13'58	
	1783 Mar 06 03:05	0°♈	
	1783 Mar 30 09:05	0°♉	
asc. node	1783 Apr 09 04:02	12°♉01'06	
	1783 Apr 23 22:00	0°♊	
	1783 May 18 20:00	0°♋	
	1783 Jun 13 07:01	0°♌	
	1783 Jul 09 15:47	0°♍	
desc. node	1783 Jul 29 17:18	21°♍36'52	
	1783 Aug 06 22:32	0°♎	
evening max el	1783 Aug 13 05:09	6°♎08'42	45°55'17
	1783 Sep 11 18:09	0°♏	
greatest brilliancy	1783 Sep 22 06:06	4°♏51'29	-4.8m
retrograde	1783 Oct 01 08:42	6°♏22'30	
evening set	1783 Oct 17 17:37	1°♏15'38	
	1783 Oct 19 21:21	30°℞♎	
inferior conj	1783 Oct 22 03:33	28°♎37'57	-6°30'42
minimum elong	1783 Oct 22 14:06	28°♎21'52	6°28'27
min. Earth dist.	1783 Oct 23 00:56	28°♎05'21	0.27236 AU
morning rise	1783 Oct 27 10:06	25°♎30'33	
direct	1783 Nov 12 00:06	20°♎45'23	
asc. node	1783 Nov 19 20:40	21°♎57'16	
greatest brilliancy	1783 Nov 23 01:37	23°♎04'13	-4.9m
	1783 Dec 05 10:36	0°♏	
morning max el	1784 Jan 01 19:47	24°♏17'36	46°57'19
	1784 Jan 07 07:55	0°♐	
	1784 Feb 03 09:23	0°♑	
	1784 Feb 29 00:12	0°♒	
desc. node	1784 Mar 10 10:07	12°♒24'35	
	1784 Mar 25 01:45	0°♓	
	1784 Apr 18 21:39	0°♈	
	1784 May 13 15:01	0°♉	
	1784 Jun 07 06:39	0°♊	
asc. node	1784 Jul 01 13:38	29°♊40'36	
	1784 Jul 01 19:58	0°♋	
morning set	1784 Jul 03 11:45	2°♋01'48	
	1784 Jul 26 06:06	0°♌	
max. Earth dist.	1784 Aug 05 20:54	13°♌05'42	1.73135 AU
superior conj	1784 Aug 08 20:22	16°♌46'26	1°14'37
minimum elong	1784 Aug 08 12:55	16°♌23'24	1°14'26
	1784 Aug 19 12:54	0°♍	
	1784 Sep 12 17:15	0°♎	
evening rise	1784 Sep 14 07:09	1°♎57'44	
	1784 Oct 06 20:32	0°♏	
desc. node	1784 Oct 21 02:57	17°♏44'10	
	1784 Oct 30 23:52	0°♐	
	1784 Nov 24 04:08	0°♑	
	1784 Dec 18 10:59	0°♒	
	1785 Jan 12 00:24	0°♓	
	1785 Feb 06 04:47	0°♈	
asc. node	1785 Feb 11 06:13	5°♈52'43	
	1785 Mar 04 18:40	0°♉	
evening max el	1785 Mar 20 12:42	16°♉20'12	46°04'55
	1785 Apr 04 08:40	0°♊	
greatest brilliancy	1785 Apr 27 20:59	15°♊12'19	-4.8m
retrograde	1785 May 08 21:15	17°♊24'10	
evening set	1785 May 24 01:07	12°♊55'06	
inferior conj	1785 May 30 06:53	9°♊08'56	0°49'58
minimum elong	1785 May 30 08:43	9°♊06'03	0°49'26

min. Earth dist.	1785 May 30 06:16	9°♊09'54	0.28868 AU
desc. node	1785 Jun 02 19:32	6°♊57'47	
morning rise	1785 Jun 05 16:40	5°♊18'07	
direct	1785 Jun 20 20:57	0°♊53'09	
greatest brilliancy	1785 Jul 01 01:37	2°♊45'42	-4.7m
	1785 Aug 07 23:03	0°♋	
morning max el	1785 Aug 08 15:55	0°♋40'13	45°47'30
	1785 Sep 05 22:23	0°♌	
asc. node	1785 Sep 23 23:04	20°♌21'36	
	1785 Oct 02 05:42	0°♍	
	1785 Oct 27 07:24	0°♎	
	1785 Nov 20 17:19	0°♏	
	1785 Dec 14 19:22	0°♐	
	1786 Jan 07 18:17	0°♑	
desc. node	1786 Jan 13 12:26	7°♑12'54	
	1786 Jan 31 16:42	0°♒	
morning set	1786 Feb 09 13:23	11°♒05'54	
	1786 Feb 24 16:06	0°♓	
	1786 Mar 20 17:35	0°♈	
superior conj	1786 Mar 21 20:38	1°♈24'05	-1°22'11
minimum elong	1786 Mar 22 02:45	1°♈43'07	1°22'05
max. Earth dist.	1786 Mar 25 21:43	6°♈25'46	1.72348 AU
	1786 Apr 13 22:08	0°♉	
evening rise	1786 Apr 29 15:24	19°♉23'50	
asc. node	1786 May 06 16:01	28°♉02'31	
	1786 May 08 06:15	0°♊	
	1786 Jun 01 18:06	0°♋	
	1786 Jun 26 09:58	0°♌	
	1786 Jul 21 07:07	0°♍	
	1786 Aug 15 12:24	0°♎	
desc. node	1786 Aug 26 05:03	12°♎32'44	
	1786 Sep 10 07:02	0°♏	
	1786 Oct 07 02:50	0°♐	
evening max el	1786 Oct 25 13:03	19°♐14'27	47°03'04
	1786 Nov 05 19:11	0°♑	
greatest brilliancy	1786 Dec 05 00:16	20°♑07'23	-4.9m
retrograde	1786 Dec 15 00:55	22°♑01'39	
asc. node	1786 Dec 17 08:34	21°♑55'04	
evening set	1786 Dec 29 16:37	17°♑45'25	
min. Earth dist.	1787 Jan 03 22:47	14°♑39'48	0.26553 AU
inferior conj	1787 Jan 04 14:25	14°♑15'46	4°31'46
minimum elong	1787 Jan 04 05:21	14°♑29'42	4°29'14
morning rise	1787 Jan 09 18:27	11°♑11'31	
direct	1787 Jan 24 23:14	6°♑38'17	
greatest brilliancy	1787 Feb 03 08:58	8°♑18'49	-4.9m
	1787 Mar 06 19:15	0°♒	
morning max el	1787 Mar 15 22:44	8°♒45'03	46°34'53
	1787 Apr 05 07:41	0°♓	
desc. node	1787 Apr 07 21:58	2°♓49'37	
	1787 May 02 03:03	0°♈	
	1787 May 27 23:13	0°♉	
	1787 Jun 22 07:34	0°♊	
	1787 Jul 17 07:23	0°♋	
asc. node	1787 Jul 30 01:24	15°♋27'37	
	1787 Aug 10 23:19	0°♌	
	1787 Sep 04 08:02	0°♍	
morning set	1787 Sep 10 19:12	8°♍00'56	
	1787 Sep 28 11:05	0°♎	
max. Earth dist.	1787 Oct 15 14:52	21°♎27'06	1.71715 AU
superior conj	1787 Oct 18 10:00	24°♎57'16	1°05'25
minimum elong	1787 Oct 18 20:07	25°♎28'57	1°05'06
	1787 Oct 22 10:40	0°♏	
	1787 Nov 15 08:43	0°♐	
desc. node	1787 Nov 18 14:56	4°♐05'25	
evening rise	1787 Nov 27 12:07	15°♐14'09	
	1787 Dec 09 06:30	0°♑	
	1788 Jan 02 04:59	0°♒	
	1788 Jan 26 05:53	0°♓	
	1788 Feb 19 12:16	0°♈	
asc. node	1788 Mar 10 18:08	24°♈39'13	
	1788 Mar 15 04:41	0°♉	
	1788 Apr 09 14:00	0°♊	
	1788 May 06 05:38	0°♋	
evening max el	1788 May 29 23:24	24°♋26'14	45°23'13
	1788 Jun 04 22:01	0°♌	
desc. node	1788 Jun 30 07:33	19°♌06'11	
greatest brilliancy	1788 Jul 07 04:48	22°♌12'12	-4.7m
retrograde	1788 Jul 17 13:40	24°♌08'27	
evening set	1788 Aug 03 08:32	18°♌50'45	
inferior conj	1788 Aug 08 00:33	16°♌01'06	-7°31'32
minimum elong	1788 Aug 07 15:51	16°♌14'38	7°30'16
min. Earth dist.	1788 Aug 08 05:01	15°♌54'10	0.28858 AU
morning rise	1788 Aug 11 22:54	13°♌36'24	
direct	1788 Aug 29 13:43	7°♌45'13	
greatest brilliancy	1788 Sep 09 09:40	9°♌52'14	-4.8m
	1788 Oct 08 16:03	0°♍	
morning max el	1788 Oct 18 09:47	9°♍17'06	46°24'41
asc. node	1788 Oct 21 10:57	12°♍21'08	
	1788 Nov 07 00:40	0°♎	
	1788 Dec 03 03:10	0°♏	
	1788 Dec 28 01:50	0°♐	
	1789 Jan 21 13:03	0°♑	
desc. node	1789 Feb 10 00:17	24°♑02'37	
	1789 Feb 14 19:51	0°♒	
	1789 Mar 11 01:31	0°♓	
	1789 Apr 04 07:49	0°♈	
morning set	1789 Apr 24 00:21	24°♈17'20	
	1789 Apr 28 15:35	0°♉	
	1789 May 23 00:50	0°♊	
superior conj	1789 May 31 06:13	10°♊06'31	-0°06'56
minimum elong	1789 May 31 07:39	10°♊10'59	0°06'51
behind sun begin	1789 May 30 10:54	9°♊07'12	
behind sun end	1789 Jun 01 04:25	11°♊14'45	
max. Earth dist.	1789 May 31 13:51	10°♊29'59	1.73534 AU
asc. node	1789 Jun 03 03:51	13°♊40'25	
	1789 Jun 16 10:49	0°♋	
evening rise	1789 Jul 06 11:35	24°♋36'45	
	1789 Jul 10 20:50	0°♌	
	1789 Aug 04 06:56	0°♍	
	1789 Aug 28 18:07	0°♎	
	1789 Sep 22 07:47	0°♏	
desc. node	1789 Sep 22 17:09	0°♏28'29	
	1789 Oct 17 01:26	0°♐	
	1789 Nov 11 01:48	0°♑	
	1789 Dec 06 16:43	0°♒	
	1790 Jan 02 22:42	0°♓	
evening max el	1790 Jan 05 16:02	2°♓48'06	47°10'48
asc. node	1790 Jan 13 20:25	10°♓54'08	
	1790 Feb 06 10:56	0°♈	
greatest brilliancy	1790 Feb 15 03:23	4°♈20'51	-4.9m
retrograde	1790 Feb 25 13:41	6°♈25'20	
evening set	1790 Mar 15 11:10	0°♈12'30	
	1790 Mar 15 19:20	30°℞♓	
min. Earth dist.	1790 Mar 18 05:45	28°♓28'54	0.28070 AU
inferior conj	1790 Mar 18 15:11	28°♓14'04	8°29'25
minimum elong	1790 Mar 18 20:07	28°♓06'19	8°29'03
morning rise	1790 Mar 22 05:16	26°♓00'48	
direct	1790 Apr 08 13:45	20°♓11'53	
greatest brilliancy	1790 Apr 17 22:23	21°♓49'13	-4.8m
	1790 May 03 08:53	0°♈	
desc. node	1790 May 05 09:46	1°♈26'48	

morning max el	1790 May 27 16:14	20°♈35'25	45°53'13
	1790 Jun 06 04:26	0°♉	
	1790 Jul 04 05:28	0°♊	
	1790 Jul 30 13:41	0°♋	
	1790 Aug 24 23:31	0°♌	
asc. node	1790 Aug 26 13:14	1°♌53'00	
	1790 Sep 18 17:46	0°♍	
	1790 Oct 13 01:04	0°♎	
	1790 Nov 06 01:36	0°♏	
greatest brilliancy	1790 Nov 19 03:44	16°♏25'48	-3.9m
morning set	1790 Nov 21 22:28	19°♏55'27	
	1790 Nov 29 22:47	0°♐	
desc. node	1790 Dec 16 02:40	20°♐20'26	
	1790 Dec 23 18:52	0°♑	
superior conj	1791 Jan 02 04:38	11°♑50'18	-0°39'24
minimum elong	1791 Jan 01 18:59	11°♑19'53	0°38'59
max. Earth dist.	1791 Jan 03 17:42	13°♑46'52	1.71097 AU
	1791 Jan 16 15:14	0°♒	
	1791 Feb 09 13:08	0°♓	
evening rise	1791 Feb 12 12:18	3°♓42'39	
	1791 Mar 05 14:12	0°♈	
	1791 Mar 29 20:20	0°♉	
asc. node	1791 Apr 08 06:11	11°♉32'59	
	1791 Apr 23 09:31	0°♊	
	1791 May 18 08:07	0°♋	
	1791 Jun 12 20:14	0°♌	
	1791 Jul 09 07:17	0°♍	
desc. node	1791 Jul 28 19:16	20°♍52'52	
	1791 Aug 06 19:58	0°♎	
evening max el	1791 Aug 10 20:00	3°♎53'14	45°53'12
	1791 Sep 13 15:27	0°♏	
greatest brilliancy	1791 Sep 19 18:40	2°♏29'51	-4.8m
retrograde	1791 Sep 28 21:33	4°♏00'38	
	1791 Oct 13 06:36	30°℞♎	
evening set	1791 Oct 15 10:03	28°♎49'13	
inferior conj	1791 Oct 19 16:52	26°♎15'34	-6°45'39
minimum elong	1791 Oct 20 03:19	25°♎59'36	6°43'31
min. Earth dist.	1791 Oct 20 14:22	25°♎42'45	0.27297 AU
morning rise	1791 Oct 24 20:10	23°♎12'22	
direct	1791 Nov 09 14:34	18°♎22'17	
asc. node	1791 Nov 18 22:41	20°♎02'29	
greatest brilliancy	1791 Nov 20 15:28	20°♎40'21	-4.9m
	1791 Dec 06 07:29	0°♏	
morning max el	1791 Dec 30 09:51	21°♏53'54	46°56'55
	1792 Jan 07 04:13	0°♐	
	1792 Feb 03 01:00	0°♑	
	1792 Feb 28 13:51	0°♒	
desc. node	1792 Mar 09 12:11	11°♒51'27	
	1792 Mar 24 14:20	0°♓	
	1792 Apr 18 09:33	0°♈	
	1792 May 13 02:26	0°♉	
	1792 Jun 06 17:44	0°♊	
asc. node	1792 Jun 30 15:35	29°♊13'16	
morning set	1792 Jul 01 05:43	29°♊56'33	
	1792 Jul 01 06:51	0°♋	
	1792 Jul 25 16:55	0°♌	
max. Earth dist.	1792 Aug 03 14:33	10°♌58'37	1.73172 AU
superior conj	1792 Aug 06 14:23	14°♌40'21	1°13'02
minimum elong	1792 Aug 06 06:36	14°♌16'19	1°12'51
	1792 Aug 18 23:46	0°♍	
evening rise	1792 Sep 11 23:19	29°♍44'40	
	1792 Sep 12 04:16	0°♎	
	1792 Oct 06 07:44	0°♏	
desc. node	1792 Oct 20 05:06	17°♏15'37	
	1792 Oct 30 11:19	0°♐	
	1792 Nov 23 15:55	0°♑	
	1792 Dec 17 23:14	0°♒	
	1793 Jan 11 13:23	0°♓	
	1793 Feb 05 19:12	0°♈	
asc. node	1793 Feb 10 08:14	5°♈15'42	
	1793 Mar 04 12:28	0°♉	
evening max el	1793 Mar 18 04:05	14°♉05'34	46°07'02
	1793 Apr 04 16:26	0°♊	
greatest brilliancy	1793 Apr 25 14:36	13°♊03'24	-4.8m
retrograde	1793 May 06 13:13	15°♊13'58	
evening set	1793 May 21 18:44	10°♊43'30	
inferior conj	1793 May 27 23:14	6°♊58'56	1°09'51
minimum elong	1793 May 28 01:46	6°♊54'55	1°09'06
min. Earth dist.	1793 May 27 23:02	6°♊59'14	0.28853 AU
desc. node	1793 Jun 01 21:33	3°♊57'40	
morning rise	1793 Jun 03 09:06	3°♊07'32	
	1793 Jun 10 11:38	30°℞♉	
direct	1793 Jun 18 12:53	28°♉43'29	
	1793 Jun 26 21:30	0°♊	
greatest brilliancy	1793 Jun 28 17:14	0°♊35'21	-4.7m
morning max el	1793 Aug 06 06:38	28°♊26'49	45°46'49
	1793 Aug 07 21:24	0°♋	
	1793 Sep 05 14:08	0°♌	
asc. node	1793 Sep 23 01:15	19°♌47'24	
	1793 Oct 01 19:11	0°♍	
	1793 Oct 26 19:51	0°♎	
	1793 Nov 20 05:13	0°♏	
	1793 Dec 14 06:56	0°♐	
	1794 Jan 07 05:39	0°♑	
desc. node	1794 Jan 12 14:27	6°♑43'45	
	1794 Jan 31 03:55	0°♒	
morning set	1794 Feb 07 00:01	8°♒34'01	
	1794 Feb 24 03:11	0°♓	
superior conj	1794 Mar 19 10:11	29°♓02'48	-1°23'11
minimum elong	1794 Mar 19 15:34	29°♓19'32	1°23'08
	1794 Mar 20 04:35	0°♈	
max. Earth dist.	1794 Mar 23 13:03	4°♈10'06	1.72293 AU
	1794 Apr 13 09:06	0°♉	
evening rise	1794 Apr 27 07:09	17°♉10'37	
asc. node	1794 May 05 18:03	27°♉34'50	
	1794 May 07 17:18	0°♊	
	1794 Jun 01 05:19	0°♋	
	1794 Jun 25 21:31	0°♌	
	1794 Jul 20 19:16	0°♍	
	1794 Aug 15 01:34	0°♎	
desc. node	1794 Aug 25 07:11	11°♎58'46	
	1794 Sep 09 21:59	0°♏	
	1794 Oct 06 21:30	0°♐	
evening max el	1794 Oct 23 01:37	16°♐47'08	47°01'14
	1794 Nov 06 02:04	0°♑	
greatest brilliancy	1794 Dec 02 14:26	17°♑39'15	-4.9m
retrograde	1794 Dec 12 13:03	19°♑32'04	
asc. node	1794 Dec 16 10:35	19°♑13'22	
evening set	1794 Dec 27 03:05	15°♑18'53	
min. Earth dist.	1795 Jan 01 12:45	12°♑08'51	0.26520 AU
inferior conj	1795 Jan 02 02:52	11°♑47'12	4°10'30
minimum elong	1795 Jan 01 18:18	12°♑00'21	4°08'02
morning rise	1795 Jan 07 09:44	8°♑39'05	
direct	1795 Jan 22 10:49	4°♑09'50	
greatest brilliancy	1795 Jan 31 23:18	5°♑52'33	-4.9m
	1795 Mar 06 22:34	0°♒	
morning max el	1795 Mar 13 11:23	6°♒19'33	46°36'31
	1795 Apr 05 01:12	0°♓	
desc. node	1795 Apr 07 00:09	2°♓08'36	
	1795 May 01 17:23	0°♈	
	1795 May 27 12:03	0°♉	

	1795 Jun 21 19:34	0°♊	
	1795 Jul 16 18:53	0°♋	
asc. node	1795 Jul 29 03:28	14°♋59'29	
	1795 Aug 10 10:32	0°♌	
	1795 Sep 03 19:06	0°♍	
morning set	1795 Sep 08 11:24	5°♍47'59	
	1795 Sep 27 22:07	0°♎	
max. Earth dist.	1795 Oct 13 05:08	19°♎06'46	1.71764 AU
superior conj	1795 Oct 15 23:54	22°♎35'46	1°07'40
minimum elong	1795 Oct 16 09:46	23°♎06'39	1°07'21
	1795 Oct 21 21:46	0°♏	
	1795 Nov 14 19:58	0°♐	
desc. node	1795 Nov 17 16:55	3°♐36'18	
evening rise	1795 Nov 24 23:06	12°♐42'41	
	1795 Dec 08 17:52	0°♑	
	1796 Jan 01 16:29	0°♒	
	1796 Jan 25 17:33	0°♓	
	1796 Feb 19 00:14	0°♈	
asc. node	1796 Mar 09 20:19	24°♈08'20	
	1796 Mar 14 17:14	0°♉	
	1796 Apr 09 03:46	0°♊	
	1796 May 05 22:12	0°♋	
evening max el	1796 May 27 15:02	22°♋14'46	45°23'30
	1796 Jun 05 00:03	0°♌	
desc. node	1796 Jun 29 09:31	17°♌39'47	
greatest brilliancy	1796 Jul 04 18:16	19°♌59'07	-4.7m
retrograde	1796 Jul 15 05:43	21°♌57'37	
evening set	1796 Jul 31 20:59	16°♌43'55	
inferior conj	1796 Aug 05 16:21	13°♌49'29	-7°20'56
minimum elong	1796 Aug 05 07:18	14°♌03'32	7°19'33
min. Earth dist.	1796 Aug 05 19:54	13°♌43'59	0.28885 AU
morning rise	1796 Aug 09 17:25	11°♌20'57	
direct	1796 Aug 27 06:00	5°♌33'09	
greatest brilliancy	1796 Sep 07 01:19	7°♌39'55	-4.8m
	1796 Oct 08 18:18	0°♍	
morning max el	1796 Oct 16 01:47	7°♍02'29	46°23'08
asc. node	1796 Oct 20 12:59	11°♍32'58	
	1796 Nov 06 17:44	0°♎	
	1796 Dec 02 17:29	0°♏	
	1796 Dec 27 14:55	0°♐	
	1797 Jan 21 01:24	0°♑	
desc. node	1797 Feb 09 02:21	23°♑32'02	
	1797 Feb 14 07:43	0°♒	
	1797 Mar 10 13:02	0°♓	
	1797 Apr 03 19:02	0°♈	
morning set	1797 Apr 21 16:31	22°♈05'08	
	1797 Apr 28 02:37	0°♉	
	1797 May 22 11:43	0°♊	
superior conj	1797 May 28 23:58	8°♊00'12	-0°10'06
minimum elong	1797 May 29 02:05	8°♊06'43	0°10'00
behind sun begin	1797 May 28 08:09	7°♊11'36	
behind sun end	1797 May 29 20:01	9°♊01'50	
max. Earth dist.	1797 May 29 12:28	8°♊38'38	1.73519 AU
asc. node	1797 Jun 02 05:49	13°♊13'08	
	1797 Jun 15 21:41	0°♋	
evening rise	1797 Jul 04 06:46	22°♋34'41	
	1797 Jul 10 07:47	0°♌	
	1797 Aug 03 18:08	0°♍	
	1797 Aug 28 05:43	0°♎	
desc. node	1797 Sep 21 19:13	29°♎57'53	
	1797 Sep 21 19:55	0°♏	
	1797 Oct 16 14:19	0°♐	
	1797 Nov 10 15:51	0°♑	
	1797 Dec 06 08:56	0°♒	
	1798 Jan 02 20:26	0°♓	
evening max el	1798 Jan 03 07:50	0°♓29'07	47°12'10
asc. node	1798 Jan 12 22:29	9°♓56'26	
	1798 Feb 08 05:49	0°♈	
greatest brilliancy	1798 Feb 12 18:14	2°♈00'52	-4.9m
retrograde	1798 Feb 23 05:33	4°♈06'00	
	1798 Mar 09 10:44	30°℞♓	
evening set	1798 Mar 13 03:33	27°♓51'07	
inferior conj	1798 Mar 16 06:00	25°♓55'07	8°34'47
minimum elong	1798 Mar 16 10:11	25°♓48'31	8°34'32
min. Earth dist.	1798 Mar 15 19:18	26°♓11'55	0.28022 AU
morning rise	1798 Mar 19 17:03	23°♓46'34	
direct	1798 Apr 06 04:26	17°♓53'53	
greatest brilliancy	1798 Apr 15 11:01	19°♓29'59	-4.8m
desc. node	1798 May 04 11:42	0°♈15'29	
	1798 May 04 03:24	0°♈	
morning max el	1798 May 25 08:05	18°♈23'11	45°54'19
	1798 Jun 05 23:53	0°♉	
	1798 Jul 03 20:19	0°♊	
	1798 Jul 30 02:37	0°♋	
	1798 Aug 24 11:31	0°♌	
asc. node	1798 Aug 25 15:25	1°♌23'38	
	1798 Sep 18 05:19	0°♍	
	1798 Oct 12 12:24	0°♎	
	1798 Nov 05 12:51	0°♏	
greatest brilliancy	1798 Nov 18 13:24	16°♏20'56	-3.9m
morning set	1798 Nov 19 10:27	17°♏27'05	
	1798 Nov 29 09:59	0°♐	
desc. node	1798 Dec 15 04:41	19°♐51'36	
	1798 Dec 23 06:03	0°♑	
superior conj	1798 Dec 30 14:06	9°♑13'53	-0°35'46
minimum elong	1798 Dec 30 05:10	8°♑45'47	0°35'22
max. Earth dist.	1799 Jan 01 01:58	11°♑06'43	1.71083 AU
	1799 Jan 16 02:24	0°♒	
	1799 Feb 09 00:20	0°♓	
evening rise	1799 Feb 09 22:51	1°♓10'27	
	1799 Mar 05 01:27	0°♈	
	1799 Mar 29 07:42	0°♉	
asc. node	1799 Apr 07 08:13	11°♉04'05	
	1799 Apr 22 21:10	0°♊	
	1799 May 17 20:19	0°♋	
	1799 Jun 12 09:34	0°♌	
	1799 Jul 08 23:01	0°♍	
desc. node	1799 Jul 27 21:23	20°♍08'45	
	1799 Aug 06 18:14	0°♎	
evening max el	1799 Aug 08 10:04	1°♎35'57	45°50'56
	1799 Sep 16 21:00	0°♏	
greatest brilliancy	1799 Sep 17 07:38	0°♏08'38	-4.8m
retrograde	1799 Sep 26 09:49	1°♏38'43	
	1799 Oct 05 13:00	30°℞♎	
evening set	1799 Oct 13 02:27	26°♎22'46	
inferior conj	1799 Oct 17 06:15	23°♎53'10	-6°59'38
minimum elong	1799 Oct 17 16:31	23°♎37'27	6°57'40
min. Earth dist.	1799 Oct 18 04:08	23°♎19'40	0.27366 AU
morning rise	1799 Oct 22 06:09	20°♎54'14	
direct	1799 Nov 07 04:41	15°♎58'53	
asc. node	1799 Nov 18 00:41	18°♎11'36	
greatest brilliancy	1799 Nov 18 06:04	18°♎16'54	-4.9m
	1799 Dec 06 23:20	0°♏	
morning max el	1799 Dec 27 23:00	19°♏27'09	46°56'33
	1800 Jan 07 00:08	0°♐	
	1800 Feb 02 16:32	0°♑	
	1800 Feb 28 03:28	0°♒	
desc. node	1800 Mar 09 14:21	11°♒18'38	
	1800 Mar 25 02:52	0°♓	
	1800 Apr 18 21:23	0°♈	
	1800 May 13 13:48	0°♉	

	1800 Jun 07 04:45	0°♊	
morning set	1800 Jun 30 00:03	27°♊52'32	
asc. node	1800 Jun 30 17:43	28°♊46'39	
	1800 Jul 01 17:40	0°♋	
	1800 Jul 26 03:39	0°♌	
max. Earth dist.	1800 Aug 02 08:42	8°♌53'26	1.73208 AU
superior conj	1800 Aug 05 08:52	12°♌36'09	1°11'23
minimum elong	1800 Aug 05 00:49	12°♌11'17	1°11'11
	1800 Aug 19 10:32	0°♍	
evening rise	1800 Sep 10 16:00	27°♍33'39	
	1800 Sep 12 15:10	0°♎	
	1800 Oct 06 18:52	0°♏	
desc. node	1800 Oct 20 07:05	16°♏46'36	
	1800 Oct 30 22:46	0°♐	
	1800 Nov 24 03:45	0°♑	
	1800 Dec 18 11:35	0°♒	
	1801 Jan 12 02:30	0°♓	
	1801 Feb 06 09:47	0°♈	
asc. node	1801 Feb 10 10:24	4°♈38'51	
	1801 Mar 05 06:40	0°♉	
evening max el	1801 Mar 16 18:29	11°♉48'31	46°09'23
	1801 Apr 06 02:52	0°♊	
greatest brilliancy	1801 Apr 24 08:12	10°♊54'48	-4.8m
retrograde	1801 May 05 05:15	13°♊04'30	
evening set	1801 May 20 12:31	8°♊32'08	
inferior conj	1801 May 26 15:39	4°♊49'35	1°29'33
minimum elong	1801 May 26 18:54	4°♊44'28	1°28'36
min. Earth dist.	1801 May 26 16:04	4°♊48'56	0.28835 AU
desc. node	1801 Jun 01 23:37	1°♊00'27	
morning rise	1801 Jun 02 01:29	0°♊57'54	
	1801 Jun 03 21:40	30°℞♉	
direct	1801 Jun 17 04:27	26°♉34'17	
greatest brilliancy	1801 Jun 27 09:29	28°♉26'18	-4.7m
	1801 Jul 01 06:00	0°♊	
morning max el	1801 Aug 04 21:36	26°♊14'41	45°46'21
	1801 Aug 08 18:38	0°♋	
	1801 Sep 06 05:21	0°♌	
asc. node	1801 Sep 23 03:15	19°♌13'43	
	1801 Oct 02 08:17	0°♍	
	1801 Oct 27 07:59	0°♎	
	1801 Nov 20 16:52	0°♏	
	1801 Dec 14 18:20	0°♐	
	1802 Jan 07 16:54	0°♑	
desc. node	1802 Jan 12 16:36	6°♑15'18	
	1802 Jan 31 15:03	0°♒	
morning set	1802 Feb 05 09:59	6°♒00'09	
	1802 Feb 24 14:11	0°♓	
superior conj	1802 Mar 17 23:11	26°♓40'05	-1°24'04
minimum elong	1802 Mar 18 03:46	26°♓54'21	1°24'01
	1802 Mar 20 15:28	0°♈	
max. Earth dist.	1802 Mar 22 01:25	1°♈45'35	1.72233 AU
	1802 Apr 13 19:55	0°♉	
evening rise	1802 Apr 25 22:32	14°♉56'46	
asc. node	1802 May 05 20:02	27°♉07'35	
	1802 May 08 04:09	0°♊	
	1802 Jun 01 16:21	0°♋	
	1802 Jun 26 08:53	0°♌	
	1802 Jul 21 07:12	0°♍	
	1802 Aug 15 14:29	0°♎	
desc. node	1802 Aug 25 09:18	11°♎25'35	
	1802 Sep 10 12:44	0°♏	
	1802 Oct 07 16:12	0°♐	
evening max el	1802 Oct 21 14:15	14°♐21'25	46°59'18
	1802 Nov 07 10:54	0°♑	
greatest brilliancy	1802 Dec 01 03:46	15°♑11'12	-4.9m
retrograde	1802 Dec 11 01:25	17°♑03'27	
asc. node	1802 Dec 16 12:39	16°♑26'25	
evening set	1802 Dec 25 13:42	12°♑52'29	
min. Earth dist.	1802 Dec 31 02:23	9°♑38'44	0.26499 AU
inferior conj	1802 Dec 31 15:12	9°♑19'08	3°48'39
minimum elong	1802 Dec 31 07:12	9°♑31'22	3°46'17
morning rise	1803 Jan 06 00:54	6°♑07'28	
direct	1803 Jan 20 22:46	1°♑41'37	
greatest brilliancy	1803 Jan 30 13:29	3°♑26'31	-4.9m
	1803 Mar 08 00:14	0°♒	
morning max el	1803 Mar 12 01:02	3°♒56'47	46°38'01
	1803 Apr 05 18:14	0°♓	
desc. node	1803 Apr 07 02:04	1°♓27'41	
	1803 May 02 07:25	0°♈	
	1803 May 28 00:35	0°♉	
	1803 Jun 22 07:14	0°♊	
	1803 Jul 17 06:02	0°♋	
asc. node	1803 Jul 29 05:34	14°♋32'27	
	1803 Aug 10 21:24	0°♌	
	1803 Sep 04 05:49	0°♍	
morning set	1803 Sep 07 03:58	3°♍37'15	
	1803 Sep 28 08:49	0°♎	
max. Earth dist.	1803 Oct 11 20:02	16°♎49'37	1.71808 AU
superior conj	1803 Oct 14 14:22	20°♎17'11	1°09'44
minimum elong	1803 Oct 14 23:56	20°♎47'06	1°09'28
	1803 Oct 22 08:31	0°♏	
	1803 Nov 15 06:49	0°♐	
desc. node	1803 Nov 17 18:58	3°♐08'40	
evening rise	1803 Nov 23 10:39	10°♐14'14	
	1803 Dec 09 04:51	0°♑	
	1804 Jan 02 03:37	0°♒	
	1804 Jan 26 04:55	0°♓	
	1804 Feb 19 11:58	0°♈	
asc. node	1804 Mar 09 22:17	23°♈37'27	
	1804 Mar 15 05:37	0°♉	
	1804 Apr 09 17:25	0°♊	
	1804 May 06 14:50	0°♋	
evening max el	1804 May 26 07:18	20°♋05'41	45°24'02
	1804 Jun 06 03:15	0°♌	
desc. node	1804 Jun 29 11:38	16°♌11'46	
greatest brilliancy	1804 Jul 03 08:02	17°♌47'34	-4.7m
retrograde	1804 Jul 13 21:55	19°♌47'54	
evening set	1804 Jul 30 09:38	14°♌38'25	
inferior conj	1804 Aug 04 08:13	11°♌39'06	-7°09'54
minimum elong	1804 Aug 03 22:53	11°♌53'37	7°08'23
min. Earth dist.	1804 Aug 04 10:37	11°♌35'22	0.28905 AU
morning rise	1804 Aug 08 11:58	9°♌06'43	
direct	1804 Aug 25 22:42	3°♌22'37	
greatest brilliancy	1804 Sep 05 16:21	5°♌28'15	-4.8m
	1804 Oct 09 18:41	0°♍	
morning max el	1804 Oct 14 17:55	4°♍49'42	46°21'36
asc. node	1804 Oct 20 14:57	10°♍46'41	
	1804 Nov 07 10:00	0°♎	
	1804 Dec 03 07:13	0°♏	
	1804 Dec 28 03:27	0°♐	
	1805 Jan 21 13:16	0°♑	
desc. node	1805 Feb 09 04:27	23°♑02'58	
	1805 Feb 14 19:08	0°♒	
	1805 Mar 11 00:08	0°♓	
	1805 Apr 04 05:56	0°♈	
morning set	1805 Apr 20 08:18	19°♈52'33	
	1805 Apr 28 13:21	0°♉	
	1805 May 22 22:20	0°♊	
superior conj	1805 May 27 17:13	5°♊53'06	-0°13'19
minimum elong	1805 May 27 20:01	6°♊01'42	0°13'11

behind sun begin	1805 May 27 07:09	5°♊22'09	
behind sun end	1805 May 28 08:53	6°♊41'15	
max. Earth dist.	1805 May 28 11:13	6°♊48'25	1.73499 AU
asc. node	1805 Jun 02 07:57	12°♊47'10	
	1805 Jun 16 08:15	0°♋	
evening rise	1805 Jul 03 01:31	20°♋32'16	
	1805 Jul 10 18:27	0°♌	
	1805 Aug 04 05:01	0°♍	
	1805 Aug 28 16:58	0°♎	
desc. node	1805 Sep 21 21:10	29°♎27'57	
	1805 Sep 22 07:43	0°♏	
	1805 Oct 17 02:54	0°♐	
	1805 Nov 11 05:38	0°♑	
	1805 Dec 07 00:59	0°♒	
evening max el	1806 Jan 01 23:46	28°♒11'46	47°13'23
	1806 Jan 03 18:27	0°♓	
asc. node	1806 Jan 13 00:36	8°♓59'04	
greatest brilliancy	1806 Feb 11 09:15	29°♓42'24	-4.9m
	1806 Feb 12 04:25	0°♈	
retrograde	1806 Feb 21 21:01	1°♈47'36	
	1806 Mar 03 03:45	30°♓℞	
evening set	1806 Mar 11 19:38	25°♓31'24	
inferior conj	1806 Mar 14 20:47	23°♓37'14	8°39'22
minimum elong	1806 Mar 15 00:12	23°♓31'51	8°39'12
min. Earth dist.	1806 Mar 14 08:53	23°♓55'57	0.27975 AU
morning rise	1806 Mar 18 05:02	21°♓32'55	
direct	1806 Apr 04 19:17	15°♓37'05	
greatest brilliancy	1806 Apr 13 23:43	17°♓11'41	-4.8m
desc. node	1806 May 04 13:48	29°♓07'27	
	1806 May 05 16:47	0°♈	
morning max el	1806 May 23 23:09	16°♈09'43	45°55'14
	1806 Jun 06 18:32	0°♉	
	1806 Jul 04 10:44	0°♊	
	1806 Jul 30 15:14	0°♋	
	1806 Aug 24 23:13	0°♌	
asc. node	1806 Aug 25 17:24	0°♌54'35	
	1806 Sep 18 16:32	0°♍	
	1806 Oct 12 23:23	0°♎	
	1806 Nov 05 23:45	0°♏	
morning set	1806 Nov 17 22:33	15°♏00'08	
	1806 Nov 29 20:51	0°♐	
desc. node	1806 Dec 15 06:50	19°♐24'07	
	1806 Dec 23 16:54	0°♑	
superior conj	1806 Dec 28 23:52	6°♑39'25	-0°32'04
minimum elong	1806 Dec 28 15:44	6°♑13'49	0°31'41
max. Earth dist.	1806 Dec 30 07:10	8°♑17'54	1.71070 AU
	1807 Jan 16 13:16	0°♒	
evening rise	1807 Feb 08 09:34	28°♒39'46	
	1807 Feb 09 11:12	0°♓	
	1807 Mar 05 12:21	0°♈	
	1807 Mar 29 18:45	0°♉	
asc. node	1807 Apr 07 10:13	10°♉36'08	
	1807 Apr 23 08:31	0°♊	
	1807 May 18 08:20	0°♋	
	1807 Jun 12 22:49	0°♌	
	1807 Jul 09 14:50	0°♍	
desc. node	1807 Jul 27 23:28	19°♍24'25	
evening max el	1807 Aug 06 23:14	29°♍17'01	45°48'50
	1807 Aug 07 17:14	0°♎	
greatest brilliancy	1807 Sep 15 20:53	27°♎48'32	-4.8m
retrograde	1807 Sep 24 22:00	29°♎17'58	
evening set	1807 Oct 11 18:50	23°♎57'17	
inferior conj	1807 Oct 15 19:43	21°♎31'50	-7°12'46
minimum elong	1807 Oct 16 05:42	21°♎16'31	7°10'59
min. Earth dist.	1807 Oct 16 18:04	20°♎57'33	0.27433 AU
morning rise	1807 Oct 20 16:06	18°♎37'28	
direct	1807 Nov 05 18:22	13°♎36'24	
greatest brilliancy	1807 Nov 16 21:08	15°♎55'03	-4.9m
asc. node	1807 Nov 18 02:51	16°♎25'58	
	1807 Dec 08 10:49	0°♏	
morning max el	1807 Dec 26 11:46	17°♏00'09	46°56'09
	1808 Jan 07 19:11	0°♐	
	1808 Feb 03 07:35	0°♑	
	1808 Feb 28 16:44	0°♒	
desc. node	1808 Mar 08 16:15	10°♒45'52	
	1808 Mar 24 15:06	0°♓	
	1808 Apr 18 08:57	0°♈	
	1808 May 13 00:54	0°♉	
	1808 Jun 06 15:34	0°♊	
morning set	1808 Jun 27 18:10	25°♊48'18	
asc. node	1808 Jun 29 19:48	28°♊20'19	
	1808 Jul 01 04:20	0°♋	
	1808 Jul 25 14:17	0°♌	
max. Earth dist.	1808 Jul 31 03:14	6°♌49'45	1.73247 AU
superior conj	1808 Aug 03 03:05	10°♌31'24	1°09'38
minimum elong	1808 Aug 02 18:48	10°♌05'50	1°09'24
	1808 Aug 18 21:14	0°♍	
evening rise	1808 Sep 08 08:28	25°♍22'18	
	1808 Sep 12 02:00	0°♎	
	1808 Oct 06 05:55	0°♏	
desc. node	1808 Oct 19 09:07	16°♏18'07	
	1808 Oct 30 10:06	0°♐	
	1808 Nov 23 15:30	0°♑	
	1808 Dec 17 23:52	0°♒	
	1809 Jan 11 15:36	0°♓	
	1809 Feb 06 00:26	0°♈	
asc. node	1809 Feb 09 12:22	4°♈01'28	
	1809 Mar 05 01:11	0°♉	
evening max el	1809 Mar 14 08:34	9°♉31'01	46°11'52
	1809 Apr 06 16:42	0°♊	
greatest brilliancy	1809 Apr 22 01:16	8°♊45'52	-4.8m
retrograde	1809 May 02 21:32	10°♊55'34	
evening set	1809 May 18 06:25	6°♊20'46	
inferior conj	1809 May 24 08:05	2°♊40'33	1°49'05
minimum elong	1809 May 24 12:01	2°♊34'23	1°47'57
min. Earth dist.	1809 May 24 08:55	2°♊39'15	0.28821 AU
	1809 May 28 16:07	30°♉℞	
morning rise	1809 May 30 17:45	28°♉49'01	
desc. node	1809 Jun 01 01:41	28°♉06'30	
direct	1809 Jun 14 20:00	24°♉25'14	
greatest brilliancy	1809 Jun 25 01:54	26°♉17'52	-4.7m
	1809 Jul 03 03:28	0°♊	
morning max el	1809 Aug 02 13:08	24°♊04'01	45°45'48
	1809 Aug 08 15:06	0°♋	
	1809 Sep 05 20:26	0°♌	
asc. node	1809 Sep 22 05:15	18°♌40'00	
	1809 Oct 01 21:23	0°♍	
	1809 Oct 26 20:10	0°♎	
	1809 Nov 20 04:33	0°♏	
	1809 Dec 14 05:44	0°♐	
	1810 Jan 07 04:09	0°♑	
desc. node	1810 Jan 11 18:35	5°♑46'26	
	1810 Jan 31 02:10	0°♒	
morning set	1810 Feb 02 19:49	3°♒25'49	
	1810 Feb 24 01:11	0°♓	
superior conj	1810 Mar 15 12:06	24°♓16'52	-1°24'47
minimum elong	1810 Mar 15 15:50	24°♓28'27	1°24'45
max. Earth dist.	1810 Mar 19 11:55	29°♓15'01	1.72176 AU
	1810 Mar 20 02:22	0°♈	
	1810 Apr 13 06:48	0°♉	
evening rise	1810 Apr 23 13:54	12°♉42'40	

asc. node	1810 May 04 22:11	26°♉40'41	
	1810 May 07 15:04	0°♊	
	1810 Jun 01 03:25	0°♋	
	1810 Jun 25 20:18	0°♌	
	1810 Jul 20 19:16	0°♍	
	1810 Aug 15 03:40	0°♎	
desc. node	1810 Aug 24 11:12	10°♎51'04	
	1810 Sep 10 03:55	0°♏	
	1810 Oct 07 11:44	0°♐	
evening max el	1810 Oct 19 03:38	11°♐56'59	46°57'24
	1810 Nov 07 23:16	0°♑	
greatest brilliancy	1810 Nov 28 16:31	12°♑41'32	-4.9m
retrograde	1810 Dec 08 14:08	14°♑33'44	
asc. node	1810 Dec 15 14:44	13°♑32'27	
evening set	1810 Dec 23 00:26	10°♑24'44	
min. Earth dist.	1810 Dec 28 15:34	7°♑07'52	0.26476 AU
inferior conj	1810 Dec 29 03:22	6°♑49'53	3°26'10
minimum elong	1810 Dec 28 20:01	7°♑01'06	3°23'57
morning rise	1811 Jan 03 15:47	3°♑35'00	
	1811 Jan 12 06:58	30°℞♐	
direct	1811 Jan 18 11:12	29°♐12'28	
	1811 Jan 24 19:53	0°♑	
greatest brilliancy	1811 Jan 28 02:54	0°♑58'53	-4.9m
	1811 Mar 08 00:49	0°♒	
morning max el	1811 Mar 09 15:08	1°♒34'41	46°39'26
	1811 Apr 05 11:04	0°♓	
desc. node	1811 Apr 06 04:11	0°♓47'23	
	1811 May 01 21:28	0°♈	
	1811 May 27 13:13	0°♉	
	1811 Jun 21 19:03	0°♊	
	1811 Jul 16 17:21	0°♋	
asc. node	1811 Jul 28 07:35	14°♋04'40	
	1811 Aug 10 08:26	0°♌	
	1811 Sep 03 16:44	0°♍	
morning set	1811 Sep 04 20:37	1°♍26'19	
	1811 Sep 27 19:45	0°♎	
max. Earth dist.	1811 Oct 09 09:29	14°♎27'13	1.71858 AU
superior conj	1811 Oct 12 04:47	17°♎57'39	1°11'42
minimum elong	1811 Oct 12 13:58	18°♎26'23	1°11'28
	1811 Oct 21 19:35	0°♏	
	1811 Nov 14 18:00	0°♐	
desc. node	1811 Nov 16 21:07	2°♐40'15	
evening rise	1811 Nov 20 21:50	7°♐43'33	
	1811 Dec 08 16:10	0°♑	
	1812 Jan 01 15:05	0°♒	
	1812 Jan 25 16:35	0°♓	
	1812 Feb 18 24:00	0°♈	
asc. node	1812 Mar 09 00:18	23°♈05'50	
	1812 Mar 14 18:20	0°♉	
	1812 Apr 09 07:29	0°♊	
	1812 May 06 08:05	0°♋	
evening max el	1812 May 23 23:58	17°♋56'43	45°24'35
	1812 Jun 06 08:35	0°♌	
desc. node	1812 Jun 28 13:42	14°♌40'07	
greatest brilliancy	1812 Jun 30 22:36	15°♌36'25	-4.7m
retrograde	1812 Jul 11 14:00	17°♌37'41	
evening set	1812 Jul 27 22:32	12°♌32'37	
inferior conj	1812 Aug 02 00:13	9°♌28'27	-6°58'18
minimum elong	1812 Aug 01 14:39	9°♌43'19	6°56'39
min. Earth dist.	1812 Aug 02 01:38	9°♌26'14	0.28921 AU
morning rise	1812 Aug 06 06:40	6°♌51'57	
direct	1812 Aug 23 15:32	1°♌12'01	
greatest brilliancy	1812 Sep 03 07:09	3°♌15'53	-4.8m
	1812 Oct 09 18:17	0°♍	
morning max el	1812 Oct 12 09:11	2°♍34'07	46°19'52
asc. node	1812 Oct 19 17:09	10°♍00'56	
	1812 Nov 07 02:22	0°♎	
	1812 Dec 02 21:13	0°♏	
	1812 Dec 27 16:22	0°♐	
	1813 Jan 21 01:32	0°♑	
desc. node	1813 Feb 08 06:26	22°♑32'14	
	1813 Feb 14 06:57	0°♒	
	1813 Mar 10 11:37	0°♓	
	1813 Apr 03 17:10	0°♈	
morning set	1813 Apr 17 23:54	17°♈38'26	
	1813 Apr 28 00:23	0°♉	
	1813 May 22 09:16	0°♊	
superior conj	1813 May 25 10:27	3°♊44'58	-0°16'32
minimum elong	1813 May 25 13:55	3°♊55'36	0°16'22
max. Earth dist.	1813 May 26 10:00	4°♊57'20	1.73477 AU
asc. node	1813 Jun 01 09:59	12°♊19'51	
	1813 Jun 15 19:10	0°♋	
evening rise	1813 Jun 30 20:23	18°♋29'06	
	1813 Jul 10 05:27	0°♌	
	1813 Aug 03 16:15	0°♍	
	1813 Aug 28 04:35	0°♎	
desc. node	1813 Sep 20 23:18	28°♎57'31	
	1813 Sep 21 19:54	0°♏	
	1813 Oct 16 15:54	0°♐	
	1813 Nov 10 19:58	0°♑	
	1813 Dec 06 17:49	0°♒	
evening max el	1813 Dec 30 14:53	25°♒50'22	47°14'20
	1814 Jan 03 18:06	0°♓	
asc. node	1814 Jan 12 02:34	7°♓58'12	
greatest brilliancy	1814 Feb 09 00:47	27°♓22'13	-4.9m
retrograde	1814 Feb 19 11:54	29°♓26'37	
evening set	1814 Mar 09 11:10	23°♓09'56	
inferior conj	1814 Mar 12 11:21	21°♓17'06	8°43'09
minimum elong	1814 Mar 12 13:59	21°♓12'58	8°43'03
min. Earth dist.	1814 Mar 11 22:36	21°♓37'11	0.27921 AU
morning rise	1814 Mar 15 17:02	19°♓16'33	
direct	1814 Apr 02 09:28	13°♓18'08	
greatest brilliancy	1814 Apr 11 12:37	14°♓51'35	-4.8m
desc. node	1814 May 03 15:56	27°♓59'57	
	1814 May 06 03:22	0°♈	
morning max el	1814 May 21 13:00	13°♈51'53	45°56'18
	1814 Jun 06 13:06	0°♉	
	1814 Jul 04 01:20	0°♊	
	1814 Jul 30 04:07	0°♋	
	1814 Aug 24 11:13	0°♌	
asc. node	1814 Aug 24 19:24	0°♌24'36	
	1814 Sep 18 04:04	0°♍	
	1814 Oct 12 10:42	0°♎	
	1814 Nov 05 10:57	0°♏	
morning set	1814 Nov 15 11:04	12°♏33'32	
	1814 Nov 29 08:03	0°♐	
desc. node	1814 Dec 14 08:49	18°♐55'08	
	1814 Dec 23 04:07	0°♑	
superior conj	1814 Dec 26 09:45	4°♑04'13	-0°28'19
minimum elong	1814 Dec 26 02:27	3°♑41'17	0°27'58
max. Earth dist.	1814 Dec 27 09:32	5°♑19'02	1.71066 AU
	1815 Jan 16 00:31	0°♒	
evening rise	1815 Feb 05 19:55	26°♒06'34	
	1815 Feb 08 22:29	0°♓	
	1815 Mar 04 23:42	0°♈	
	1815 Mar 29 06:13	0°♉	
asc. node	1815 Apr 06 12:21	10°♉07'16	
	1815 Apr 22 20:18	0°♊	
	1815 May 17 20:46	0°♋	
	1815 Jun 12 12:32	0°♌	
	1815 Jul 09 07:17	0°♍	

desc. node	1815 Jul 27 01:25	18°♍38'12	
evening max el	1815 Aug 04 11:52	26°♍56'06	45°46'52
	1815 Aug 07 17:41	0°♎	
greatest brilliancy	1815 Sep 13 10:09	25°♎28'06	-4.8m
retrograde	1815 Sep 22 10:41	26°♎57'23	
evening set	1815 Oct 09 11:19	21°♎31'45	
inferior conj	1815 Oct 13 09:23	19°♎10'31	-7°25'02
minimum elong	1815 Oct 13 19:02	18°♎55'42	7°23'24
min. Earth dist.	1815 Oct 14 08:11	18°♎35'33	0.27502 AU
morning rise	1815 Oct 18 02:16	16°♎21'00	
direct	1815 Nov 03 08:06	11°♎13'46	
greatest brilliancy	1815 Nov 14 12:31	13°♎33'35	-4.9m
asc. node	1815 Nov 17 04:50	14°♎43'53	
	1815 Dec 08 19:31	0°♏	
morning max el	1815 Dec 24 01:11	14°♏34'14	46°55'46
	1816 Jan 07 13:58	0°♐	
	1816 Feb 02 22:44	0°♑	
	1816 Feb 28 06:13	0°♒	
desc. node	1816 Mar 07 18:22	10°♒12'53	
	1816 Mar 24 03:38	0°♓	
	1816 Apr 17 20:51	0°♈	
	1816 May 12 12:20	0°♉	
	1816 Jun 06 02:41	0°♊	
morning set	1816 Jun 25 12:10	23°♊42'51	
asc. node	1816 Jun 28 21:45	27°♊52'46	
	1816 Jun 30 15:16	0°♋	
	1816 Jul 25 01:10	0°♌	
max. Earth dist.	1816 Jul 28 24:00	4°♌52'16	1.73285 AU
superior conj	1816 Jul 31 21:20	8°♌26'05	1°07'47
minimum elong	1816 Jul 31 12:50	7°♌59'53	1°07'32
	1816 Aug 18 08:10	0°♍	
evening rise	1816 Sep 06 01:18	23°♍11'25	
	1816 Sep 11 13:04	0°♎	
	1816 Oct 05 17:13	0°♏	
desc. node	1816 Oct 18 11:15	15°♏49'09	
	1816 Oct 29 21:42	0°♐	
	1816 Nov 23 03:28	0°♑	
	1816 Dec 17 12:21	0°♒	
	1817 Jan 11 04:55	0°♓	
	1817 Feb 05 15:24	0°♈	
asc. node	1817 Feb 08 14:24	3°♈23'30	
	1817 Mar 04 20:26	0°♉	
evening max el	1817 Mar 11 23:10	7°♉14'01	46°14'15
	1817 Apr 07 11:53	0°♊	
greatest brilliancy	1817 Apr 19 17:49	6°♊35'21	-4.8m
retrograde	1817 Apr 30 14:16	8°♊45'39	
evening set	1817 May 16 00:24	4°♊08'07	
inferior conj	1817 May 22 00:27	0°♊30'24	2°08'39
minimum elong	1817 May 22 05:03	0°♊23'10	2°07'19
min. Earth dist.	1817 May 22 01:26	0°♊28'51	0.28807 AU
	1817 May 22 19:48	30°℞♉	
morning rise	1817 May 28 09:50	26°♉39'29	
desc. node	1817 May 31 03:42	25°♉15'00	
direct	1817 Jun 12 11:46	22°♉15'07	
greatest brilliancy	1817 Jun 22 17:57	24°♉08'15	-4.7m
	1817 Jul 04 10:41	0°♊	
morning max el	1817 Jul 31 05:29	21°♊54'54	45°45'21
	1817 Aug 08 11:08	0°♋	
	1817 Sep 05 11:26	0°♌	
asc. node	1817 Sep 21 07:25	18°♌06'44	
	1817 Oct 01 10:29	0°♍	
	1817 Oct 26 08:22	0°♎	
	1817 Nov 19 16:17	0°♏	
	1817 Dec 13 17:14	0°♐	
	1818 Jan 06 15:27	0°♑	
desc. node	1818 Jan 10 20:37	5°♑17'24	
	1818 Jan 30 13:19	0°♒	
morning set	1818 Jan 31 06:03	0°♒52'27	
	1818 Feb 23 12:12	0°♓	
superior conj	1818 Mar 13 01:08	21°♓53'48	-1°25'21
minimum elong	1818 Mar 13 03:57	22°♓02'36	1°25'20
max. Earth dist.	1818 Mar 16 23:42	26°♓48'19	1.72123 AU
	1818 Mar 19 13:18	0°♈	
	1818 Apr 12 17:43	0°♉	
evening rise	1818 Apr 21 05:17	10°♉28'27	
asc. node	1818 May 04 00:12	26°♉13'09	
	1818 May 07 02:03	0°♊	
	1818 May 31 14:35	0°♋	
	1818 Jun 25 07:49	0°♌	
	1818 Jul 20 07:25	0°♍	
	1818 Aug 14 16:57	0°♎	
desc. node	1818 Aug 23 13:21	10°♎17'09	
	1818 Sep 09 19:19	0°♏	
	1818 Oct 07 07:50	0°♐	
evening max el	1818 Oct 16 17:53	9°♐34'59	46°55'21
	1818 Nov 08 15:39	0°♑	
greatest brilliancy	1818 Nov 26 05:02	10°♑11'54	-4.9m
retrograde	1818 Dec 06 03:05	12°♑04'02	
asc. node	1818 Dec 14 16:44	10°♑32'55	
evening set	1818 Dec 20 11:28	7°♑56'57	
min. Earth dist.	1818 Dec 26 04:36	4°♑37'13	0.26455 AU
inferior conj	1818 Dec 26 15:30	4°♑20'38	3°03'07
minimum elong	1818 Dec 26 08:51	4°♑30'46	3°01'06
morning rise	1819 Jan 01 06:30	1°♑02'44	
	1819 Jan 03 06:57	30°℞♐	
direct	1819 Jan 15 23:57	26°♐43'36	
greatest brilliancy	1819 Jan 25 15:53	28°♐30'44	-4.9m
	1819 Jan 29 07:17	0°♑	
morning max el	1819 Mar 07 05:15	29°♑12'50	46°40'55
	1819 Mar 08 00:09	0°♒	
desc. node	1819 Apr 05 06:18	0°♓07'59	
	1819 Apr 05 03:26	0°♓	
	1819 May 01 11:13	0°♈	
	1819 May 27 01:40	0°♉	
	1819 Jun 21 06:44	0°♊	
	1819 Jul 16 04:34	0°♋	
asc. node	1819 Jul 27 09:38	13°♋37'14	
	1819 Aug 09 19:22	0°♌	
morning set	1819 Sep 02 13:22	29°♌16'07	
	1819 Sep 03 03:33	0°♍	
	1819 Sep 27 06:34	0°♎	
max. Earth dist.	1819 Oct 06 21:40	12°♎01'23	1.71906 AU
superior conj	1819 Oct 09 19:27	15°♎39'31	1°13'32
minimum elong	1819 Oct 10 04:12	16°♎06'50	1°13'18
	1819 Oct 21 06:28	0°♏	
	1819 Nov 14 05:02	0°♐	
desc. node	1819 Nov 15 23:04	2°♐11'46	
evening rise	1819 Nov 18 09:13	5°♐14'05	
	1819 Dec 08 03:21	0°♑	
	1820 Jan 01 02:25	0°♒	
	1820 Jan 25 04:09	0°♓	
	1820 Feb 18 11:54	0°♈	
asc. node	1820 Mar 08 02:28	22°♈35'14	
	1820 Mar 14 06:53	0°♉	
	1820 Apr 08 21:25	0°♊	
	1820 May 06 01:25	0°♋	
evening max el	1820 May 21 16:17	15°♋47'35	45°25'03
	1820 Jun 06 15:48	0°♌	
desc. node	1820 Jun 27 15:40	13°♌05'54	
greatest brilliancy	1820 Jun 28 13:52	13°♌26'47	-4.7m
retrograde	1820 Jul 09 05:42	15°♌28'14	

evening set	1820 Jul	25	11:37	10°♌27'37	
inferior conj	1820 Jul	30	16:18	7°♌18'45	-6°46'02
minimum elong	1820 Jul	30	06:35	7°♌33'55	6°44'17
min. Earth dist.	1820 Jul	30	17:08	7°♌17'27	0.28937 AU
morning rise	1820 Aug	04	01:28	4°♌38'00	
	1820 Aug	14	08:39	30°℞♋	
direct	1820 Aug	21	08:03	29°♋02'21	
	1820 Aug	28	12:22	0°♌	
greatest brilliancy	1820 Aug	31	22:23	1°♌04'41	-4.8m
	1820 Oct	09	16:39	0°♍	
morning max el	1820 Oct	09	23:40	0°♍17'21	46°18'12
asc. node	1820 Oct	18	19:08	9°♍15'57	
	1820 Nov	06	18:12	0°♎	
	1820 Dec	02	10:50	0°♏	
	1820 Dec	27	04:55	0°♐	
	1821 Jan	20	13:28	0°♑	
desc. node	1821 Feb	07	08:31	22°♑02'39	
	1821 Feb	13	18:28	0°♒	
	1821 Mar	09	22:50	0°♓	
	1821 Apr	03	04:08	0°♈	
morning set	1821 Apr	15	15:31	15°♈25'06	
	1821 Apr	27	11:09	0°♉	
	1821 May	21	19:54	0°♊	
superior conj	1821 May	23	03:52	1°♊38'16	-0°19'42
minimum elong	1821 May	23	07:58	1°♊50'53	0°19'30
max. Earth dist.	1821 May	24	08:01	3°♊04'49	1.73449 AU
asc. node	1821 May	31	11:59	11°♊53'22	
	1821 Jun	15	05:46	0°♋	
evening rise	1821 Jun	28	15:24	16°♋27'21	
	1821 Jul	09	16:10	0°♌	
	1821 Aug	03	03:14	0°♍	
	1821 Aug	27	15:57	0°♎	
desc. node	1821 Sep	20	01:22	28°♎27'40	
	1821 Sep	21	07:50	0°♏	
	1821 Oct	16	04:41	0°♐	
	1821 Nov	10	10:06	0°♑	
	1821 Dec	06	10:36	0°♒	
evening max el	1821 Dec	28	04:53	23°♒27'09	47°15'12
	1822 Jan	03	18:25	0°♓	
asc. node	1822 Jan	11	04:39	6°♓57'18	
greatest brilliancy	1822 Feb	06	16:44	25°♓03'17	-4.9m
retrograde	1822 Feb	17	02:22	27°♓06'30	
evening set	1822 Mar	07	02:16	20°♓49'58	
min. Earth dist.	1822 Mar	09	12:39	19°♓18'50	0.27870 AU
inferior conj	1822 Mar	10	01:56	18°♓57'53	8°45'57
minimum elong	1822 Mar	10	03:43	18°♓55'04	8°45'55
morning rise	1822 Mar	13	05:23	17°♓00'33	
direct	1822 Mar	30	23:07	10°♓59'52	
greatest brilliancy	1822 Apr	09	02:10	12°♓32'53	-4.8m
desc. node	1822 May	02	17:51	26°♓54'43	
	1822 May	06	10:44	0°♈	
morning max el	1822 May	19	02:21	11°♈33'37	45°57'35
	1822 Jun	06	06:49	0°♉	
	1822 Jul	03	15:22	0°♊	
	1822 Jul	29	16:31	0°♋	
asc. node	1822 Aug	23	21:34	29°♋56'19	
	1822 Aug	23	22:48	0°♌	
	1822 Sep	17	15:15	0°♍	
	1822 Oct	11	21:42	0°♎	
	1822 Nov	04	21:52	0°♏	
morning set	1822 Nov	12	23:34	10°♏07'45	
	1822 Nov	28	18:56	0°♐	
desc. node	1822 Dec	13	10:52	18°♐27'16	
	1822 Dec	22	15:00	0°♑	
superior conj	1822 Dec	23	19:30	1°♑29'40	-0°24'29
minimum elong	1822 Dec	23	13:07	1°♑09'35	0°24'11
max. Earth dist.	1822 Dec	24	11:39	2°♑20'28	1.71063 AU
	1823 Jan	15	11:25	0°♒	
evening rise	1823 Feb	03	06:11	23°♒34'07	
	1823 Feb	08	09:26	0°♓	
	1823 Mar	04	10:43	0°♈	
	1823 Mar	28	17:23	0°♉	
asc. node	1823 Apr	05	14:21	9°♉38'56	
	1823 Apr	22	07:50	0°♊	
	1823 May	17	08:57	0°♋	
	1823 Jun	12	02:01	0°♌	
	1823 Jul	08	23:37	0°♍	
desc. node	1823 Jul	26	03:35	17°♍53'02	
evening max el	1823 Aug	02	00:40	24°♍36'59	45°44'59
	1823 Aug	07	18:51	0°♎	
greatest brilliancy	1823 Sep	10	22:43	23°♎08'14	-4.8m
retrograde	1823 Sep	19	23:48	24°♎38'11	
evening set	1823 Oct	07	03:42	19°♎07'23	
inferior conj	1823 Oct	10	23:03	16°♎50'14	-7°36'21
minimum elong	1823 Oct	11	08:19	16°♎36'01	7°34'53
min. Earth dist.	1823 Oct	11	22:00	16°♎15'05	0.27575 AU
morning rise	1823 Oct	15	12:28	14°♎05'49	
direct	1823 Oct	31	22:15	8°♎52'06	
greatest brilliancy	1823 Nov	12	03:47	11°♎13'02	-4.9m
asc. node	1823 Nov	16	06:51	13°♎06'27	
	1823 Dec	09	01:29	0°♏	
morning max el	1823 Dec	21	15:38	12°♏11'47	46°55'19
	1824 Jan	07	08:03	0°♐	
	1824 Feb	02	13:25	0°♑	
	1824 Feb	27	19:18	0°♒	
desc. node	1824 Mar	06	20:31	9°♒41'07	
	1824 Mar	23	15:47	0°♓	
	1824 Apr	17	08:22	0°♈	
	1824 May	11	23:26	0°♉	
	1824 Jun	05	13:30	0°♊	
morning set	1824 Jun	23	06:14	21°♊38'31	
asc. node	1824 Jun	27	23:53	27°♊26'41	
	1824 Jun	30	01:55	0°♋	
	1824 Jul	24	11:45	0°♌	
max. Earth dist.	1824 Jul	26	22:18	3°♌00'28	1.73316 AU
superior conj	1824 Jul	29	15:44	6°♌22'12	1°05'51
minimum elong	1824 Jul	29	07:06	5°♌55'34	1°05'35
	1824 Aug	17	18:46	0°♍	
evening rise	1824 Sep	03	18:27	21°♍02'39	
	1824 Sep	10	23:49	0°♎	
	1824 Oct	05	04:13	0°♏	
desc. node	1824 Oct	17	13:14	15°♏20'41	
	1824 Oct	29	09:03	0°♐	
	1824 Nov	22	15:14	0°♑	
	1824 Dec	17	00:40	0°♒	
	1825 Jan	10	18:07	0°♓	
	1825 Feb	05	06:22	0°♈	
asc. node	1825 Feb	07	16:33	2°♈46'11	
	1825 Mar	04	16:01	0°♉	
evening max el	1825 Mar	09	14:22	4°♉59'09	46°16'48
	1825 Apr	08	13:46	0°♊	
greatest brilliancy	1825 Apr	17	10:00	4°♊24'54	-4.8m
retrograde	1825 Apr	28	07:17	6°♊35'54	
evening set	1825 May	13	18:24	1°♊55'34	
	1825 May	17	00:42	30°℞♉	
inferior conj	1825 May	19	16:39	28°♉20'19	2°28'04
minimum elong	1825 May	19	21:53	28°♉12'04	2°26'34
min. Earth dist.	1825 May	19	17:29	28°♉19'00	0.28792 AU
morning rise	1825 May	26	01:36	24°♉30'21	
desc. node	1825 May	30	05:47	22°♉27'15	
direct	1825 Jun	10	03:50	20°♉05'11	

greatest brilliancy	1825 Jun 20 09:15	21°♉58'09	-4.7m
	1825 Jul 05 08:55	0°♊	
morning max el	1825 Jul 28 22:22	19°♊47'42	45°45'02
	1825 Aug 08 06:19	0°♋	
	1825 Sep 05 01:58	0°♌	
asc. node	1825 Sep 20 09:23	17°♌33'48	
	1825 Sep 30 23:13	0°♍	
	1825 Oct 25 20:14	0°♎	
	1825 Nov 19 03:45	0°♏	
	1825 Dec 13 04:29	0°♐	
	1826 Jan 06 02:35	0°♑	
desc. node	1826 Jan 09 22:46	4°♑49'20	
morning set	1826 Jan 28 15:50	28°♑18'07	
	1826 Jan 30 00:20	0°♒	
	1826 Feb 22 23:06	0°♓	
superior conj	1826 Mar 10 13:29	19°♓28'53	-1°25'45
minimum elong	1826 Mar 10 15:23	19°♓34'48	1°25'45
max. Earth dist.	1826 Mar 14 12:25	24°♓24'45	1.72069 AU
	1826 Mar 19 00:07	0°♈	
	1826 Apr 12 04:30	0°♉	
evening rise	1826 Apr 18 20:08	8°♉12'59	
asc. node	1826 May 03 02:11	25°♉45'59	
	1826 May 06 12:54	0°♊	
	1826 May 31 01:38	0°♋	
	1826 Jun 24 19:15	0°♌	
	1826 Jul 19 19:31	0°♍	
	1826 Aug 14 06:13	0°♎	
desc. node	1826 Aug 22 15:26	9°♎43'15	
	1826 Sep 09 10:45	0°♏	
	1826 Oct 07 04:19	0°♐	
evening max el	1826 Oct 14 08:31	7°♐14'49	46°53'18
	1826 Nov 09 13:04	0°♑	
greatest brilliancy	1826 Nov 23 17:51	7°♑43'42	-4.9m
retrograde	1826 Dec 03 15:56	9°♑35'04	
asc. node	1826 Dec 13 18:49	7°♑28'45	
evening set	1826 Dec 17 22:54	5°♑29'54	
min. Earth dist.	1826 Dec 23 17:53	2°♑07'17	0.26439 AU
inferior conj	1826 Dec 24 03:44	1°♑52'17	2°39'50
minimum elong	1826 Dec 23 21:50	2°♑01'15	2°38'00
	1826 Dec 27 06:21	30°℞♐	
morning rise	1826 Dec 29 21:06	28°♐31'19	
direct	1827 Jan 13 12:47	24°♐15'39	
greatest brilliancy	1827 Jan 23 05:06	26°♐03'13	-4.9m
	1827 Jan 31 12:55	0°♑	
morning max el	1827 Mar 04 18:47	26°♑49'32	46°42'05
	1827 Mar 07 22:30	0°♒	
desc. node	1827 Apr 04 08:15	29°♒28'22	
	1827 Apr 04 19:33	0°♓	
	1827 May 01 00:53	0°♈	
	1827 May 26 14:02	0°♉	
	1827 Jun 20 18:21	0°♊	
	1827 Jul 15 15:43	0°♋	
asc. node	1827 Jul 26 11:44	13°♋10'05	
	1827 Aug 09 06:16	0°♌	
morning set	1827 Aug 31 06:06	27°♌05'56	
	1827 Sep 02 14:21	0°♍	
	1827 Sep 26 17:22	0°♎	
max. Earth dist.	1827 Oct 04 08:00	9°♎29'58	1.71952 AU
superior conj	1827 Oct 07 10:28	13°♎22'35	1°15'13
minimum elong	1827 Oct 07 18:43	13°♎48'20	1°15'01
	1827 Oct 20 17:21	0°♏	
	1827 Nov 13 16:01	0°♐	
desc. node	1827 Nov 15 01:08	1°♐43'49	
evening rise	1827 Nov 15 20:59	2°♐46'02	
	1827 Dec 07 14:27	0°♑	
	1827 Dec 31 13:41	0°♒	
	1828 Jan 24 15:41	0°♓	
	1828 Feb 17 23:51	0°♈	
asc. node	1828 Mar 07 04:25	22°♈03'41	
	1828 Mar 13 19:35	0°♉	
	1828 Apr 08 11:37	0°♊	
	1828 May 05 19:19	0°♋	
evening max el	1828 May 19 07:45	13°♋35'52	45°25'39
	1828 Jun 07 01:58	0°♌	
greatest brilliancy	1828 Jun 26 05:31	11°♌17'02	-4.7m
desc. node	1828 Jun 26 17:49	11°♌28'00	
retrograde	1828 Jul 06 21:01	13°♌18'27	
evening set	1828 Jul 23 00:42	8°♌21'59	
inferior conj	1828 Jul 28 08:22	5°♌08'46	-6°33'15
minimum elong	1828 Jul 27 22:32	5°♌24'09	6°31'23
min. Earth dist.	1828 Jul 28 08:58	5°♌07'50	0.28950 AU
morning rise	1828 Aug 01 20:13	2°♌23'44	
	1828 Aug 06 07:22	30°℞♋	
direct	1828 Aug 19 00:00	26°♋52'11	
greatest brilliancy	1828 Aug 29 14:08	28°♋53'38	-4.8m
	1828 Sep 01 07:34	0°♌	
morning max el	1828 Oct 07 13:41	27°♌59'03	46°16'41
	1828 Oct 09 14:20	0°♍	
asc. node	1828 Oct 17 21:09	8°♍31'18	
	1828 Nov 06 09:54	0°♎	
	1828 Dec 02 00:26	0°♏	
	1828 Dec 26 17:28	0°♐	
	1829 Jan 20 01:24	0°♑	
desc. node	1829 Feb 06 10:37	21°♑33'06	
	1829 Feb 13 05:59	0°♒	
	1829 Mar 09 10:04	0°♓	
	1829 Apr 02 15:10	0°♈	
morning set	1829 Apr 13 06:57	13°♈10'45	
	1829 Apr 26 22:02	0°♉	
superior conj	1829 May 20 21:02	29°♉30'18	-0°22'51
minimum elong	1829 May 21 01:46	29°♉44'53	0°22'38
	1829 May 21 06:41	0°♊	
max. Earth dist.	1829 May 22 03:39	1°♊04'28	1.73423 AU
asc. node	1829 May 30 14:08	11°♊26'47	
	1829 Jun 14 16:33	0°♋	
evening rise	1829 Jun 26 10:05	14°♋24'06	
	1829 Jul 09 03:05	0°♌	
	1829 Aug 02 14:24	0°♍	
	1829 Aug 27 03:33	0°♎	
desc. node	1829 Sep 19 03:20	27°♎56'47	
	1829 Sep 20 20:02	0°♏	
	1829 Oct 15 17:46	0°♐	
	1829 Nov 10 00:36	0°♑	
	1829 Dec 06 03:53	0°♒	
evening max el	1829 Dec 25 18:27	21°♒02'24	47°16'12
	1830 Jan 03 20:04	0°♓	
asc. node	1830 Jan 10 06:47	5°♓54'50	
greatest brilliancy	1830 Feb 04 08:41	22°♓44'15	-4.9m
retrograde	1830 Feb 14 16:58	24°♓46'46	
evening set	1830 Mar 04 17:07	18°♓30'44	
min. Earth dist.	1830 Mar 07 02:53	17°♓00'41	0.27818 AU
inferior conj	1830 Mar 07 16:41	16°♓38'56	8°47'55
minimum elong	1830 Mar 07 17:37	16°♓37'28	8°47'54
morning rise	1830 Mar 10 18:19	14°♓44'23	
direct	1830 Mar 28 12:38	8°♓41'38	
greatest brilliancy	1830 Apr 06 16:08	10°♓14'45	-4.8m
desc. node	1830 May 01 20:01	25°♓51'28	
	1830 May 06 15:59	0°♈	
morning max el	1830 May 16 16:18	9°♈16'16	45°58'45
	1830 Jun 06 00:20	0°♉	
	1830 Jul 03 05:31	0°♊	

	1830 Jul 29 05:09	0°♋	
asc. node	1830 Aug 22 23:33	29°♋26'42	
	1830 Aug 23 10:38	0°♌	
	1830 Sep 17 02:40	0°♍	
	1830 Oct 11 08:55	0°♎	
	1830 Nov 04 09:01	0°♏	
morning set	1830 Nov 10 12:06	7°♏41'24	
	1830 Nov 28 06:04	0°♐	
desc. node	1830 Dec 12 13:00	17°♐58'49	
superior conj	1830 Dec 21 05:17	28°♐54'17	-0°20'36
minimum elong	1830 Dec 20 23:51	28°♐37'13	0°20'20
max. Earth dist.	1830 Dec 21 15:58	29°♐27'54	1.71063 AU
	1830 Dec 22 02:10	0°♑	
	1831 Jan 14 22:36	0°♒	
evening rise	1831 Jan 31 16:37	21°♒01'29	
	1831 Feb 07 20:36	0°♓	
	1831 Mar 03 21:55	0°♈	
	1831 Mar 28 04:45	0°♉	
asc. node	1831 Apr 04 16:23	9°♉10'06	
	1831 Apr 21 19:34	0°♊	
	1831 May 16 21:25	0°♋	
	1831 Jun 11 15:54	0°♌	
	1831 Jul 08 16:37	0°♍	
desc. node	1831 Jul 25 05:39	17°♍05'57	
evening max el	1831 Jul 30 14:36	22°♍19'50	45°43'12
	1831 Aug 07 21:53	0°♎	
greatest brilliancy	1831 Sep 08 10:46	20°♎47'18	-4.8m
retrograde	1831 Sep 17 13:31	22°♎18'27	
evening set	1831 Oct 04 20:03	16°♎42'42	
inferior conj	1831 Oct 08 12:47	14°♎29'20	-7°46'42
minimum elong	1831 Oct 08 21:36	14°♎15'50	7°45'27
min. Earth dist.	1831 Oct 09 11:26	13°♎54'41	0.27648 AU
morning rise	1831 Oct 12 22:45	11°♎50'04	
direct	1831 Oct 29 12:59	6°♎30'02	
greatest brilliancy	1831 Nov 09 18:29	8°♎51'18	-4.9m
asc. node	1831 Nov 15 09:01	11°♎32'01	
	1831 Dec 09 05:52	0°♏	
morning max el	1831 Dec 19 07:03	9°♏51'02	46°54'41
	1832 Jan 07 02:03	0°♐	
	1832 Feb 02 04:15	0°♑	
	1832 Feb 27 08:36	0°♒	
desc. node	1832 Mar 05 22:24	9°♒07'46	
	1832 Mar 23 04:09	0°♓	
	1832 Apr 16 20:06	0°♈	
	1832 May 11 10:44	0°♉	
	1832 Jun 05 00:31	0°♊	
morning set	1832 Jun 21 00:35	19°♊34'17	
asc. node	1832 Jun 27 01:58	26°♊59'36	
	1832 Jun 29 12:48	0°♋	
	1832 Jul 23 22:37	0°♌	
max. Earth dist.	1832 Jul 24 20:58	1°♌08'51	1.73349 AU
superior conj	1832 Jul 27 10:13	4°♌17'40	1°03'50
minimum elong	1832 Jul 27 01:30	3°♌50'46	1°03'32
	1832 Aug 17 05:42	0°♍	
evening rise	1832 Sep 01 11:39	18°♍52'59	
	1832 Sep 10 10:54	0°♎	
	1832 Oct 04 15:33	0°♏	
desc. node	1832 Oct 16 15:18	14°♏51'27	
	1832 Oct 28 20:44	0°♐	
	1832 Nov 22 03:22	0°♑	
	1832 Dec 16 13:23	0°♒	
	1833 Jan 10 07:47	0°♓	
	1833 Feb 04 21:55	0°♈	
asc. node	1833 Feb 06 18:31	2°♈06'56	
	1833 Mar 04 12:36	0°♉	
evening max el	1833 Mar 07 06:41	2°♉46'02	46°19'24
	1833 Apr 10 03:20	0°♊	
greatest brilliancy	1833 Apr 15 02:32	2°♊14'21	-4.8m
retrograde	1833 Apr 26 00:31	4°♊25'38	
	1833 May 11 00:19	30°℞♉	
evening set	1833 May 11 12:43	29°♉42'43	
inferior conj	1833 May 17 09:00	26°♉09'54	2°47'09
minimum elong	1833 May 17 14:51	26°♉00'43	2°45'31
min. Earth dist.	1833 May 17 09:29	26°♉09'09	0.28772 AU
morning rise	1833 May 23 17:19	22°♉21'04	
desc. node	1833 May 29 07:51	19°♉43'34	
direct	1833 Jun 07 20:19	17°♉55'14	
greatest brilliancy	1833 Jun 18 00:01	19°♉47'09	-4.7m
	1833 Jul 06 01:33	0°♊	
morning max el	1833 Jul 26 15:10	17°♊39'50	45°44'33
	1833 Aug 08 01:13	0°♋	
	1833 Sep 04 16:38	0°♌	
asc. node	1833 Sep 19 11:26	17°♌00'17	
	1833 Sep 30 12:12	0°♍	
	1833 Oct 25 08:26	0°♎	
	1833 Nov 18 15:31	0°♏	
	1833 Dec 12 16:02	0°♐	
	1834 Jan 05 13:59	0°♑	
desc. node	1834 Jan 09 00:46	4°♑19'52	
morning set	1834 Jan 26 01:33	25°♑42'39	
	1834 Jan 29 11:37	0°♒	
	1834 Feb 22 10:17	0°♓	
superior conj	1834 Mar 08 01:43	17°♓02'34	-1°26'01
minimum elong	1834 Mar 08 02:39	17°♓05'27	1°26'00
max. Earth dist.	1834 Mar 12 02:13	22°♓03'25	1.72015 AU
	1834 Mar 18 11:15	0°♈	
	1834 Apr 11 15:36	0°♉	
evening rise	1834 Apr 16 10:57	5°♉56'22	
asc. node	1834 May 02 04:23	25°♉18'32	
	1834 May 06 00:03	0°♊	
	1834 May 30 12:55	0°♋	
	1834 Jun 24 06:54	0°♌	
	1834 Jul 19 07:53	0°♍	
	1834 Aug 13 19:51	0°♎	
desc. node	1834 Aug 21 17:22	9°♎07'59	
	1834 Sep 09 02:44	0°♏	
	1834 Oct 07 01:56	0°♐	
evening max el	1834 Oct 11 22:50	4°♐52'52	46°50'58
	1834 Nov 10 19:14	0°♑	
greatest brilliancy	1834 Nov 21 07:17	5°♑14'59	-4.9m
retrograde	1834 Dec 01 04:10	7°♑04'39	
asc. node	1834 Dec 12 20:54	4°♑17'59	
evening set	1834 Dec 15 10:30	3°♑01'16	
	1834 Dec 20 15:30	30°℞♐	
inferior conj	1834 Dec 21 15:53	29°♐22'47	2°16'09
minimum elong	1834 Dec 21 10:49	29°♐30'32	2°14'32
min. Earth dist.	1834 Dec 21 07:33	29°♐35'32	0.26426 AU
morning rise	1834 Dec 27 11:24	25°♐58'42	
direct	1835 Jan 11 01:10	21°♐46'28	
greatest brilliancy	1835 Jan 20 18:46	23°♐34'57	-4.9m
	1835 Feb 02 00:44	0°♑	
morning max el	1835 Mar 02 07:16	24°♑22'30	46°43'16
	1835 Mar 07 20:20	0°♒	
desc. node	1835 Apr 03 10:23	28°♒48'55	
	1835 Apr 04 11:40	0°♓	
	1835 Apr 30 14:41	0°♈	
	1835 May 26 02:36	0°♉	
	1835 Jun 20 06:09	0°♊	
	1835 Jul 15 03:02	0°♋	
asc. node	1835 Jul 25 13:45	12°♋42'10	
	1835 Aug 08 17:18	0°♌	

morning set	1835 Aug 28 23:10	24°♌56'23	
	1835 Sep 02 01:16	0°♍	
	1835 Sep 26 04:20	0°♎	
max. Earth dist.	1835 Oct 01 19:51	7°♎02'50	1.72007 AU
superior conj	1835 Oct 05 01:46	11°♎06'06	1°16'45
minimum elong	1835 Oct 05 09:29	11°♎30'13	1°16'36
	1835 Oct 20 04:26	0°♏	
evening rise	1835 Nov 13 08:45	0°♐17'19	
	1835 Nov 13 03:13	0°♐	
desc. node	1835 Nov 14 03:18	1°♐15'26	
	1835 Dec 07 01:49	0°♑	
	1835 Dec 31 01:15	0°♒	
	1836 Jan 24 03:29	0°♓	
	1836 Feb 17 12:04	0°♈	
asc. node	1836 Mar 06 06:29	21°♈31'45	
	1836 Mar 13 08:34	0°♉	
	1836 Apr 08 02:10	0°♊	
	1836 May 05 13:50	0°♋	
evening max el	1836 May 16 22:42	11°♋22'27	45°26'26
	1836 Jun 07 15:49	0°♌	
greatest brilliancy	1836 Jun 23 21:10	9°♌07'12	-4.7m
desc. node	1836 Jun 25 19:51	9°♌46'27	
retrograde	1836 Jul 04 12:33	11°♌09'09	
evening set	1836 Jul 20 14:04	6°♌16'20	
inferior conj	1836 Jul 26 00:38	2°♌59'14	-6°20'01
minimum elong	1836 Jul 25 14:43	3°♌14'43	6°18'02
min. Earth dist.	1836 Jul 26 01:10	2°♌58'23	0.28960 AU
morning rise	1836 Jul 30 15:09	0°♌10'05	
	1836 Jul 30 22:04	30°℞♋	
direct	1836 Aug 16 15:46	24°♋42'24	
greatest brilliancy	1836 Aug 27 06:32	26°♋43'51	-4.8m
	1836 Sep 03 08:16	0°♌	
morning max el	1836 Oct 05 03:52	25°♌41'32	46°15'10
	1836 Oct 09 11:10	0°♍	
asc. node	1836 Oct 16 23:20	7°♍47'52	
	1836 Nov 06 01:23	0°♎	
	1836 Dec 01 13:58	0°♏	
	1836 Dec 26 06:04	0°♐	
	1837 Jan 19 13:26	0°♑	
desc. node	1837 Feb 05 12:37	21°♑02'46	
	1837 Feb 12 17:39	0°♒	
	1837 Mar 08 21:27	0°♓	
	1837 Apr 02 02:18	0°♈	
morning set	1837 Apr 10 21:53	10°♈54'27	
	1837 Apr 26 08:59	0°♉	
superior conj	1837 May 18 13:58	27°♉21'25	-0°26'01
minimum elong	1837 May 18 19:20	27°♉37'54	0°25'46
max. Earth dist.	1837 May 19 21:59	28°♉59'53	1.73395 AU
	1837 May 20 17:32	0°♊	
asc. node	1837 May 29 16:10	10°♊59'43	
	1837 Jun 14 03:25	0°♋	
evening rise	1837 Jun 24 04:46	12°♋20'43	
	1837 Jul 08 14:02	0°♌	
	1837 Aug 02 01:35	0°♍	
	1837 Aug 26 15:06	0°♎	
desc. node	1837 Sep 18 05:29	27°♎26'44	
	1837 Sep 20 08:11	0°♏	
	1837 Oct 15 06:49	0°♐	
	1837 Nov 09 15:12	0°♑	
	1837 Dec 05 21:35	0°♒	
evening max el	1837 Dec 23 07:54	18°♒37'04	47°16'51
	1838 Jan 03 23:26	0°♓	
asc. node	1838 Jan 09 08:44	4°♓49'43	
greatest brilliancy	1838 Feb 01 23:50	20°♓22'49	-4.9m
retrograde	1838 Feb 12 07:28	22°♓25'16	
evening set	1838 Mar 02 07:01	16°♓10'11	
min. Earth dist.	1838 Mar 04 16:37	14°♓40'40	0.27769 AU
inferior conj	1838 Mar 05 07:00	14°♓18'04	8°48'55
minimum elong	1838 Mar 05 07:03	14°♓17'58	8°48'54
morning rise	1838 Mar 08 07:16	12°♓25'46	
direct	1838 Mar 26 01:44	6°♓21'23	
greatest brilliancy	1838 Apr 04 05:39	7°♓54'52	-4.8m
desc. node	1838 Apr 30 22:07	24°♓49'03	
	1838 May 06 19:38	0°♈	
morning max el	1838 May 14 06:44	6°♈59'38	46°00'06
	1838 Jun 05 17:31	0°♉	
	1838 Jul 02 19:29	0°♊	
	1838 Jul 28 17:38	0°♋	
asc. node	1838 Aug 22 01:35	28°♋57'31	
	1838 Aug 22 22:20	0°♌	
	1838 Sep 16 13:56	0°♍	
	1838 Oct 10 19:58	0°♎	
	1838 Nov 03 19:58	0°♏	
morning set	1838 Nov 08 01:16	5°♏17'43	
	1838 Nov 27 17:00	0°♐	
desc. node	1838 Dec 11 15:00	17°♐30'38	
superior conj	1838 Dec 18 15:22	26°♐20'29	-0°16'43
minimum elong	1838 Dec 18 10:57	26°♐06'32	0°16'29
max. Earth dist.	1838 Dec 19 00:33	26°♐49'22	1.71070 AU
	1838 Dec 21 13:08	0°♑	
	1839 Jan 14 09:37	0°♒	
evening rise	1839 Jan 29 03:02	18°♒29'08	
	1839 Feb 07 07:41	0°♓	
	1839 Mar 03 09:04	0°♈	
	1839 Mar 27 16:05	0°♉	
asc. node	1839 Apr 03 18:32	8°♉41'46	
	1839 Apr 21 07:16	0°♊	
	1839 May 16 09:52	0°♋	
	1839 Jun 11 05:49	0°♌	
	1839 Jul 08 09:50	0°♍	
desc. node	1839 Jul 24 07:36	16°♍18'11	
evening max el	1839 Jul 28 05:22	20°♍05'14	45°41'32
	1839 Aug 08 02:25	0°♎	
greatest brilliancy	1839 Sep 05 22:40	18°♎27'09	-4.8m
retrograde	1839 Sep 15 03:24	19°♎59'28	
evening set	1839 Oct 02 12:23	14°♎19'16	
inferior conj	1839 Oct 06 02:35	12°♎09'25	-7°56'24
minimum elong	1839 Oct 06 10:53	11°♎56'43	7°55'18
min. Earth dist.	1839 Oct 07 00:38	11°♎35'41	0.27714 AU
morning rise	1839 Oct 10 09:02	9°♎35'16	
direct	1839 Oct 27 04:03	4°♎09'17	
greatest brilliancy	1839 Nov 07 08:32	6°♎29'56	-4.9m
asc. node	1839 Nov 14 11:00	10°♎01'38	
	1839 Dec 09 08:09	0°♏	
morning max el	1839 Dec 16 22:28	7°♏31'39	46°54'03
	1840 Jan 06 19:15	0°♐	
	1840 Feb 01 18:33	0°♑	
	1840 Feb 26 21:30	0°♒	
desc. node	1840 Mar 05 00:33	8°♒36'10	
	1840 Mar 22 16:13	0°♓	
	1840 Apr 16 07:36	0°♈	
	1840 May 10 21:51	0°♉	
	1840 Jun 04 11:22	0°♊	
morning set	1840 Jun 18 18:30	17°♊29'23	
asc. node	1840 Jun 26 03:56	26°♊32'52	
	1840 Jun 28 23:30	0°♋	
max. Earth dist.	1840 Jul 22 18:35	29°♋14'50	1.73377 AU
	1840 Jul 23 09:15	0°♌	
superior conj	1840 Jul 25 04:21	2°♌12'48	1°01'42
minimum elong	1840 Jul 24 19:34	1°♌45'45	1°01'24

	1840 Aug 16 16:23	0°♍	
evening rise	1840 Aug 30 04:42	16°♍43'41	
	1840 Sep 09 21:46	0°♎	
	1840 Oct 04 02:40	0°♏	
desc. node	1840 Oct 15 17:25	14°♏23'10	
	1840 Oct 28 08:10	0°♐	
	1840 Nov 21 15:11	0°♑	
	1840 Dec 16 01:45	0°♒	
	1841 Jan 09 21:06	0°♓	
	1841 Feb 04 13:13	0°♈	
asc. node	1841 Feb 05 20:35	1°♈28'55	
	1841 Mar 04 09:28	0°♉	
evening max el	1841 Mar 04 23:01	0°♉33'51	46°21'41
	1841 Apr 12 14:38	0°♊	
greatest brilliancy	1841 Apr 12 19:22	0°♊04'33	-4.8m
retrograde	1841 Apr 23 17:07	2°♊15'15	
	1841 May 04 06:33	30°℞♉	
evening set	1841 May 09 06:59	27°♉29'51	
inferior conj	1841 May 15 01:09	23°♉59'35	3°06'15
minimum elong	1841 May 15 07:35	23°♉49'28	3°04'28
min. Earth dist.	1841 May 15 01:27	23°♉59'07	0.28754 AU
morning rise	1841 May 21 08:36	20°♉11'53	
desc. node	1841 May 28 09:51	17°♉04'06	
direct	1841 Jun 05 12:39	15°♉45'26	
greatest brilliancy	1841 Jun 15 14:37	17°♉36'01	-4.7m
	1841 Jul 06 13:45	0°♊	
morning max el	1841 Jul 24 07:07	15°♊30'32	45°44'07
	1841 Aug 07 19:22	0°♋	
	1841 Sep 04 06:49	0°♌	
asc. node	1841 Sep 18 13:37	16°♌28'16	
	1841 Sep 30 00:47	0°♍	
	1841 Oct 24 20:14	0°♎	
	1841 Nov 18 02:56	0°♏	
	1841 Dec 12 03:13	0°♐	
	1842 Jan 05 01:00	0°♑	
desc. node	1842 Jan 08 02:47	3°♑51'40	
morning set	1842 Jan 23 11:37	23°♑09'29	
	1842 Jan 28 22:28	0°♒	
	1842 Feb 21 21:02	0°♓	
superior conj	1842 Mar 05 14:13	14°♓38'20	-1°26'06
minimum elong	1842 Mar 05 14:08	14°♓38'06	1°26'06
max. Earth dist.	1842 Mar 09 17:33	19°♓48'15	1.71960 AU
	1842 Mar 17 21:56	0°♈	
	1842 Apr 11 02:17	0°♉	
evening rise	1842 Apr 14 01:45	3°♉40'52	
asc. node	1842 May 01 06:21	24°♉51'39	
	1842 May 05 10:48	0°♊	
	1842 May 29 23:54	0°♋	
	1842 Jun 23 18:18	0°♌	
	1842 Jul 18 20:01	0°♍	
	1842 Aug 13 09:17	0°♎	
desc. node	1842 Aug 20 19:32	8°♎34'03	
	1842 Sep 08 18:40	0°♏	
	1842 Oct 06 24:00	0°♐	
evening max el	1842 Oct 09 12:07	2°♐29'21	46°48'37
	1842 Nov 12 14:07	0°♑	
greatest brilliancy	1842 Nov 18 21:06	2°♑47'35	-4.9m
retrograde	1842 Nov 28 15:42	4°♑35'10	
asc. node	1842 Dec 11 22:54	1°♑03'16	
evening set	1842 Dec 12 22:13	0°♑33'03	
	1842 Dec 13 22:33	30°℞♐	
inferior conj	1842 Dec 19 03:59	26°♐54'16	1°52'01
minimum elong	1842 Dec 18 23:46	27°♐00'42	1°50'40
min. Earth dist.	1842 Dec 18 21:31	27°♐04'09	0.26414 AU
morning rise	1842 Dec 25 01:26	23°♐27'14	
direct	1843 Jan 08 12:58	19°♐17'57	
greatest brilliancy	1843 Jan 18 09:00	21°♐08'11	-4.9m
	1843 Feb 03 01:40	0°♑	
morning max el	1843 Feb 27 19:12	21°♑55'08	46°44'42
	1843 Mar 07 16:54	0°♒	
desc. node	1843 Apr 02 12:29	28°♒11'07	
	1843 Apr 04 03:02	0°♓	
	1843 Apr 30 03:52	0°♈	
	1843 May 25 14:39	0°♉	
	1843 Jun 19 17:31	0°♊	
	1843 Jul 14 14:00	0°♋	
asc. node	1843 Jul 24 15:49	12°♋15'20	
	1843 Aug 08 04:02	0°♌	
morning set	1843 Aug 26 15:57	22°♌46'53	
	1843 Sep 01 11:56	0°♍	
	1843 Sep 25 15:01	0°♎	
max. Earth dist.	1843 Sep 29 09:24	4°♎41'59	1.72062 AU
superior conj	1843 Oct 02 16:53	8°♎50'04	1°18'11
minimum elong	1843 Oct 03 00:02	9°♎12'22	1°18'02
	1843 Oct 19 15:12	0°♏	
evening rise	1843 Nov 10 20:29	27°♏49'35	
	1843 Nov 12 14:08	0°♐	
desc. node	1843 Nov 13 05:14	0°♐47'16	
	1843 Dec 06 12:53	0°♑	
	1843 Dec 30 12:31	0°♒	
	1844 Jan 23 15:00	0°♓	
	1844 Feb 16 23:59	0°♈	
asc. node	1844 Mar 05 08:38	21°♈01'09	
	1844 Mar 12 21:13	0°♉	
	1844 Apr 07 16:25	0°♊	
	1844 May 05 08:20	0°♋	
evening max el	1844 May 14 13:26	9°♋09'47	45°27'15
	1844 Jun 08 09:43	0°♌	
greatest brilliancy	1844 Jun 21 12:08	6°♌57'37	-4.7m
desc. node	1844 Jun 24 21:50	8°♌02'08	
retrograde	1844 Jul 02 04:27	9°♌00'58	
evening set	1844 Jul 18 03:30	4°♌11'15	
inferior conj	1844 Jul 23 16:52	0°♌50'27	-6°06'05
minimum elong	1844 Jul 23 06:57	1°♌05'55	6°04'02
min. Earth dist.	1844 Jul 23 17:13	0°♌49'55	0.28976 AU
	1844 Jul 25 01:13	30°℞♋	
morning rise	1844 Jul 28 10:08	27°♋57'21	
direct	1844 Aug 14 07:38	22°♋33'11	
greatest brilliancy	1844 Aug 24 23:16	24°♋35'10	-4.8m
	1844 Sep 04 16:22	0°♌	
morning max el	1844 Oct 02 18:55	23°♌26'47	46°13'42
	1844 Oct 09 07:10	0°♍	
asc. node	1844 Oct 16 01:18	7°♍04'50	
	1844 Nov 05 16:27	0°♎	
	1844 Dec 01 03:12	0°♏	
	1844 Dec 25 18:22	0°♐	
	1845 Jan 19 01:12	0°♑	
desc. node	1845 Feb 04 14:42	20°♑33'29	
	1845 Feb 12 05:03	0°♒	
	1845 Mar 08 08:34	0°♓	
	1845 Apr 01 13:11	0°♈	
morning set	1845 Apr 08 12:54	8°♈39'00	
	1845 Apr 25 19:40	0°♉	
superior conj	1845 May 16 07:08	25°♉14'02	-0°29'07
minimum elong	1845 May 16 13:05	25°♉32'21	0°28'49
max. Earth dist.	1845 May 17 17:01	26°♉58'15	1.73364 AU
	1845 May 20 04:07	0°♊	
asc. node	1845 May 28 18:09	10°♊33'20	
	1845 Jun 13 13:59	0°♋	
evening rise	1845 Jun 21 23:45	10°♋19'06	
	1845 Jul 08 00:46	0°♌	

	1845 Aug 01 12:36	0°♍	
	1845 Aug 26 02:34	0°♎	
desc. node	1845 Sep 17 07:31	26°♎56'30	
	1845 Sep 19 20:17	0°♏	
	1845 Oct 14 19:55	0°♐	
	1845 Nov 09 05:55	0°♑	
	1845 Dec 05 15:35	0°♒	
evening max el	1845 Dec 20 22:08	16°♒14'07	47°17'36
	1846 Jan 04 04:24	0°♓	
asc. node	1846 Jan 08 10:50	3°♓43'31	
greatest brilliancy	1846 Jan 30 14:20	18°♓00'49	-4.9m
retrograde	1846 Feb 09 22:25	20°♓03'59	
evening set	1846 Feb 27 20:27	13°♓50'20	
min. Earth dist.	1846 Mar 02 05:59	12°♓21'09	0.27716 AU
inferior conj	1846 Mar 02 21:15	11°♓57'13	8°48'59
minimum elong	1846 Mar 02 20:26	11°♓58'29	8°48'58
morning rise	1846 Mar 05 20:37	10°♓06'35	
direct	1846 Mar 23 15:15	4°♓01'13	
greatest brilliancy	1846 Apr 01 18:44	5°♓34'44	-4.8m
desc. node	1846 Apr 30 00:03	23°♓48'10	
	1846 May 06 21:32	0°♈	
morning max el	1846 May 11 22:02	4°♈45'33	46°01'34
	1846 Jun 05 10:10	0°♉	
	1846 Jul 02 09:08	0°♊	
	1846 Jul 28 05:53	0°♋	
asc. node	1846 Aug 21 03:44	28°♋29'11	
	1846 Aug 22 09:52	0°♌	
	1846 Sep 16 01:07	0°♍	
	1846 Oct 10 07:00	0°♎	
	1846 Nov 03 06:58	0°♏	
morning set	1846 Nov 05 14:19	2°♏53'35	
	1846 Nov 27 04:01	0°♐	
desc. node	1846 Dec 10 17:03	17°♐02'23	
superior conj	1846 Dec 16 01:09	23°♐45'28	-0°12'45
minimum elong	1846 Dec 15 21:46	23°♐34'47	0°12'35
behind sun begin	1846 Dec 15 04:42	22°♐41'04	
behind sun end	1846 Dec 16 14:50	24°♐28'30	
max. Earth dist.	1846 Dec 16 09:25	24°♐11'27	1.71074 AU
	1846 Dec 21 00:10	0°♑	
	1847 Jan 13 20:41	0°♒	
evening rise	1847 Jan 26 13:10	15°♒55'45	
	1847 Feb 06 18:46	0°♓	
	1847 Mar 02 20:14	0°♈	
	1847 Mar 27 03:27	0°♉	
asc. node	1847 Apr 02 20:30	8°♉12'52	
	1847 Apr 20 19:02	0°♊	
	1847 May 15 22:22	0°♋	
	1847 Jun 10 19:49	0°♌	
	1847 Jul 08 03:19	0°♍	
desc. node	1847 Jul 23 09:46	15°♍30'28	
evening max el	1847 Jul 25 20:34	17°♍52'06	45°39'50
	1847 Aug 08 08:48	0°♎	
greatest brilliancy	1847 Sep 03 10:46	16°♎07'58	-4.8m
retrograde	1847 Sep 12 17:00	17°♎41'02	
evening set	1847 Sep 30 04:43	11°♎56'48	
inferior conj	1847 Oct 03 16:34	9°♎50'05	-8°05'04
minimum elong	1847 Oct 04 00:18	9°♎38'14	8°04'08
min. Earth dist.	1847 Oct 04 13:56	9°♎17'20	0.27785 AU
morning rise	1847 Oct 07 19:35	7°♎20'43	
direct	1847 Oct 24 19:29	1°♎49'08	
greatest brilliancy	1847 Nov 04 22:38	4°♎08'35	-4.9m
asc. node	1847 Nov 13 13:02	8°♎34'07	
	1847 Dec 09 09:21	0°♏	
morning max el	1847 Dec 14 13:16	5°♏10'00	46°53'10
	1848 Jan 06 12:24	0°♐	
	1848 Feb 01 08:59	0°♑	
	1848 Feb 26 10:33	0°♒	
desc. node	1848 Mar 04 02:39	8°♒03'54	
	1848 Mar 22 04:24	0°♓	
	1848 Apr 15 19:13	0°♈	
	1848 May 10 09:04	0°♉	
	1848 Jun 03 22:21	0°♊	
morning set	1848 Jun 16 12:40	15°♊24'49	
asc. node	1848 Jun 25 06:03	26°♊06'10	
	1848 Jun 28 10:19	0°♋	
max. Earth dist.	1848 Jul 20 14:58	27°♋16'44	1.73399 AU
superior conj	1848 Jul 22 22:54	0°♌08'57	0°59'30
minimum elong	1848 Jul 22 14:08	29°♋41'56	0°59'12
	1848 Jul 22 20:00	0°♌	
	1848 Aug 16 03:11	0°♍	
evening rise	1848 Aug 27 22:16	14°♍35'44	
	1848 Sep 09 08:44	0°♎	
	1848 Oct 03 13:55	0°♏	
desc. node	1848 Oct 14 19:23	13°♏53'58	
	1848 Oct 27 19:48	0°♐	
	1848 Nov 21 03:18	0°♑	
	1848 Dec 15 14:30	0°♒	
	1849 Jan 09 10:55	0°♓	
	1849 Feb 04 05:11	0°♈	
asc. node	1849 Feb 04 22:43	0°♈49'30	
evening max el	1849 Mar 02 14:37	28°♈18'30	46°24'10
	1849 Mar 04 07:34	0°♉	
greatest brilliancy	1849 Apr 10 12:49	27°♉54'29	-4.8m
	1849 Apr 19 13:05	0°♊	
retrograde	1849 Apr 21 09:17	0°♊03'59	
	1849 Apr 23 05:03	30°℞♉	
evening set	1849 May 07 01:25	25°♉16'01	
inferior conj	1849 May 12 17:22	21°♉48'33	3°25'03
minimum elong	1849 May 13 00:21	21°♉37'34	3°23'07
min. Earth dist.	1849 May 12 17:45	21°♉47'58	0.28730 AU
morning rise	1849 May 18 23:41	18°♉02'02	
desc. node	1849 May 27 11:57	14°♉28'16	
direct	1849 Jun 03 04:43	13°♉34'55	
greatest brilliancy	1849 Jun 13 05:37	15°♉24'28	-4.7m
	1849 Jul 06 23:06	0°♊	
morning max el	1849 Jul 21 22:20	13°♊18'42	45°43'51
	1849 Aug 07 13:19	0°♋	
	1849 Sep 03 21:03	0°♌	
asc. node	1849 Sep 17 15:32	15°♌55'02	
	1849 Sep 29 13:29	0°♍	
	1849 Oct 24 08:12	0°♎	
	1849 Nov 17 14:33	0°♏	
	1849 Dec 11 14:40	0°♐	
	1850 Jan 04 12:21	0°♑	
desc. node	1850 Jan 07 04:56	3°♑22'48	
morning set	1850 Jan 20 21:14	20°♑33'39	
	1850 Jan 28 09:44	0°♒	
	1850 Feb 21 08:13	0°♓	
superior conj	1850 Mar 03 02:04	12°♓10'44	-1°26'00
minimum elong	1850 Mar 03 00:59	12°♓07'21	1°26'01
max. Earth dist.	1850 Mar 07 06:14	17°♓23'21	1.71903 AU
	1850 Mar 17 09:03	0°♈	
	1850 Apr 10 13:22	0°♉	
evening rise	1850 Apr 11 15:53	1°♉21'58	
asc. node	1850 Apr 30 08:22	24°♉23'40	
	1850 May 04 21:57	0°♊	
	1850 May 29 11:15	0°♋	
	1850 Jun 23 06:05	0°♌	
	1850 Jul 18 08:34	0°♍	
	1850 Aug 12 23:10	0°♎	
desc. node	1850 Aug 19 21:36	7°♎58'42	

	1850 Sep 08 11:08	0°♏	
	1850 Oct 06 23:11	0°♐	
evening max el	1850 Oct 07 00:36	0°♐03'29	46°46'19
	1850 Nov 15 12:53	0°♑	
greatest brilliancy	1850 Nov 16 10:59	0°♑20'09	-4.9m
retrograde	1850 Nov 26 03:17	2°♑06'00	
	1850 Dec 06 07:58	30°℞♐	
evening set	1850 Dec 10 10:21	28°♐04'17	
asc. node	1850 Dec 11 00:59	27°♐44'39	
inferior conj	1850 Dec 16 16:18	24°♐25'44	1°27'50
minimum elong	1850 Dec 16 12:58	24°♐30'49	1°26'46
min. Earth dist.	1850 Dec 16 11:46	24°♐32'39	0.26414 AU
morning rise	1850 Dec 22 15:33	20°♐56'06	
direct	1851 Jan 06 00:50	16°♐49'02	
greatest brilliancy	1851 Jan 15 23:54	18°♐41'40	-4.9m
	1851 Feb 03 20:29	0°♑	
morning max el	1851 Feb 25 07:34	19°♑27'24	46°45'52
	1851 Mar 07 13:19	0°♒	
desc. node	1851 Apr 01 14:24	27°♒31'36	
	1851 Apr 03 18:43	0°♓	
	1851 Apr 29 17:30	0°♈	
	1851 May 25 03:07	0°♉	
	1851 Jun 19 05:16	0°♊	
	1851 Jul 14 01:18	0°♋	
asc. node	1851 Jul 23 17:54	11°♋47'31	
	1851 Aug 07 15:07	0°♌	
morning set	1851 Aug 24 08:56	20°♌36'59	
	1851 Aug 31 22:55	0°♍	
	1851 Sep 25 02:02	0°♎	
max. Earth dist.	1851 Sep 27 01:14	2°♎27'14	1.72112 AU
superior conj	1851 Sep 30 08:29	6°♎34'29	1°19'27
minimum elong	1851 Sep 30 15:00	6°♎54'52	1°19'20
	1851 Oct 19 02:17	0°♏	
evening rise	1851 Nov 08 08:55	25°♏23'12	
desc. node	1851 Nov 12 07:20	0°♐18'46	
	1851 Nov 12 01:20	0°♐	
	1851 Dec 06 00:14	0°♑	
	1851 Dec 30 00:04	0°♒	
	1852 Jan 23 02:52	0°♓	
	1852 Feb 16 12:18	0°♈	
asc. node	1852 Mar 04 10:33	20°♈28'25	
	1852 Mar 12 10:23	0°♉	
	1852 Apr 07 07:23	0°♊	
	1852 May 05 04:00	0°♋	
evening max el	1852 May 12 04:37	6°♋56'43	45°28'18
	1852 Jun 09 11:12	0°♌	
greatest brilliancy	1852 Jun 19 02:44	4°♌46'14	-4.7m
desc. node	1852 Jun 23 23:58	6°♌12'37	
retrograde	1852 Jun 29 20:53	6°♌51'26	
evening set	1852 Jul 15 17:04	2°♌04'38	
	1852 Jul 19 05:37	30°℞♋	
inferior conj	1852 Jul 21 09:02	28°♋40'19	-5°51'39
minimum elong	1852 Jul 20 23:11	28°♋55'41	5°49'32
min. Earth dist.	1852 Jul 21 08:53	28°♋40'34	0.28986 AU
morning rise	1852 Jul 26 05:04	25°♋43'27	
direct	1852 Aug 11 23:45	20°♋22'43	
greatest brilliancy	1852 Aug 22 15:29	22°♋24'58	-4.8m
	1852 Sep 05 15:55	0°♌	
morning max el	1852 Sep 30 10:49	21°♌13'24	46°12'15
	1852 Oct 09 02:55	0°♍	
asc. node	1852 Oct 15 03:20	6°♍21'36	
	1852 Nov 05 07:38	0°♎	
	1852 Nov 30 16:36	0°♏	
	1852 Dec 25 06:52	0°♐	
	1853 Jan 18 13:09	0°♑	
desc. node	1853 Feb 03 16:47	20°♑03'31	
	1853 Feb 11 16:40	0°♒	
	1853 Mar 07 19:56	0°♓	
	1853 Apr 01 00:21	0°♈	
morning set	1853 Apr 06 03:36	6°♈21'34	
	1853 Apr 25 06:42	0°♉	
superior conj	1853 May 13 23:50	23°♉04'01	-0°32'12
minimum elong	1853 May 14 06:22	23°♉24'06	0°31'54
max. Earth dist.	1853 May 15 12:19	24°♉56'17	1.73337 AU
	1853 May 19 15:04	0°♊	
asc. node	1853 May 27 20:18	10°♊06'19	
	1853 Jun 13 00:57	0°♋	
evening rise	1853 Jun 19 18:17	8°♋15'04	
	1853 Jul 07 11:51	0°♌	
	1853 Jul 31 23:56	0°♍	
	1853 Aug 25 14:21	0°♎	
desc. node	1853 Sep 16 09:29	26°♎25'08	
	1853 Sep 19 08:44	0°♏	
	1853 Oct 14 09:21	0°♐	
	1853 Nov 08 21:02	0°♑	
	1853 Dec 05 10:13	0°♒	
evening max el	1853 Dec 18 13:28	13°♒53'33	47°18'19
	1854 Jan 04 11:39	0°♓	
asc. node	1854 Jan 07 12:56	2°♓35'11	
greatest brilliancy	1854 Jan 28 04:23	15°♓38'09	-4.9m
retrograde	1854 Feb 07 13:46	17°♓42'25	
evening set	1854 Feb 25 09:31	11°♓30'58	
inferior conj	1854 Feb 28 11:34	9°♓36'08	8°48'07
minimum elong	1854 Feb 28 09:53	9°♓38'44	8°48'05
min. Earth dist.	1854 Feb 27 19:04	10°♓01'57	0.27663 AU
morning rise	1854 Mar 03 10:28	7°♓46'27	
direct	1854 Mar 21 05:23	1°♓41'03	
greatest brilliancy	1854 Mar 30 07:19	3°♓13'51	-4.8m
desc. node	1854 Apr 29 02:12	22°♓48'48	
	1854 May 06 22:18	0°♈	
morning max el	1854 May 09 13:37	2°♈31'35	46°02'45
	1854 Jun 05 02:45	0°♉	
	1854 Jul 01 22:57	0°♊	
	1854 Jul 27 18:22	0°♋	
asc. node	1854 Aug 20 05:43	27°♋59'34	
	1854 Aug 21 21:39	0°♌	
	1854 Sep 15 12:30	0°♍	
	1854 Oct 09 18:10	0°♎	
	1854 Nov 02 18:04	0°♏	
morning set	1854 Nov 03 03:32	0°♏29'38	
	1854 Nov 26 15:08	0°♐	
desc. node	1854 Dec 09 19:11	16°♐34'03	
superior conj	1854 Dec 13 11:10	21°♐10'52	-0°08'47
minimum elong	1854 Dec 13 08:50	21°♐03'30	0°08'41
behind sun begin	1854 Dec 12 10:14	19°♐52'23	
behind sun end	1854 Dec 14 07:26	22°♐14'37	
max. Earth dist.	1854 Dec 13 17:07	21°♐29'34	1.71078 AU
	1854 Dec 20 11:20	0°♑	
	1855 Jan 13 07:51	0°♒	
evening rise	1855 Jan 23 23:25	13°♒22'20	
	1855 Feb 06 05:57	0°♓	
	1855 Mar 02 07:29	0°♈	
	1855 Mar 26 14:54	0°♉	
asc. node	1855 Apr 01 22:33	7°♉43'57	
	1855 Apr 20 06:54	0°♊	
	1855 May 15 11:03	0°♋	
	1855 Jun 10 10:08	0°♌	
	1855 Jul 07 21:27	0°♍	
desc. node	1855 Jul 22 11:48	14°♍40'52	
evening max el	1855 Jul 23 11:24	15°♍37'24	45°38'06
	1855 Aug 08 18:01	0°♎	

greatest brilliancy	1855 Aug 31 23:32	13°♎49'04	-4.8m
retrograde	1855 Sep 10 06:13	15°♎22'14	
evening set	1855 Sep 27 20:53	9°♎34'34	
inferior conj	1855 Oct 01 06:35	7°♎30'41	-8°12'50
minimum elong	1855 Oct 01 13:40	7°♎19'47	8°12'04
min. Earth dist.	1855 Oct 02 03:27	6°♎58'37	0.27849 AU
morning rise	1855 Oct 05 06:12	5°♎05'56	
	1855 Oct 17 09:18	30°℞♍	
direct	1855 Oct 22 10:26	29°♍29'02	
	1855 Oct 27 13:48	0°♎	
greatest brilliancy	1855 Nov 02 12:51	1°♎47'21	-4.9m
asc. node	1855 Nov 12 15:12	7°♎09'30	
	1855 Dec 09 09:22	0°♏	
morning max el	1855 Dec 12 02:58	2°♏45'34	46°52'15
	1856 Jan 06 05:12	0°♐	
	1856 Jan 31 23:14	0°♑	
	1856 Feb 25 23:28	0°♒	
desc. node	1856 Mar 03 04:34	7°♒31'16	
	1856 Mar 21 16:30	0°♓	
	1856 Apr 15 06:46	0°♈	
	1856 May 09 20:13	0°♉	
	1856 Jun 03 09:15	0°♊	
morning set	1856 Jun 14 06:53	13°♊20'33	
asc. node	1856 Jun 24 08:07	25°♊39'29	
	1856 Jun 27 21:05	0°♋	
max. Earth dist.	1856 Jul 18 09:57	25°♋14'22	1.73428 AU
superior conj	1856 Jul 20 17:25	28°♋05'05	0°57'14
minimum elong	1856 Jul 20 08:43	27°♋38'16	0°56'55
	1856 Jul 22 06:44	0°♌	
	1856 Aug 15 14:01	0°♍	
evening rise	1856 Aug 25 15:43	12°♍27'26	
	1856 Sep 08 19:45	0°♎	
	1856 Oct 03 01:12	0°♏	
desc. node	1856 Oct 13 21:29	13°♏25'10	
	1856 Oct 27 07:25	0°♐	
	1856 Nov 20 15:22	0°♑	
	1856 Dec 15 03:13	0°♒	
	1857 Jan 09 00:43	0°♓	
	1857 Feb 03 21:17	0°♈	
asc. node	1857 Feb 04 00:40	0°♈09'32	
evening max el	1857 Feb 28 05:21	26°♈01'12	46°26'36
	1857 Mar 04 06:24	0°♉	
greatest brilliancy	1857 Apr 08 06:34	25°♉45'06	-4.8m
retrograde	1857 Apr 19 01:13	27°♉53'20	
evening set	1857 May 04 19:57	23°♉02'31	
inferior conj	1857 May 10 09:39	19°♉38'12	3°43'25
minimum elong	1857 May 10 17:08	19°♉26'24	3°41'25
min. Earth dist.	1857 May 10 10:18	19°♉37'11	0.28708 AU
morning rise	1857 May 16 14:39	15°♉53'05	
desc. node	1857 May 26 14:01	11°♉57'45	
direct	1857 May 31 20:21	11°♉24'59	
greatest brilliancy	1857 Jun 10 21:06	13°♉14'04	-4.7m
	1857 Jul 07 05:35	0°♊	
morning max el	1857 Jul 19 12:59	11°♊05'59	45°43'36
	1857 Aug 07 06:40	0°♋	
	1857 Sep 03 11:01	0°♌	
asc. node	1857 Sep 16 17:37	15°♌22'44	
	1857 Sep 29 02:01	0°♍	
	1857 Oct 23 20:04	0°♎	
	1857 Nov 17 02:04	0°♏	
	1857 Dec 11 01:57	0°♐	
	1858 Jan 03 23:28	0°♑	
desc. node	1858 Jan 06 06:56	2°♑54'11	
morning set	1858 Jan 18 06:45	17°♑58'07	
	1858 Jan 27 20:45	0°♒	
	1858 Feb 20 19:09	0°♓	
superior conj	1858 Feb 28 13:54	9°♓43'43	-1°25'46
minimum elong	1858 Feb 28 11:48	9°♓37'11	1°25'46
max. Earth dist.	1858 Mar 04 16:43	14°♓52'13	1.71848 AU
	1858 Mar 16 19:56	0°♈	
evening rise	1858 Apr 09 05:59	29°♈03'33	
	1858 Apr 10 00:15	0°♉	
asc. node	1858 Apr 29 10:32	23°♉56'52	
	1858 May 04 08:53	0°♊	
	1858 May 28 22:22	0°♋	
	1858 Jun 22 17:37	0°♌	
	1858 Jul 17 20:54	0°♍	
	1858 Aug 12 12:56	0°♎	
desc. node	1858 Aug 18 23:33	7°♎23'25	
	1858 Sep 08 03:44	0°♏	
evening max el	1858 Oct 04 12:42	27°♏37'12	46°43'54
	1858 Oct 06 23:18	0°♐	
greatest brilliancy	1858 Nov 14 00:23	27°♐52'05	-4.9m
retrograde	1858 Nov 23 15:02	29°♐36'49	
evening set	1858 Dec 07 22:28	25°♐34'51	
asc. node	1858 Dec 10 03:03	24°♐22'15	
inferior conj	1858 Dec 14 04:22	21°♐56'59	1°03'20
minimum elong	1858 Dec 14 01:57	22°♐00'40	1°02'32
min. Earth dist.	1858 Dec 14 01:39	22°♐01'08	0.26415 AU
morning rise	1858 Dec 20 05:17	18°♐25'18	
direct	1859 Jan 03 12:36	14°♐19'48	
greatest brilliancy	1859 Jan 13 14:23	16°♐14'59	-4.9m
	1859 Feb 04 10:19	0°♑	
morning max el	1859 Feb 22 20:31	17°♑01'49	46°47'09
	1859 Mar 07 08:48	0°♒	
desc. node	1859 Mar 31 16:36	26°♒54'11	
	1859 Apr 03 09:50	0°♓	
	1859 Apr 29 06:40	0°♈	
	1859 May 24 15:12	0°♉	
	1859 Jun 18 16:40	0°♊	
	1859 Jul 13 12:17	0°♋	
asc. node	1859 Jul 22 19:54	11°♋20'28	
	1859 Aug 07 01:51	0°♌	
morning set	1859 Aug 22 02:11	18°♌29'02	
	1859 Aug 31 09:35	0°♍	
	1859 Sep 24 12:44	0°♎	
max. Earth dist.	1859 Sep 24 18:51	0°♎19'05	1.72167 AU
superior conj	1859 Sep 28 00:10	4°♎20'13	1°20'35
minimum elong	1859 Sep 28 06:04	4°♎38'36	1°20'30
	1859 Oct 18 13:07	0°♏	
evening rise	1859 Nov 05 21:15	22°♏57'18	
desc. node	1859 Nov 11 09:28	29°♏51'06	
	1859 Nov 11 12:19	0°♐	
	1859 Dec 05 11:23	0°♑	
	1859 Dec 29 11:26	0°♒	
	1860 Jan 22 14:29	0°♓	
	1860 Feb 16 00:22	0°♈	
asc. node	1860 Mar 03 12:38	19°♈57'01	
	1860 Mar 11 23:18	0°♉	
	1860 Apr 06 22:10	0°♊	
	1860 May 04 23:50	0°♋	
evening max el	1860 May 09 20:40	4°♋46'55	45°29'25
	1860 Jun 10 22:20	0°♌	
greatest brilliancy	1860 Jun 16 17:23	2°♌36'13	-4.7m
desc. node	1860 Jun 23 02:01	4°♌20'18	
retrograde	1860 Jun 27 13:39	4°♌43'10	
evening set	1860 Jul 13 06:54	29°♋59'18	
	1860 Jul 13 06:24	30°℞♋	
inferior conj	1860 Jul 19 01:17	26°♋31'30	-5°36'47
minimum elong	1860 Jul 18 15:31	26°♋46'41	5°34'36
min. Earth dist.	1860 Jul 19 00:22	26°♋32'55	0.28993 AU
morning rise	1860 Jul 24 00:01	23°♋30'58	

direct	1860 Aug 09 16:26	18°♋13'49		
greatest brilliancy	1860 Aug 20 07:05	20°♋15'33	-4.7m	
	1860 Sep 06 08:37	0°♌		
morning max el	1860 Sep 28 03:02	19°♌02'23	46°10'45	
	1860 Oct 08 21:38	0°♍		
asc. node	1860 Oct 14 05:31	5°♍40'29		
	1860 Nov 04 22:14	0°♎		
	1860 Nov 30 05:35	0°♏		
	1860 Dec 24 19:03	0°♐		
	1861 Jan 18 00:52	0°♑		
desc. node	1861 Feb 02 18:47	19°♑34'01		
	1861 Feb 11 04:02	0°♒		
	1861 Mar 07 07:01	0°♓		
	1861 Mar 31 11:12	0°♈		
morning set	1861 Apr 03 18:02	4°♈04'07		
	1861 Apr 24 17:23	0°♉		
superior conj	1861 May 11 16:26	20°♉54'35	-0°35'15	
minimum elong	1861 May 11 23:30	21°♉16'23	0°34'56	
max. Earth dist.	1861 May 13 09:33	23°♉01'13	1.73306 AU	
	1861 May 19 01:40	0°♊		
asc. node	1861 May 26 22:19	9°♊39'56		
	1861 Jun 12 11:35	0°♋		
evening rise	1861 Jun 17 12:56	6°♋12'23		
	1861 Jul 06 22:37	0°♌		
	1861 Jul 31 10:58	0°♍		
	1861 Aug 25 01:47	0°♎		
desc. node	1861 Sep 15 11:40	25°♎55'30		
	1861 Sep 18 20:50	0°♏		
	1861 Oct 13 22:31	0°♐		
	1861 Nov 08 12:00	0°♑		
	1861 Dec 05 05:02	0°♒		
evening max el	1861 Dec 16 05:07	11°♒34'23	47°18'38	
	1862 Jan 04 21:21	0°♓		
asc. node	1862 Jan 06 14:54	1°♓24'57		
greatest brilliancy	1862 Jan 25 18:28	13°♓15'24	-4.9m	
retrograde	1862 Feb 05 04:47	15°♓20'08		
evening set	1862 Feb 22 21:55	9°♓11'52		
min. Earth dist.	1862 Feb 25 07:57	7°♓42'09	0.27607 AU	
inferior conj	1862 Feb 26 01:36	7°♓14'32	8°46'23	
minimum elong	1862 Feb 25 23:04	7°♓18'30	8°46'17	
morning rise	1862 Mar 01 00:27	5°♓25'06		
	1862 Mar 13 03:44	30°℞♒		
direct	1862 Mar 18 19:31	29°♒20'40		
	1862 Mar 24 15:08	0°♓		
greatest brilliancy	1862 Mar 27 19:34	0°♓52'21	-4.8m	
desc. node	1862 Apr 28 04:18	21°♓51'04		
	1862 May 06 21:42	0°♈		
morning max el	1862 May 07 04:21	0°♈16'05	46°04'04	
	1862 Jun 04 18:45	0°♉		
	1862 Jul 01 12:19	0°♊		
	1862 Jul 27 06:29	0°♋		
asc. node	1862 Aug 19 07:45	27°♋31'10		
	1862 Aug 21 09:04	0°♌		
	1862 Sep 14 23:33	0°♍		
	1862 Oct 09 05:03	0°♎		
morning set	1862 Oct 31 17:16	28°♎08'24		
	1862 Nov 02 04:53	0°♏		
	1862 Nov 26 01:57	0°♐		
desc. node	1862 Dec 08 21:11	16°♐06'16		
superior conj	1862 Dec 10 21:40	18°♐38'47	-0°04'52	
minimum elong	1862 Dec 10 20:23	18°♐34'44	0°04'48	
behind sun begin	1862 Dec 09 19:03	17°♐15'03		
behind sun end	1862 Dec 11 21:43	19°♐54'26		
max. Earth dist.	1862 Dec 10 23:22	18°♐44'08	1.71087 AU	
	1862 Dec 19 22:12	0°♑		
	1863 Jan 12 18:46	0°♒		
evening rise	1863 Jan 21 09:41	10°♒49'35		
	1863 Feb 05 16:55	0°♓		
	1863 Mar 01 18:35	0°♈		
	1863 Mar 26 02:12	0°♉		
asc. node	1863 Apr 01 00:42	7°♉15'46		
	1863 Apr 19 18:38	0°♊		
	1863 May 14 23:37	0°♋		
	1863 Jun 10 00:22	0°♌		
	1863 Jul 07 15:45	0°♍		
evening max el	1863 Jul 21 01:27	13°♍21'38	45°36'28	
desc. node	1863 Jul 21 13:48	13°♍51'02		
	1863 Aug 09 05:56	0°♎		
greatest brilliancy	1863 Aug 29 13:02	11°♎32'09	-4.8m	
retrograde	1863 Sep 07 19:22	13°♎05'03		
evening set	1863 Sep 25 13:02	7°♎14'13		
inferior conj	1863 Sep 28 20:51	5°♎12'54	-8°19'45	
minimum elong	1863 Sep 29 03:14	5°♎03'04	8°19'09	
min. Earth dist.	1863 Sep 29 17:30	4°♎41'05	0.27912 AU	
morning rise	1863 Oct 02 17:10	2°♎52'37		
	1863 Oct 08 02:58	30°℞♍		
direct	1863 Oct 20 01:00	27°♍10'20		
greatest brilliancy	1863 Oct 31 03:47	29°♍28'13	-4.9m	
	1863 Nov 01 10:28	0°♎		
asc. node	1863 Nov 11 17:10	5°♎48'17		
	1863 Dec 09 08:00	0°♏		
morning max el	1863 Dec 09 16:06	0°♏20'36	46°51'28	
	1864 Jan 05 21:25	0°♐		
	1864 Jan 31 13:04	0°♑		
	1864 Feb 25 12:06	0°♒		
desc. node	1864 Mar 02 06:44	7°♒00'07		
	1864 Mar 21 04:23	0°♓		
	1864 Apr 14 18:10	0°♈		
	1864 May 09 07:17	0°♉		
	1864 Jun 02 20:03	0°♊		
morning set	1864 Jun 12 00:52	11°♊15'51		
asc. node	1864 Jun 23 10:07	25°♊12'54		
	1864 Jun 27 07:44	0°♋		
max. Earth dist.	1864 Jul 16 04:58	23°♋12'33	1.73452 AU	
superior conj	1864 Jul 18 11:52	26°♋01'28	0°54'53	
minimum elong	1864 Jul 18 03:14	25°♋34'56	0°54'34	
	1864 Jul 21 17:21	0°♌		
	1864 Aug 15 00:43	0°♍		
evening rise	1864 Aug 23 09:20	10°♍20'09		
	1864 Sep 08 06:38	0°♎		
	1864 Oct 02 12:23	0°♏		
desc. node	1864 Oct 12 23:35	12°♏56'41		
	1864 Oct 26 18:58	0°♐		
	1864 Nov 20 03:21	0°♑		
	1864 Dec 14 15:51	0°♒		
	1865 Jan 08 14:30	0°♓		
asc. node	1865 Feb 03 02:47	29°♓30'06		
	1865 Feb 03 13:29	0°♈		
evening max el	1865 Feb 25 19:12	23°♈41'55	46°28'55	
	1865 Mar 04 06:08	0°♉		
greatest brilliancy	1865 Apr 06 00:01	23°♉35'13	-4.8m	
retrograde	1865 Apr 16 17:11	25°♉42'41		
evening set	1865 May 02 14:29	20°♉48'31		
inferior conj	1865 May 08 01:54	17°♉27'38	4°01'36	
minimum elong	1865 May 08 09:49	17°♉15'07	3°59'30	
min. Earth dist.	1865 May 08 02:53	17°♉26'04	0.28689 AU	
morning rise	1865 May 14 05:26	13°♉44'19		
desc. node	1865 May 25 16:01	9°♉31'46		
direct	1865 May 29 11:35	9°♉14'36		
greatest brilliancy	1865 Jun 08 13:00	11°♉03'54	-4.7m	
	1865 Jul 07 10:06	0°♊		

morning max el	1865 Jul 17 04:03	8°♊54'06	45°43'31
	1865 Aug 06 23:39	0°♋	
	1865 Sep 03 00:49	0°♌	
asc. node	1865 Sep 15 19:47	14°♌50'54	
	1865 Sep 28 14:28	0°♍	
	1865 Oct 23 07:51	0°♎	
	1865 Nov 16 13:31	0°♏	
	1865 Dec 10 13:14	0°♐	
	1866 Jan 03 10:36	0°♑	
desc. node	1866 Jan 05 08:58	2°♑25'38	
morning set	1866 Jan 15 16:32	15°♑23'16	
	1866 Jan 27 07:46	0°♒	
	1866 Feb 20 06:05	0°♓	
superior conj	1866 Feb 26 01:56	7°♓17'20	-1°25'21
minimum elong	1866 Feb 25 22:49	7°♓07'37	1°25'20
max. Earth dist.	1866 Mar 02 01:40	12°♓16'21	1.71793 AU
	1866 Mar 16 06:49	0°♈	
evening rise	1866 Apr 06 20:15	26°♈45'37	
	1866 Apr 09 11:07	0°♉	
asc. node	1866 Apr 28 12:32	23°♉29'26	
	1866 May 03 19:50	0°♊	
	1866 May 28 09:35	0°♋	
	1866 Jun 22 05:18	0°♌	
	1866 Jul 17 09:25	0°♍	
	1866 Aug 12 02:56	0°♎	
desc. node	1866 Aug 18 01:43	6°♎48'17	
	1866 Sep 07 20:43	0°♏	
evening max el	1866 Oct 02 01:23	25°♏12'31	46°41'35
	1866 Oct 07 00:41	0°♐	
greatest brilliancy	1866 Nov 11 13:15	25°♐23'32	-4.9m
retrograde	1866 Nov 21 03:20	27°♐07'52	
evening set	1866 Dec 05 10:54	23°♐05'06	
asc. node	1866 Dec 09 05:04	20°♐57'38	
inferior conj	1866 Dec 11 16:30	19°♐28'04	0°38'41
minimum elong	1866 Dec 11 15:01	19°♐30'19	0°38'12
min. Earth dist.	1866 Dec 11 15:16	19°♐29'55	0.26423 AU
morning rise	1866 Dec 17 18:56	15°♐54'46	
direct	1867 Jan 01 01:01	11°♐50'22	
greatest brilliancy	1867 Jan 11 04:28	13°♐47'33	-4.9m
	1867 Feb 04 20:48	0°♑	
morning max el	1867 Feb 20 10:39	14°♑38'47	46°48'27
	1867 Mar 07 03:53	0°♒	
desc. node	1867 Mar 30 18:39	26°♒16'23	
	1867 Apr 03 00:51	0°♓	
	1867 Apr 28 19:50	0°♈	
	1867 May 24 03:20	0°♉	
	1867 Jun 18 04:11	0°♊	
	1867 Jul 12 23:25	0°♋	
asc. node	1867 Jul 21 22:01	10°♋53'10	
	1867 Aug 06 12:48	0°♌	
morning set	1867 Aug 19 19:27	16°♌20'35	
	1867 Aug 30 20:28	0°♍	
max. Earth dist.	1867 Sep 22 11:34	28°♍07'32	1.72217 AU
	1867 Sep 23 23:39	0°♎	
superior conj	1867 Sep 25 15:54	2°♎05'31	1°21'35
minimum elong	1867 Sep 25 21:07	2°♎21'48	1°21'31
	1867 Oct 18 00:07	0°♏	
evening rise	1867 Nov 03 09:40	20°♏31'09	
desc. node	1867 Nov 10 11:25	29°♏22'16	
	1867 Nov 10 23:28	0°♐	
	1867 Dec 04 22:45	0°♑	
	1867 Dec 28 23:02	0°♒	
	1868 Jan 22 02:23	0°♓	
	1868 Feb 15 12:44	0°♈	
asc. node	1868 Mar 02 14:48	19°♈24'56	
	1868 Mar 11 12:34	0°♉	
	1868 Apr 06 13:22	0°♊	
	1868 May 04 20:32	0°♋	
evening max el	1868 May 07 13:22	2°♋38'06	45°30'34
	1868 Jun 13 05:24	0°♌	
greatest brilliancy	1868 Jun 14 08:25	0°♌26'14	-4.7m
desc. node	1868 Jun 22 04:01	2°♌23'16	
retrograde	1868 Jun 25 06:23	2°♌34'16	
	1868 Jul 06 16:17	30°℞♋	
evening set	1868 Jul 10 21:00	27°♋53'25	
inferior conj	1868 Jul 16 17:34	24°♋22'07	-5°21'30
minimum elong	1868 Jul 16 08:00	24°♋37'02	5°19'18
min. Earth dist.	1868 Jul 16 15:55	24°♋24'42	0.28999 AU
morning rise	1868 Jul 21 18:59	21°♋17'50	
direct	1868 Aug 07 09:26	16°♋04'32	
greatest brilliancy	1868 Aug 17 22:16	18°♋04'55	-4.7m
	1868 Sep 06 21:28	0°♌	
morning max el	1868 Sep 25 19:12	16°♌50'23	46°09'12
	1868 Oct 08 16:14	0°♍	
asc. node	1868 Oct 13 07:29	4°♍58'17	
	1868 Nov 04 12:59	0°♎	
	1868 Nov 29 18:46	0°♏	
	1868 Dec 24 07:26	0°♐	
	1869 Jan 17 12:48	0°♑	
desc. node	1869 Feb 01 20:54	19°♑04'13	
	1869 Feb 10 15:39	0°♒	
	1869 Mar 06 18:24	0°♓	
	1869 Mar 30 22:22	0°♈	
morning set	1869 Apr 01 08:23	1°♈45'25	
	1869 Apr 24 04:23	0°♉	
superior conj	1869 May 09 09:01	18°♉44'09	-0°38'16
minimum elong	1869 May 09 16:36	19°♉07'31	0°37'55
max. Earth dist.	1869 May 11 07:34	21°♉07'30	1.73269 AU
	1869 May 18 12:35	0°♊	
asc. node	1869 May 26 00:22	9°♊12'42	
	1869 Jun 11 22:31	0°♋	
evening rise	1869 Jun 15 07:37	4°♋08'52	
	1869 Jul 06 09:41	0°♌	
	1869 Jul 30 22:20	0°♍	
	1869 Aug 24 13:37	0°♎	
desc. node	1869 Sep 14 13:40	25°♎24'02	
	1869 Sep 18 09:24	0°♏	
	1869 Oct 13 12:12	0°♐	
	1869 Nov 08 03:35	0°♑	
	1869 Dec 05 00:48	0°♒	
evening max el	1869 Dec 13 20:22	9°♒13'00	47°18'53
	1870 Jan 05 10:59	0°♓	
asc. node	1870 Jan 05 17:01	0°♓11'51	
greatest brilliancy	1870 Jan 23 08:59	10°♓51'53	-4.9m
retrograde	1870 Feb 02 19:19	12°♓56'12	
evening set	1870 Feb 20 09:51	6°♓52'01	
min. Earth dist.	1870 Feb 22 21:02	5°♓20'27	0.27550 AU
inferior conj	1870 Feb 23 15:32	4°♓51'30	8°43'42
minimum elong	1870 Feb 23 12:10	4°♓56'45	8°43'32
morning rise	1870 Feb 26 14:45	3°♓01'28	
	1870 Mar 04 03:09	30°℞♒	
direct	1870 Mar 16 09:21	26°♒58'51	
greatest brilliancy	1870 Mar 25 08:04	28°♒29'29	-4.8m
	1870 Mar 29 06:20	0°♓	
desc. node	1870 Apr 27 06:15	20°♓53'03	
morning max el	1870 May 04 18:10	27°♓56'54	46°05'26
	1870 May 06 20:37	0°♈	
	1870 Jun 04 10:54	0°♉	
	1870 Jul 01 01:57	0°♊	
	1870 Jul 26 18:52	0°♋	
asc. node	1870 Aug 18 09:56	27°♋02'16	

	1870 Aug 20 20:47	0°♌	
	1870 Sep 14 10:55	0°♍	
	1870 Oct 08 16:16	0°♎	
morning set	1870 Oct 29 06:48	25°♎45'15	
	1870 Nov 01 16:04	0°♏	
	1870 Nov 25 13:11	0°♐	
desc. node	1870 Dec 07 23:15	15°♐37'26	
superior conj	1870 Dec 08 07:56	16°♐04'47	-0°00'53
minimum elong	1870 Dec 08 07:43	16°♐04'04	0°00'52
behind sun begin	1870 Dec 07 05:35	14°♐41'52	
behind sun end	1870 Dec 09 09:50	17°♐26'15	
max. Earth dist.	1870 Dec 08 02:30	15°♐47'38	1.71096 AU
	1870 Dec 19 09:27	0°♑	
	1871 Jan 12 06:02	0°♒	
evening rise	1871 Jan 18 19:35	8°♒14'36	
	1871 Feb 05 04:15	0°♓	
	1871 Mar 01 06:01	0°♈	
	1871 Mar 25 13:54	0°♉	
asc. node	1871 Mar 31 02:40	6°♉45'53	
	1871 Apr 19 06:46	0°♊	
	1871 May 14 12:37	0°♋	
	1871 Jun 09 15:08	0°♌	
	1871 Jul 07 10:53	0°♍	
evening max el	1871 Jul 18 14:48	11°♍03'25	45°35'00
desc. node	1871 Jul 20 15:58	12°♍59'54	
	1871 Aug 09 22:20	0°♎	
greatest brilliancy	1871 Aug 27 02:28	9°♎14'32	-4.8m
retrograde	1871 Sep 05 08:31	10°♎47'33	
evening set	1871 Sep 23 04:56	4°♎53'35	
inferior conj	1871 Sep 26 11:11	2°♎54'38	-8°25'46
minimum elong	1871 Sep 26 16:50	2°♎45'55	8°25'17
min. Earth dist.	1871 Sep 27 07:43	2°♎22'58	0.27979 AU
morning rise	1871 Sep 30 04:27	0°♎38'38	
	1871 Oct 01 06:56	30°℞♍	
direct	1871 Oct 17 15:22	24°♍50'53	
greatest brilliancy	1871 Oct 28 19:18	27°♍09'08	-4.9m
	1871 Nov 03 18:05	0°♎	
asc. node	1871 Nov 10 19:14	4°♎28'47	
morning max el	1871 Dec 07 05:29	27°♎55'06	46°50'31
	1871 Dec 09 06:14	0°♏	
	1872 Jan 05 13:47	0°♐	
	1872 Jan 31 03:12	0°♑	
	1872 Feb 25 01:01	0°♒	
desc. node	1872 Mar 01 08:49	6°♒27'47	
	1872 Mar 20 16:33	0°♓	
	1872 Apr 14 05:50	0°♈	
	1872 May 08 18:37	0°♉	
	1872 Jun 02 07:09	0°♊	
morning set	1872 Jun 09 18:43	9°♊09'44	
asc. node	1872 Jun 22 12:15	24°♊45'52	
	1872 Jun 26 18:41	0°♋	
max. Earth dist.	1872 Jul 14 00:47	21°♋12'18	1.73474 AU
superior conj	1872 Jul 16 06:21	23°♋57'06	0°52'28
minimum elong	1872 Jul 15 21:51	23°♋30'57	0°52'07
	1872 Jul 21 04:14	0°♌	
	1872 Aug 14 11:40	0°♍	
evening rise	1872 Aug 21 03:13	8°♍13'00	
	1872 Sep 07 17:47	0°♎	
	1872 Oct 01 23:49	0°♏	
desc. node	1872 Oct 12 01:34	12°♏27'04	
	1872 Oct 26 06:46	0°♐	
	1872 Nov 19 15:39	0°♑	
	1872 Dec 14 04:53	0°♒	
	1873 Jan 08 04:46	0°♓	
asc. node	1873 Feb 02 04:53	28°♓49'04	
	1873 Feb 03 06:23	0°♈	
evening max el	1873 Feb 23 08:58	21°♈21'15	46°31'28
	1873 Mar 04 07:31	0°♉	
greatest brilliancy	1873 Apr 03 16:51	21°♉23'20	-4.8m
retrograde	1873 Apr 14 09:23	23°♉30'47	
evening set	1873 Apr 30 08:57	18°♉32'49	
inferior conj	1873 May 05 17:57	15°♉15'40	4°19'32
minimum elong	1873 May 06 02:19	15°♉02'29	4°17'22
min. Earth dist.	1873 May 05 19:06	15°♉13'52	0.28670 AU
morning rise	1873 May 11 19:54	11°♉34'37	
desc. node	1873 May 24 18:07	7°♉09'16	
direct	1873 May 27 02:40	7°♉02'44	
greatest brilliancy	1873 Jun 06 04:38	8°♉52'28	-4.7m
	1873 Jul 07 13:13	0°♊	
morning max el	1873 Jul 14 19:52	6°♊43'19	45°43'32
	1873 Aug 06 16:33	0°♋	
	1873 Sep 02 14:41	0°♌	
asc. node	1873 Sep 14 21:42	14°♌18'01	
	1873 Sep 28 03:00	0°♍	
	1873 Oct 22 19:44	0°♎	
	1873 Nov 16 01:04	0°♏	
	1873 Dec 10 00:35	0°♐	
	1874 Jan 02 21:51	0°♑	
desc. node	1874 Jan 04 11:07	1°♑57'02	
morning set	1874 Jan 13 02:07	12°♑47'20	
	1874 Jan 26 18:57	0°♒	
	1874 Feb 19 17:12	0°♓	
superior conj	1874 Feb 23 13:22	4°♓48'21	-1°24'45
minimum elong	1874 Feb 23 09:15	4°♓35'26	1°24'43
max. Earth dist.	1874 Feb 27 08:49	9°♓34'12	1.71742 AU
	1874 Mar 15 17:52	0°♈	
evening rise	1874 Apr 04 09:55	24°♈25'16	
	1874 Apr 08 22:09	0°♉	
asc. node	1874 Apr 27 14:33	23°♉01'35	
	1874 May 03 06:57	0°♊	
	1874 May 27 20:56	0°♋	
	1874 Jun 21 17:09	0°♌	
	1874 Jul 16 22:08	0°♍	
	1874 Aug 11 17:11	0°♎	
desc. node	1874 Aug 17 03:45	6°♎12'08	
	1874 Sep 07 14:07	0°♏	
evening max el	1874 Sep 29 15:06	22°♏50'40	46°39'23
	1874 Oct 07 03:25	0°♐	
greatest brilliancy	1874 Nov 09 01:45	22°♐55'11	-4.9m
retrograde	1874 Nov 18 16:07	24°♐39'21	
evening set	1874 Dec 02 23:42	20°♐35'45	
asc. node	1874 Dec 08 07:10	17°♐32'09	
inferior conj	1874 Dec 09 04:40	16°♐59'34	0°14'00
minimum elong	1874 Dec 09 04:07	17°♐00'23	0°13'50
transit middle	1874 Dec 09 04:07	17°♐00'23	0°13'50
transit begin	1874 Dec 09 01:49	17°♐03'53	
transit end	1874 Dec 09 06:26	16°♐56'53	
min. Earth dist.	1874 Dec 09 04:38	16°♐59'36	0.26433 AU
morning rise	1874 Dec 15 08:25	13°♐24'58	
direct	1874 Dec 29 13:58	9°♐21'37	
greatest brilliancy	1875 Jan 08 18:03	11°♐19'56	-4.9m
	1875 Feb 05 04:26	0°♑	
morning max el	1875 Feb 18 01:10	12°♑16'50	46°49'25
	1875 Mar 06 22:29	0°♒	
desc. node	1875 Mar 29 20:36	25°♒38'27	
	1875 Apr 02 15:44	0°♓	
	1875 Apr 28 08:58	0°♈	
	1875 May 23 15:27	0°♉	
	1875 Jun 17 15:39	0°♊	
	1875 Jul 12 10:30	0°♋	
asc. node	1875 Jul 21 00:05	10°♋25'57	

	1875 Aug 05 23:41	0°♌	
morning set	1875 Aug 17 12:36	14°♌12'01	
	1875 Aug 30 07:18	0°♍	
max. Earth dist.	1875 Sep 20 01:59	25°♍49'09	1.72266 AU
superior conj	1875 Sep 23 07:45	29°♍51'25	1°22'28
minimum elong	1875 Sep 23 12:15	0°♎05'28	1°22'24
	1875 Sep 23 10:30	0°♎	
	1875 Oct 17 11:03	0°♏	
evening rise	1875 Oct 31 22:17	18°♏05'54	
desc. node	1875 Nov 09 13:30	28°♏54'13	
	1875 Nov 10 10:32	0°♐	
	1875 Dec 04 09:59	0°♑	
	1875 Dec 28 10:28	0°♒	
	1876 Jan 21 14:07	0°♓	
	1876 Feb 15 00:58	0°♈	
asc. node	1876 Mar 01 16:43	18°♈52'26	
	1876 Mar 11 01:45	0°♉	
	1876 Apr 06 04:41	0°♊	
	1876 May 04 17:55	0°♋	
evening max el	1876 May 05 06:07	0°♋29'30	45°31'44
greatest brilliancy	1876 Jun 12 00:10	28°♋17'11	-4.7m
	1876 Jun 18 04:46	0°♌	
desc. node	1876 Jun 21 06:09	0°♌22'04	
retrograde	1876 Jun 22 22:44	0°♌25'21	
	1876 Jun 27 13:47	30°℞♋	
evening set	1876 Jul 08 11:13	25°♋47'37	
inferior conj	1876 Jul 14 09:50	22°♋13'03	-5°05'40
minimum elong	1876 Jul 14 00:30	22°♋27'37	5°03'28
min. Earth dist.	1876 Jul 14 07:43	22°♋16'20	0.29001 AU
morning rise	1876 Jul 19 13:46	19°♋04'54	
direct	1876 Aug 05 02:10	13°♋55'40	
greatest brilliancy	1876 Aug 15 13:18	15°♋54'27	-4.7m
	1876 Sep 07 06:46	0°♌	
morning max el	1876 Sep 23 10:30	14°♌36'56	46°07'36
	1876 Oct 08 10:10	0°♍	
asc. node	1876 Oct 12 09:33	4°♍17'24	
	1876 Nov 04 03:20	0°♎	
	1876 Nov 29 07:38	0°♏	
	1876 Dec 23 19:31	0°♐	
	1877 Jan 17 00:25	0°♑	
desc. node	1877 Jan 31 22:56	18°♑35'05	
	1877 Feb 10 02:57	0°♒	
	1877 Mar 06 05:25	0°♓	
morning set	1877 Mar 29 22:48	29°♓27'49	
	1877 Mar 30 09:11	0°♈	
	1877 Apr 23 15:04	0°♉	
superior conj	1877 May 07 01:30	16°♉34'14	-0°41'13
minimum elong	1877 May 07 09:33	16°♉59'01	0°40'53
max. Earth dist.	1877 May 09 05:07	19°♉13'15	1.73234 AU
	1877 May 17 23:13	0°♊	
asc. node	1877 May 25 02:29	8°♊46'35	
	1877 Jun 11 09:11	0°♋	
evening rise	1877 Jun 13 02:00	2°♋05'14	
	1877 Jul 05 20:30	0°♌	
	1877 Jul 30 09:25	0°♍	
	1877 Aug 24 01:12	0°♎	
desc. node	1877 Sep 13 15:39	24°♎53'16	
	1877 Sep 17 21:44	0°♏	
	1877 Oct 13 01:42	0°♐	
	1877 Nov 07 19:06	0°♑	
	1877 Dec 04 20:49	0°♒	
evening max el	1877 Dec 11 11:00	6°♒50'55	47°19'04
asc. node	1878 Jan 04 19:07	28°♒57'41	
	1878 Jan 06 04:29	0°♓	
greatest brilliancy	1878 Jan 21 00:14	8°♓30'23	-4.9m
retrograde	1878 Jan 31 09:34	10°♓33'37	
evening set	1878 Feb 17 21:32	4°♓34'19	
min. Earth dist.	1878 Feb 20 10:37	2°♓59'49	0.27488 AU
inferior conj	1878 Feb 21 05:35	2°♓30'06	8°40'04
minimum elong	1878 Feb 21 01:23	2°♓36'40	8°39'49
morning rise	1878 Feb 24 05:31	0°♓38'52	
	1878 Feb 25 07:37	30°℞♒	
direct	1878 Mar 13 22:37	24°♒38'40	
greatest brilliancy	1878 Mar 22 21:09	26°♒08'47	-4.8m
	1878 Mar 31 11:51	0°♓	
desc. node	1878 Apr 26 08:24	19°♓58'16	
morning max el	1878 May 02 07:20	25°♓37'27	46°06'48
	1878 May 06 18:02	0°♈	
	1878 Jun 04 02:18	0°♉	
	1878 Jun 30 15:04	0°♊	
	1878 Jul 26 06:50	0°♋	
asc. node	1878 Aug 17 11:52	26°♋33'46	
	1878 Aug 20 08:07	0°♌	
	1878 Sep 13 21:54	0°♍	
	1878 Oct 08 03:05	0°♎	
morning set	1878 Oct 26 20:21	23°♎23'28	
	1878 Nov 01 02:53	0°♏	
	1878 Nov 25 00:02	0°♐	
max. Earth dist.	1878 Dec 05 05:41	12°♐52'34	1.71113 AU
superior conj	1878 Dec 05 18:20	13°♐32'19	0°03'08
minimum elong	1878 Dec 05 19:08	13°♐34'53	0°03'05
behind sun begin	1878 Dec 04 17:20	12°♐13'43	
behind sun end	1878 Dec 06 20:56	14°♐56'02	
desc. node	1878 Dec 07 01:22	15°♐09'57	
	1878 Dec 18 20:21	0°♑	
	1879 Jan 11 16:58	0°♒	
evening rise	1879 Jan 16 05:35	5°♒40'58	
	1879 Feb 04 15:12	0°♓	
	1879 Feb 28 17:04	0°♈	
	1879 Mar 25 01:09	0°♉	
asc. node	1879 Mar 30 04:44	6°♉17'43	
	1879 Apr 18 18:28	0°♊	
	1879 May 14 01:11	0°♋	
	1879 Jun 09 05:35	0°♌	
	1879 Jul 07 06:05	0°♍	
evening max el	1879 Jul 16 04:15	8°♍46'46	45°33'34
desc. node	1879 Jul 19 17:59	12°♍08'36	
	1879 Aug 10 19:37	0°♎	
greatest brilliancy	1879 Aug 24 15:32	6°♎57'57	-4.8m
retrograde	1879 Sep 02 22:11	8°♎31'50	
evening set	1879 Sep 20 20:36	2°♎34'57	
inferior conj	1879 Sep 24 01:39	0°♎37'56	-8°30'43
minimum elong	1879 Sep 24 06:33	0°♎30'23	8°30'23
min. Earth dist.	1879 Sep 24 21:54	0°♎06'43	0.28046 AU
	1879 Sep 25 02:16	30°℞♍	
morning rise	1879 Sep 27 16:11	28°♍26'00	
direct	1879 Oct 15 05:59	22°♍32'58	
greatest brilliancy	1879 Oct 26 10:58	24°♍51'57	-4.9m
	1879 Nov 05 05:16	0°♎	
asc. node	1879 Nov 09 21:21	3°♎13'07	
morning max el	1879 Dec 04 19:48	25°♎33'25	46°49'32
	1879 Dec 09 03:10	0°♏	
	1880 Jan 05 05:28	0°♐	
	1880 Jan 30 16:48	0°♑	
	1880 Feb 24 13:30	0°♒	
desc. node	1880 Feb 29 10:43	5°♒56'07	
	1880 Mar 20 04:19	0°♓	
	1880 Apr 13 17:05	0°♈	
	1880 May 08 05:30	0°♉	
	1880 Jun 01 17:47	0°♊	
morning set	1880 Jun 07 12:50	7°♊05'50	

asc. node	1880 Jun 21	14:17	24°♊19'55	
	1880 Jun 26	05:10	0°♋	
max. Earth dist.	1880 Jul 11	22:46	19°♋20'03	1.73500 AU
superior conj	1880 Jul 14	01:01	21°♋54'35	0°49'58
minimum elong	1880 Jul 13	16:42	21°♋29'00	0°49'39
	1880 Jul 20	14:44	0°♌	
	1880 Aug 13	22:16	0°♍	
evening rise	1880 Aug 18	21:18	6°♍07'42	
	1880 Sep 07	04:36	0°♎	
	1880 Oct 01	10:55	0°♏	
desc. node	1880 Oct 11	03:40	11°♏58'51	
	1880 Oct 25	18:16	0°♐	
	1880 Nov 19	03:40	0°♑	
	1880 Dec 13	17:40	0°♒	
	1881 Jan 07	18:51	0°♓	
asc. node	1881 Feb 01	06:50	28°♓08'06	
	1881 Feb 02	23:16	0°♈	
evening max el	1881 Feb 20	23:50	19°♈04'14	46°34'01
	1881 Mar 04	09:54	0°♉	
greatest brilliancy	1881 Apr 01	09:18	19°♉11'59	-4.8m
retrograde	1881 Apr 12	02:07	21°♉20'01	
evening set	1881 Apr 28	03:33	16°♉18'08	
inferior conj	1881 May 03	10:04	13°♉04'46	4°36'59
minimum elong	1881 May 03	18:48	12°♉51'00	4°34'47
min. Earth dist.	1881 May 03	11:01	13°♉03'15	0.28646 AU
morning rise	1881 May 09	10:17	9°♉26'28	
desc. node	1881 May 23	20:10	4°♉53'05	
direct	1881 May 24	18:10	4°♉52'06	
greatest brilliancy	1881 Jun 03	19:45	6°♉41'52	-4.7m
	1881 Jul 07	14:17	0°♊	
morning max el	1881 Jul 12	12:33	4°♊35'59	45°43'35
	1881 Aug 06	08:38	0°♋	
	1881 Sep 02	04:01	0°♌	
asc. node	1881 Sep 13	23:47	13°♌46'48	
	1881 Sep 27	15:09	0°♍	
	1881 Oct 22	07:20	0°♎	
	1881 Nov 15	12:22	0°♏	
	1881 Dec 09	11:42	0°♐	
	1882 Jan 02	08:51	0°♑	
desc. node	1882 Jan 03	13:06	1°♑28'45	
morning set	1882 Jan 10	11:41	10°♑12'05	
	1882 Jan 26	05:52	0°♒	
	1882 Feb 19	04:04	0°♓	
superior conj	1882 Feb 21	00:33	2°♓19'11	-1°23'59
minimum elong	1882 Feb 20	19:26	2°♓03'12	1°23'57
max. Earth dist.	1882 Feb 24	17:29	6°♓57'20	1.71695 AU
	1882 Mar 15	04:42	0°♈	
evening rise	1882 Apr 01	23:27	22°♈05'09	
	1882 Apr 08	08:59	0°♉	
asc. node	1882 Apr 26	16:43	22°♉34'49	
	1882 May 02	17:52	0°♊	
	1882 May 27	08:04	0°♋	
	1882 Jun 21	04:46	0°♌	
	1882 Jul 16	10:37	0°♍	
	1882 Aug 11	07:17	0°♎	
desc. node	1882 Aug 16	05:43	5°♎36'24	
	1882 Sep 07	07:39	0°♏	
evening max el	1882 Sep 27	05:35	20°♏31'20	46°36'51
	1882 Oct 07	07:38	0°♐	
greatest brilliancy	1882 Nov 06	14:10	20°♐26'57	-4.9m
retrograde	1882 Nov 16	04:37	22°♐10'29	
evening set	1882 Nov 30	12:37	18°♐06'06	
inferior conj	1882 Dec 06	16:41	14°♐30'52	-0°10'46
minimum elong	1882 Dec 06	17:06	14°♐30'14	0°10'37
transit middle	1882 Dec 06	17:06	14°♐30'14	0°10'37
transit begin	1882 Dec 06	13:57	14°♐35'01	
transit end	1882 Dec 06	20:15	14°♐25'26	
min. Earth dist.	1882 Dec 06	17:55	14°♐28'59	0.26447 AU
asc. node	1882 Dec 07	09:12	14°♐05'48	
morning rise	1882 Dec 12	21:29	10°♐55'02	
direct	1882 Dec 27	02:58	6°♐52'47	
greatest brilliancy	1883 Jan 06	07:23	8°♐51'43	-4.9m
	1883 Feb 05	09:49	0°♑	
morning max el	1883 Feb 15	15:05	9°♑53'22	46°50'21
	1883 Mar 06	16:33	0°♒	
desc. node	1883 Mar 28	22:47	25°♒01'49	
	1883 Apr 02	06:20	0°♓	
	1883 Apr 27	21:54	0°♈	
	1883 May 23	03:25	0°♉	
	1883 Jun 17	03:00	0°♊	
	1883 Jul 11	21:28	0°♋	
asc. node	1883 Jul 20	02:05	9°♋58'52	
	1883 Aug 05	10:26	0°♌	
morning set	1883 Aug 15	06:13	12°♌05'24	
	1883 Aug 29	17:59	0°♍	
max. Earth dist.	1883 Sep 17	15:58	23°♍29'54	1.72318 AU
superior conj	1883 Sep 21	00:08	27°♍39'31	1°23'11
minimum elong	1883 Sep 21	03:55	27°♍51'18	1°23'09
	1883 Sep 22	21:14	0°♎	
	1883 Oct 16	21:55	0°♏	
evening rise	1883 Oct 29	11:13	15°♏41'53	
desc. node	1883 Nov 08	15:39	28°♏26'21	
	1883 Nov 09	21:35	0°♐	
	1883 Dec 03	21:16	0°♑	
	1883 Dec 27	22:00	0°♒	
	1884 Jan 21	01:57	0°♓	
	1884 Feb 14	13:19	0°♈	
asc. node	1884 Feb 29	18:49	18°♈20'09	
	1884 Mar 10	15:08	0°♉	
	1884 Apr 05	20:19	0°♊	
evening max el	1884 May 02	22:19	28°♊19'16	45°32'58
	1884 May 04	16:15	0°♋	
greatest brilliancy	1884 Jun 09	16:33	26°♋08'42	-4.7m
desc. node	1884 Jun 20	08:10	28°♋16'26	
retrograde	1884 Jun 20	14:36	28°♋16'31	
evening set	1884 Jul 06	01:41	23°♋41'42	
inferior conj	1884 Jul 12	02:11	20°♋04'14	-4°49'30
minimum elong	1884 Jul 11	17:08	20°♋18'24	4°47'18
min. Earth dist.	1884 Jul 12	00:01	20°♋07'38	0.28998 AU
morning rise	1884 Jul 17	08:34	16°♋52'13	
direct	1884 Aug 02	18:34	11°♋47'01	
greatest brilliancy	1884 Aug 13	04:55	13°♋44'41	-4.7m
	1884 Sep 07	13:27	0°♌	
morning max el	1884 Sep 21	00:59	12°♌21'41	46°06'11
	1884 Oct 08	03:39	0°♍	
asc. node	1884 Oct 11	11:42	3°♍37'21	
	1884 Nov 03	17:32	0°♎	
	1884 Nov 28	20:28	0°♏	
	1884 Dec 23	07:42	0°♐	
	1885 Jan 16	12:12	0°♑	
desc. node	1885 Jan 31	00:58	18°♑05'20	
	1885 Feb 09	14:27	0°♒	
	1885 Mar 05	16:40	0°♓	
morning set	1885 Mar 27	12:33	27°♓07'23	
	1885 Mar 29	20:14	0°♈	
	1885 Apr 23	01:59	0°♉	
superior conj	1885 May 04	17:35	14°♉22'21	-0°44'09
minimum elong	1885 May 05	02:03	14°♉48'28	0°43'48
max. Earth dist.	1885 May 07	01:24	17°♉14'21	1.73193 AU
	1885 May 17	10:05	0°♊	

asc. node	1885 May 24 04:29	8°♊19'22	
evening rise	1885 Jun 10 20:09	0°♋00'11	
	1885 Jun 10 20:06	0°♋	
	1885 Jul 05 07:33	0°♌	
	1885 Jul 29 20:45	0°♍	
	1885 Aug 23 13:00	0°♎	
desc. node	1885 Sep 12 17:50	24°♎22'34	
	1885 Sep 17 10:16	0°♏	
	1885 Oct 12 15:26	0°♐	
	1885 Nov 07 10:57	0°♑	
	1885 Dec 04 17:40	0°♒	
evening max el	1885 Dec 09 00:33	4°♒25'24	47°18'55
asc. node	1886 Jan 03 21:04	27°♒39'54	
	1886 Jan 07 04:52	0°♓	
greatest brilliancy	1886 Jan 18 15:29	6°♓07'15	-4.9m
retrograde	1886 Jan 28 23:12	8°♓09'14	
evening set	1886 Feb 15 08:32	2°♓15'13	
min. Earth dist.	1886 Feb 18 00:20	0°♓36'44	0.27433 AU
inferior conj	1886 Feb 18 19:25	0°♓06'51	8°35'24
minimum elong	1886 Feb 18 14:23	0°♓14'43	8°35'02
	1886 Feb 18 23:47	30°℞♒	
morning rise	1886 Feb 21 20:29	28°♒13'49	
direct	1886 Mar 11 11:19	22°♒16'14	
greatest brilliancy	1886 Mar 20 10:49	23°♒46'47	-4.8m
	1886 Apr 01 23:48	0°♓	
desc. node	1886 Apr 25 10:29	19°♓03'02	
morning max el	1886 Apr 29 20:14	23°♓15'43	46°08'17
	1886 May 06 15:14	0°♈	
	1886 Jun 03 17:54	0°♉	
	1886 Jun 30 04:27	0°♊	
	1886 Jul 25 19:05	0°♋	
asc. node	1886 Aug 16 13:56	26°♋04'49	
	1886 Aug 19 19:44	0°♌	
	1886 Sep 13 09:11	0°♍	
	1886 Oct 07 14:13	0°♎	
morning set	1886 Oct 24 10:28	21°♎02'36	
	1886 Oct 31 13:57	0°♏	
	1886 Nov 24 11:08	0°♐	
max. Earth dist.	1886 Dec 02 12:43	10°♐08'51	1.71132 AU
superior conj	1886 Dec 03 05:16	11°♐00'55	0°07'01
minimum elong	1886 Dec 03 07:06	11°♐06'40	0°06'55
behind sun begin	1886 Dec 02 07:13	9°♐51'32	
behind sun end	1886 Dec 04 06:59	12°♐21'49	
desc. node	1886 Dec 06 03:21	14°♐41'20	
	1886 Dec 18 07:29	0°♑	
	1887 Jan 11 04:09	0°♒	
evening rise	1887 Jan 13 15:55	3°♒07'36	
	1887 Feb 04 02:29	0°♓	
	1887 Feb 28 04:30	0°♈	
	1887 Mar 24 12:51	0°♉	
asc. node	1887 Mar 29 06:50	5°♉48'12	
	1887 Apr 18 06:39	0°♊	
	1887 May 13 14:20	0°♋	
	1887 Jun 08 20:45	0°♌	
	1887 Jul 07 02:28	0°♍	
evening max el	1887 Jul 13 18:03	6°♍29'44	45°32'21
desc. node	1887 Jul 18 19:59	11°♍14'54	
	1887 Aug 12 02:00	0°♎	
greatest brilliancy	1887 Aug 22 03:51	4°♎39'22	-4.8m
retrograde	1887 Aug 31 12:21	6°♎14'51	
evening set	1887 Sep 18 11:53	0°♎15'20	
	1887 Sep 18 22:11	30°℞♍	
inferior conj	1887 Sep 21 15:59	28°♍19'49	-8°34'56
minimum elong	1887 Sep 21 20:06	28°♍13'29	8°34'42
min. Earth dist.	1887 Sep 22 11:39	27°♍49'33	0.28109 AU
morning rise	1887 Sep 25 04:03	26°♍11'45	
direct	1887 Oct 12 20:58	20°♍13'44	
greatest brilliancy	1887 Oct 24 02:09	22°♍33'09	-4.8m
	1887 Nov 06 06:49	0°♎	
asc. node	1887 Nov 08 23:20	1°♎58'20	
morning max el	1887 Dec 02 10:59	23°♎13'06	46°48'45
	1887 Dec 08 23:46	0°♏	
	1888 Jan 04 21:11	0°♐	
	1888 Jan 30 06:32	0°♑	
	1888 Feb 24 02:11	0°♒	
desc. node	1888 Feb 28 12:55	5°♒24'40	
	1888 Mar 19 16:21	0°♓	
	1888 Apr 13 04:42	0°♈	
	1888 May 07 16:48	0°♉	
	1888 Jun 01 04:51	0°♊	
morning set	1888 Jun 05 06:31	4°♊59'05	
asc. node	1888 Jun 20 16:17	23°♊52'25	
	1888 Jun 25 16:07	0°♋	
max. Earth dist.	1888 Jul 09 21:28	17°♋28'36	1.73519 AU
superior conj	1888 Jul 11 19:13	19°♋49'20	0°47'23
minimum elong	1888 Jul 11 11:08	19°♋24'26	0°47'03
	1888 Jul 20 01:39	0°♌	
	1888 Aug 13 09:18	0°♍	
evening rise	1888 Aug 16 15:10	4°♍00'30	
	1888 Sep 06 15:50	0°♎	
	1888 Sep 30 22:28	0°♏	
desc. node	1888 Oct 10 05:44	11°♏29'08	
	1888 Oct 25 06:11	0°♐	
	1888 Nov 18 16:05	0°♑	
	1888 Dec 13 06:49	0°♒	
	1889 Jan 07 09:20	0°♓	
asc. node	1889 Jan 31 08:58	27°♓26'33	
	1889 Feb 02 16:44	0°♈	
evening max el	1889 Feb 18 15:29	16°♈48'28	46°36'28
	1889 Mar 04 14:15	0°♉	
greatest brilliancy	1889 Mar 30 01:16	16°♉59'07	-4.8m
retrograde	1889 Apr 09 19:00	19°♉07'50	
evening set	1889 Apr 25 22:12	14°♉02'01	
inferior conj	1889 May 01 02:05	10°♉52'21	4°54'08
minimum elong	1889 May 01 11:09	10°♉38'05	4°51'54
min. Earth dist.	1889 May 01 02:34	10°♉51'36	0.28628 AU
morning rise	1889 May 07 00:25	7°♉17'02	
direct	1889 May 22 10:08	2°♉40'01	
desc. node	1889 May 22 22:12	2°♉40'19	
greatest brilliancy	1889 Jun 01 10:23	4°♉29'10	-4.7m
	1889 Jul 07 14:46	0°♊	
morning max el	1889 Jul 10 05:33	2°♊27'58	45°43'32
	1889 Aug 06 00:59	0°♋	
	1889 Sep 01 17:44	0°♌	
asc. node	1889 Sep 13 01:57	13°♌14'41	
	1889 Sep 27 03:41	0°♍	
	1889 Oct 21 19:15	0°♎	
	1889 Nov 14 23:59	0°♏	
	1889 Dec 08 23:08	0°♐	
	1890 Jan 01 20:10	0°♑	
desc. node	1890 Jan 02 15:09	0°♑59'38	
morning set	1890 Jan 07 21:33	7°♑36'49	
	1890 Jan 25 17:05	0°♒	
superior conj	1890 Feb 18 11:57	29°♒49'52	-1°23'04
minimum elong	1890 Feb 18 05:54	29°♒30'54	1°22'59
	1890 Feb 18 15:12	0°♓	
max. Earth dist.	1890 Feb 22 05:19	4°♓29'31	1.71646 AU
	1890 Mar 14 15:46	0°♈	
evening rise	1890 Mar 30 13:14	19°♈44'56	
	1890 Apr 07 20:03	0°♉	
asc. node	1890 Apr 25 18:41	22°♉06'37	

	1890 May 02 05:03	0°♊	
	1890 May 26 19:33	0°♋	
	1890 Jun 20 16:48	0°♌	
	1890 Jul 15 23:35	0°♍	
	1890 Aug 10 21:58	0°♎	
desc. node	1890 Aug 15 07:55	4°♎59'51	
	1890 Sep 07 02:00	0°♏	
evening max el	1890 Sep 24 19:55	18°♏10'40	46°34'21
	1890 Oct 07 14:16	0°♐	
greatest brilliancy	1890 Nov 04 03:02	17°♐58'34	-4.9m
retrograde	1890 Nov 13 16:39	19°♐40'46	
evening set	1890 Nov 28 01:49	15°♐35'34	
inferior conj	1890 Dec 04 04:45	12°♐01'32	-0°35'26
minimum elong	1890 Dec 04 06:06	11°♐59'28	0°35'00
min. Earth dist.	1890 Dec 04 07:27	11°♐57'25	0.26461 AU
asc. node	1890 Dec 06 11:14	10°♐39'13	
morning rise	1890 Dec 10 10:18	8°♐24'29	
direct	1890 Dec 24 15:45	4°♐23'18	
greatest brilliancy	1891 Jan 03 21:03	6°♐22'59	-4.9m
	1891 Feb 05 13:41	0°♑	
morning max el	1891 Feb 13 04:13	7°♑27'07	46°51'22
	1891 Mar 06 10:25	0°♒	
desc. node	1891 Mar 28 00:49	24°♒24'37	
	1891 Apr 01 20:56	0°♓	
	1891 Apr 27 10:53	0°♈	
	1891 May 22 15:27	0°♉	
	1891 Jun 16 14:29	0°♊	
	1891 Jul 11 08:38	0°♋	
asc. node	1891 Jul 19 04:11	9°♋31'28	
	1891 Aug 04 21:27	0°♌	
morning set	1891 Aug 12 23:39	9°♌57'26	
	1891 Aug 29 04:56	0°♍	
max. Earth dist.	1891 Sep 15 04:47	21°♍06'22	1.72370 AU
superior conj	1891 Sep 18 16:24	25°♍26'34	1°23'47
minimum elong	1891 Sep 18 19:28	25°♍36'05	1°23'46
	1891 Sep 22 08:13	0°♎	
	1891 Oct 16 09:00	0°♏	
evening rise	1891 Oct 27 00:01	13°♏16'54	
desc. node	1891 Nov 07 17:35	27°♏57'13	
	1891 Nov 09 08:51	0°♐	
	1891 Dec 03 08:44	0°♑	
	1891 Dec 27 09:42	0°♒	
	1892 Jan 20 13:58	0°♓	
	1892 Feb 14 01:51	0°♈	
asc. node	1892 Feb 28 20:56	17°♈47'27	
	1892 Mar 10 04:42	0°♉	
	1892 Apr 05 12:14	0°♊	
evening max el	1892 Apr 30 13:43	26°♊07'00	45°34'15
	1892 May 04 15:31	0°♋	
greatest brilliancy	1892 Jun 07 09:01	24°♋00'29	-4.7m
retrograde	1892 Jun 18 06:22	26°♋08'12	
desc. node	1892 Jun 19 10:10	26°♋06'39	
evening set	1892 Jul 03 16:25	21°♋35'43	
inferior conj	1892 Jul 09 18:42	17°♋55'47	-4°33'00
minimum elong	1892 Jul 09 09:58	18°♋09'28	4°30'49
min. Earth dist.	1892 Jul 09 16:42	17°♋58'56	0.29001 AU
morning rise	1892 Jul 15 03:27	14°♋40'03	
direct	1892 Jul 31 10:44	9°♋38'30	
greatest brilliancy	1892 Aug 10 21:24	11°♋35'54	-4.7m
	1892 Sep 07 18:11	0°♌	
morning max el	1892 Sep 18 15:21	10°♌05'43	46°04'42
	1892 Oct 07 20:57	0°♍	
asc. node	1892 Oct 10 13:38	2°♍56'39	
	1892 Nov 03 07:45	0°♎	
	1892 Nov 28 09:22	0°♏	
	1892 Dec 22 19:54	0°♐	
	1893 Jan 15 24:00	0°♑	
desc. node	1893 Jan 30 03:06	17°♑35'54	
	1893 Feb 09 01:56	0°♒	
	1893 Mar 05 03:54	0°♓	
morning set	1893 Mar 25 02:16	24°♓46'41	
	1893 Mar 29 07:16	0°♈	
	1893 Apr 22 12:52	0°♉	
superior conj	1893 May 02 09:53	12°♉11'17	-0°47'01
minimum elong	1893 May 02 18:44	12°♉38'35	0°46'38
max. Earth dist.	1893 May 04 20:10	15°♉10'56	1.73148 AU
	1893 May 16 20:53	0°♊	
asc. node	1893 May 23 06:32	7°♊52'33	
evening rise	1893 Jun 08 14:35	27°♊56'16	
	1893 Jun 10 06:54	0°♋	
	1893 Jul 04 18:30	0°♌	
	1893 Jul 29 08:01	0°♍	
	1893 Aug 23 00:49	0°♎	
desc. node	1893 Sep 11 19:50	23°♎51'09	
	1893 Sep 16 22:55	0°♏	
	1893 Oct 12 05:21	0°♐	
	1893 Nov 07 03:08	0°♑	
	1893 Dec 04 15:17	0°♒	
evening max el	1893 Dec 06 13:43	1°♒58'55	47°18'54
asc. node	1894 Jan 02 23:12	26°♒20'07	
	1894 Jan 08 14:53	0°♓	
greatest brilliancy	1894 Jan 16 06:21	3°♓43'35	-4.9m
retrograde	1894 Jan 26 12:53	5°♓45'04	
evening set	1894 Feb 12 19:13	29°♒56'20	
	1894 Feb 12 16:46	30°℞♒	
min. Earth dist.	1894 Feb 15 13:58	28°♒13'43	0.27376 AU
inferior conj	1894 Feb 16 09:12	27°♒43'39	8°29'51
minimum elong	1894 Feb 16 03:23	27°♒52'43	8°29'20
morning rise	1894 Feb 19 11:47	25°♒48'28	
direct	1894 Mar 08 23:55	19°♒53'40	
greatest brilliancy	1894 Mar 18 00:34	21°♒25'06	-4.8m
	1894 Apr 03 01:10	0°♓	
desc. node	1894 Apr 24 12:27	18°♓09'08	
morning max el	1894 Apr 27 09:52	20°♓56'05	46°09'55
	1894 May 06 11:33	0°♈	
	1894 Jun 03 09:05	0°♉	
	1894 Jun 29 17:31	0°♊	
	1894 Jul 25 07:03	0°♋	
asc. node	1894 Aug 15 16:05	25°♋36'52	
	1894 Aug 19 07:05	0°♌	
	1894 Sep 12 20:14	0°♍	
	1894 Oct 07 01:10	0°♎	
morning set	1894 Oct 22 00:36	18°♎42'16	
	1894 Oct 31 00:55	0°♏	
	1894 Nov 23 22:08	0°♐	
max. Earth dist.	1894 Nov 29 21:01	7°♐29'21	1.71154 AU
superior conj	1894 Nov 30 15:55	8°♐28'47	0°10'55
minimum elong	1894 Nov 30 18:45	8°♐37'42	0°10'47
behind sun begin	1894 Nov 29 22:58	7°♐35'29	
behind sun end	1894 Dec 01 14:32	9°♐39'55	
desc. node	1894 Dec 05 05:28	14°♐13'19	
	1894 Dec 17 18:31	0°♑	
	1895 Jan 10 15:13	0°♒	
evening rise	1895 Jan 11 01:52	0°♒33'26	
	1895 Feb 03 13:37	0°♓	
	1895 Feb 27 15:46	0°♈	
	1895 Mar 24 00:22	0°♉	
asc. node	1895 Mar 28 08:49	5°♉18'54	
	1895 Apr 17 18:40	0°♊	
	1895 May 13 03:19	0°♋	
	1895 Jun 08 11:47	0°♌	

	1895 Jul	06	23:03	0°♍			desc. node	1898 Jan	01	17:18	0°♑32'02			
evening max el	1895 Jul	11	09:00	4°♍16'53	45°31'18		morning set	1898 Jan	05	07:26	5°♑02'41			
desc. node	1895 Jul	17	22:10	10°♍21'53				1898 Jan	25	03:59	0°♒			
	1895 Aug	13	20:53	0°♎										
greatest brilliancy	1895 Aug	19	15:51	2°♎22'30	-4.7m		superior conj	1898 Feb	15	22:53	27°♒19'43	-1°21'57		
retrograde	1895 Aug	29	03:05	3°♎59'59			minimum elong	1898 Feb	15	15:54	26°♒57'52	1°21'50		
	1895 Sep	12	12:42	30°℞♍				1898 Feb	18	02:04	0°♓			
evening set	1895 Sep	16	03:09	27°♍58'29			max. Earth dist.	1898 Feb	19	17:03	2°♓02'01	1.71600 AU		
inferior conj	1895 Sep	19	06:39	26°♍03'48	-8°38'14			1898 Mar	14	02:35	0°♈			
minimum elong	1895 Sep	19	09:58	25°♍58'42	8°38'05		evening rise	1898 Mar	28	02:18	17°♈23'08			
min. Earth dist.	1895 Sep	20	01:12	25°♍35'16	0.28174 AU			1898 Apr	07	06:51	0°♉			
morning rise	1895 Sep	22	16:33	23°♍59'03			asc. node	1898 Apr	24	20:44	21°♉39'29			
direct	1895 Oct	10	12:46	17°♍56'52				1898 May	01	15:58	0°♊			
greatest brilliancy	1895 Oct	21	16:58	20°♍15'46	-4.8m			1898 May	26	06:45	0°♋			
	1895 Nov	07	00:57	0°♎				1898 Jun	20	04:31	0°♌			
asc. node	1895 Nov	08	01:25	0°♎47'09				1898 Jul	15	12:15	0°♍			
morning max el	1895 Nov	30	02:45	20°♎55'21	46°47'31			1898 Aug	10	12:24	0°♎			
	1895 Dec	08	19:27	0°♏			desc. node	1898 Aug	14	09:54	4°♎23'40			
	1896 Jan	04	12:31	0°♐				1898 Sep	06	20:18	0°♏			
	1896 Jan	29	20:01	0°♑			evening max el	1898 Sep	22	09:38	15°♏50'06	46°31'55		
	1896 Feb	23	14:38	0°♒				1898 Oct	07	22:31	0°♐			
desc. node	1896 Feb	27	14:59	4°♒53'25			greatest brilliancy	1898 Nov	01	16:37	15°♐33'17	-4.9m		
	1896 Mar	19	04:09	0°♓			retrograde	1898 Nov	11	04:23	17°♐13'42			
	1896 Apr	12	16:01	0°♈			evening set	1898 Nov	25	15:30	13°♐07'19			
	1896 May	07	03:47	0°♉			inferior conj	1898 Dec	01	17:09	9°♐34'55	-0°59'48		
	1896 May	31	15:36	0°♊			minimum elong	1898 Dec	01	19:27	9°♐31'26	0°59'03		
morning set	1896 Jun	03	00:21	2°♊53'49			min. Earth dist.	1898 Dec	01	21:33	9°♐28'13	0.26480 AU		
asc. node	1896 Jun	19	18:26	23°♊26'26			asc. node	1898 Dec	05	13:19	7°♐17'01			
	1896 Jun	25	02:43	0°♋			morning rise	1898 Dec	07	23:11	5°♐56'47			
max. Earth dist.	1896 Jul	07	20:29	15°♋39'11	1.73533 AU		direct	1898 Dec	22	04:26	1°♐56'19			
							greatest brilliancy	1899 Jan	01	11:29	3°♐57'15	-4.9m		
superior conj	1896 Jul	09	13:44	17°♋46'01	0°44'46			1899 Feb	05	15:24	0°♑			
minimum elong	1896 Jul	09	05:54	17°♋21'55	0°44'25		morning max el	1899 Feb	10	16:29	4°♑59'49	46°52'04		
	1896 Jul	19	12:14	0°♌				1899 Mar	06	03:31	0°♒			
	1896 Aug	12	19:58	0°♍			desc. node	1899 Mar	27	02:47	23°♒48'19			
evening rise	1896 Aug	14	09:31	1°♍55'55				1899 Apr	01	11:05	0°♓			
	1896 Sep	06	02:42	0°♎				1899 Apr	26	23:33	0°♈			
	1896 Sep	30	09:37	0°♏				1899 May	22	03:14	0°♉			
desc. node	1896 Oct	09	07:45	11°♏00'28				1899 Jun	16	01:42	0°♊			
	1896 Oct	24	17:45	0°♐				1899 Jul	10	19:30	0°♋			
	1896 Nov	18	04:13	0°♑			asc. node	1899 Jul	18	06:16	9°♋04'56			
	1896 Dec	12	19:49	0°♒				1899 Aug	04	08:07	0°♌			
	1897 Jan	06	23:47	0°♓			morning set	1899 Aug	10	17:00	7°♌50'15			
asc. node	1897 Jan	30	11:04	26°♓44'51				1899 Aug	28	15:34	0°♍			
	1897 Feb	02	10:27	0°♈			max. Earth dist.	1899 Sep	12	19:30	18°♍49'44	1.72424 AU		
evening max el	1897 Feb	16	07:39	14°♈34'14	46°38'53									
	1897 Mar	04	20:26	0°♉			superior conj	1899 Sep	16	08:52	23°♍15'16	1°24'15		
greatest brilliancy	1897 Mar	27	17:31	14°♉46'54	-4.8m		minimum elong	1899 Sep	16	11:11	23°♍22'29	1°24'14		
retrograde	1897 Apr	07	11:41	16°♉55'39				1899 Sep	21	18:52	0°♎			
evening set	1897 Apr	23	16:50	11°♉46'11				1899 Oct	15	19:47	0°♏			
inferior conj	1897 Apr	28	17:59	8°♉40'14	5°11'00		evening rise	1899 Oct	24	13:15	10°♏54'22			
minimum elong	1897 Apr	29	03:19	8°♉25'32	5°08'45		desc. node	1899 Nov	06	19:42	27°♏29'42			
min. Earth dist.	1897 Apr	28	17:54	8°♉40'22	0.28602 AU			1899 Nov	08	19:47	0°♐			
morning rise	1897 May	04	14:11	5°♉08'01				1899 Dec	02	19:51	0°♑			
direct	1897 May	20	02:09	0°♉28'31				1899 Dec	26	21:03	0°♒			
desc. node	1897 May	22	00:18	0°♉32'49				1900 Jan	20	01:39	0°♓			
greatest brilliancy	1897 May	30	00:28	2°♉16'25	-4.7m			1900 Feb	13	14:08	0°♈			
	1897 Jul	07	13:43	0°♊			asc. node	1900 Feb	27	22:52	17°♈14'53			
morning max el	1897 Jul	07	21:53	0°♊19'27	45°43'36			1900 Mar	10	18:08	0°♉			
	1897 Aug	05	16:38	0°♋				1900 Apr	06	04:15	0°♊			
	1897 Sep	01	06:54	0°♌			evening max el	1900 Apr	29	04:22	23°♊53'11	45°35'35		
asc. node	1897 Sep	12	03:51	12°♌43'14				1900 May	05	15:46	0°♋			
	1897 Sep	26	15:43	0°♍			greatest brilliancy	1900 Jun	06	01:12	21°♋51'54	-4.7m		
	1897 Oct	21	06:43	0°♎			retrograde	1900 Jun	16	22:20	24°♋00'03			
	1897 Nov	14	11:08	0°♏			desc. node	1900 Jun	19	12:19	23°♋52'13			
	1897 Dec	08	10:09	0°♐			evening set	1900 Jul	02	07:07	19°♋29'23			
	1898 Jan	01	07:07	0°♑			inferior conj	1900 Jul	08	11:05	15°♋47'26	-4°15'59		

minimum elong	1900 Jul 08	02:43	16°♋00'31	4°13'51	
min. Earth dist.	1900 Jul 08	09:18	15°♋50'13	0.29001 AU	
morning rise	1900 Jul 13	22:10	12°♋28'15		
direct	1900 Jul 30	02:30	7°♋30'00		
greatest brilliancy	1900 Aug 09	14:07	9°♋27'50	-4.7m	
	1900 Sep 08	20:55	0°♌		
morning max el	1900 Sep 17	05:56	7°♌51'08	46°03'23	
	1900 Oct 08	13:36	0°♍		
asc. node	1900 Oct 10	15:46	2°♍17'42		
	1900 Nov 03	21:32	0°♎		
	1900 Nov 28	21:55	0°♏		
	1900 Dec 23	07:48	0°♐		
	1901 Jan 16	11:29	0°♑		
desc. node	1901 Jan 30	05:07	17°♑07'02		
	1901 Feb 09	13:06	0°♒		
	1901 Mar 05	14:51	0°♓		
morning set	1901 Mar 23	15:57	22°♓26'34		
	1901 Mar 29	18:03	0°♈		
	1901 Apr 22	23:34	0°♉		
superior conj	1901 May 01	02:02	10°♉00'13	-0°49'48	
minimum elong	1901 May 01	11:13	10°♉28'32	0°49'25	
max. Earth dist.	1901 May 03	13:18	13°♉02'55	1.73110 AU	
	1901 May 17	07:34	0°♊		
asc. node	1901 May 23	08:41	7°♊26'20		
evening rise	1901 Jun 07	08:41	25°♊51'44		
	1901 Jun 10	17:37	0°♋		
	1901 Jul 05	05:22	0°♌		
	1901 Jul 29	19:13	0°♍		
	1901 Aug 23	12:33	0°♎		
desc. node	1901 Sep 11	21:49	23°♎20'03		
	1901 Sep 17	11:29	0°♏		
	1901 Oct 12	19:15	0°♐		
	1901 Nov 07	19:25	0°♑		
evening max el	1901 Dec 05	03:22	29°♑34'09	47°18'52	
	1901 Dec 05	13:32	0°♒		
asc. node	1902 Jan 03	01:18	24°♒58'12		
	1902 Jan 11	17:47	0°♓		
greatest brilliancy	1902 Jan 14	20:37	1°♓19'35	-4.9m	
retrograde	1902 Jan 25	03:02	3°♓21'28		
	1902 Feb 06	22:55	30°℞♒		
evening set	1902 Feb 11	05:35	27°♒38'04		
min. Earth dist.	1902 Feb 14	03:15	25°♒51'27	0.27319 AU	
inferior conj	1902 Feb 14	22:57	25°♒20'45	8°23'12	
minimum elong	1902 Feb 14	16:24	25°♒30'57	8°22'32	
morning rise	1902 Feb 18	03:27	23°♒23'01		
direct	1902 Mar 07	12:46	17°♒31'27		
greatest brilliancy	1902 Mar 16	13:50	19°♒03'28	-4.8m	
	1902 Apr 04	19:31	0°♓		
desc. node	1902 Apr 24	14:37	17°♓17'19		
morning max el	1902 Apr 26	00:16	18°♓38'46	46°11'27	
	1902 May 07	07:05	0°♈		
	1902 Jun 03	23:59	0°♉		
	1902 Jun 30	06:28	0°♊		
	1902 Jul 25	18:59	0°♋		
asc. node	1902 Aug 15	18:02	25°♋08'12		
	1902 Aug 19	18:28	0°♌		
	1902 Sep 13	07:18	0°♍		
	1902 Oct 07	12:06	0°♎		
morning set	1902 Oct 20	14:43	16°♎22'06		
	1902 Oct 31	11:51	0°♏		
	1902 Nov 24	09:06	0°♐		
max. Earth dist.	1902 Nov 28	07:02	4°♐55'20	1.71177 AU	
superior conj	1902 Nov 29	02:36	5°♐56'52	0°14'48	
minimum elong	1902 Nov 29	06:24	6°♐08'49	0°14'37	
behind sun begin	1902 Nov 28	18:44	5°♐32'08		
behind sun end	1902 Nov 29	18:04	6°♐45'30		
desc. node	1902 Dec 05	07:33	13°♐45'16		
	1902 Dec 18	05:32	0°♑		
evening rise	1903 Jan 09	11:55	27°♑59'31		
	1903 Jan 11	02:18	0°♒		
	1903 Feb 04	00:46	0°♓		
	1903 Feb 28	03:03	0°♈		
	1903 Mar 24	11:53	0°♉		
asc. node	1903 Mar 28	10:55	4°♉49'58		
	1903 Apr 18	06:41	0°♊		
	1903 May 13	16:23	0°♋		
	1903 Jun 09	03:07	0°♌		
	1903 Jul 07	20:36	0°♍		
evening max el	1903 Jul 10	00:30	2°♍04'51	45°30'06	
desc. node	1903 Jul 18	00:09	9°♍26'44		
	1903 Aug 17	21:51	0°♎		
greatest brilliancy	1903 Aug 18	04:01	0°♎05'09	-4.7m	
retrograde	1903 Aug 27	17:36	1°♎44'05		
	1903 Sep 06	02:29	30°℞♍		
evening set	1903 Sep 14	18:00	25°♍41'28		
inferior conj	1903 Sep 17	21:12	23°♍46'59	-8°40'43	
minimum elong	1903 Sep 17	23:42	23°♍43'07	8°40'38	
min. Earth dist.	1903 Sep 18	14:30	23°♍20'19	0.28233 AU	
morning rise	1903 Sep 21	05:14	21°♍44'57		
direct	1903 Oct 09	04:36	15°♍39'28		
greatest brilliancy	1903 Oct 20	07:04	17°♍56'55	-4.8m	
asc. node	1903 Nov 08	03:33	29°♍37'33		
	1903 Nov 08	14:43	0°♎		
morning max el	1903 Nov 28	17:59	18°♎36'00	46°46'16	
	1903 Dec 09	14:42	0°♏		
	1904 Jan 05	03:43	0°♐		
	1904 Jan 30	09:28	0°♑		
	1904 Feb 24	03:08	0°♒		
desc. node	1904 Feb 27	16:53	4°♒21'31		
	1904 Mar 19	16:01	0°♓		
	1904 Apr 13	03:27	0°♈		
	1904 May 07	14:52	0°♉		
	1904 Jun 01	02:28	0°♊		
morning set	1904 Jun 01	18:18	0°♊48'32		
asc. node	1904 Jun 19	20:27	22°♊59'33		
	1904 Jun 25	13:29	0°♋		
max. Earth dist.	1904 Jul 06	19:07	13°♋48'08	1.73549 AU	
superior conj	1904 Jul 08	08:13	15°♋42'09	0°42'04	
minimum elong	1904 Jul 08	00:42	15°♋19'03	0°41'45	
	1904 Jul 19	23:01	0°♌		
evening rise	1904 Aug 13	03:44	29°♌50'17		
	1904 Aug 13	06:53	0°♍		
	1904 Sep 06	13:50	0°♎		
	1904 Sep 30	21:04	0°♏		
desc. node	1904 Oct 09	09:50	10°♏31'10		
	1904 Oct 25	05:37	0°♐		
	1904 Nov 18	16:40	0°♑		
	1904 Dec 13	09:08	0°♒		
	1905 Jan 07	14:38	0°♓		
asc. node	1905 Jan 30	13:00	26°♓01'35		
	1905 Feb 03	04:49	0°♈		
evening max el	1905 Feb 14	23:30	12°♈18'17	46°41'12	
	1905 Mar 06	05:26	0°♉		
greatest brilliancy	1905 Mar 26	10:19	12°♉34'24	-4.8m	
retrograde	1905 Apr 06	03:54	14°♉42'24		
evening set	1905 Apr 22	11:32	9°♉29'25		
inferior conj	1905 Apr 27	09:50	6°♉27'15	5°27'24	
minimum elong	1905 Apr 27	19:24	6°♉12'11	5°25'10	
min. Earth dist.	1905 Apr 27	09:19	6°♉28'04	0.28573 AU	
morning rise	1905 May 03	03:40	2°♉58'13		
	1905 May 09	10:37	30°℞♈		

direct	1905 May 18	18:04	28°♈16'16	
desc. node	1905 May 22	02:21	28°♈29'11	
	1905 May 28	11:18	0°♉	
greatest brilliancy	1905 May 28	14:30	0°♉02'44	-4.7m
morning max el	1905 Jul 06	13:14	28°♉07'48	45°43'42
	1905 Jul 08	12:00	0°♊	
	1905 Aug 06	08:17	0°♋	
	1905 Sep 01	20:16	0°♌	
asc. node	1905 Sep 12	05:59	12°♌11'41	
	1905 Sep 27	04:02	0°♍	
	1905 Oct 21	18:32	0°♎	
	1905 Nov 14	22:40	0°♏	
	1905 Dec 08	21:31	0°♐	
desc. node	1906 Jan 01	19:16	0°♑02'45	
	1906 Jan 01	18:23	0°♑	
morning set	1906 Jan 03	17:06	2°♑26'51	
	1906 Jan 25	15:12	0°♒	
superior conj	1906 Feb 14	09:38	24°♒48'11	-1°20'40
minimum elong	1906 Feb 14	01:48	24°♒23'39	1°20'32
max. Earth dist.	1906 Feb 18	04:21	29°♒32'16	1.71552 AU
	1906 Feb 18	13:13	0°♓	
	1906 Mar 14	13:42	0°♈	
evening rise	1906 Mar 26	15:14	14°♈59'51	
	1906 Apr 07	17:59	0°♉	
asc. node	1906 Apr 24	22:53	21°♉11'35	
	1906 May 02	03:13	0°♊	
	1906 May 26	18:17	0°♋	
	1906 Jun 20	16:35	0°♌	
	1906 Jul 16	01:18	0°♍	
	1906 Aug 11	03:21	0°♎	
desc. node	1906 Aug 14	11:54	3°♎46'13	
	1906 Sep 07	15:32	0°♏	
evening max el	1906 Sep 20	22:07	13°♏25'15	46°29'13
	1906 Oct 09	10:31	0°♐	
greatest brilliancy	1906 Oct 31	06:14	13°♐06'02	-4.9m
retrograde	1906 Nov 09	15:36	14°♐44'34	
evening set	1906 Nov 24	05:05	10°♐36'22	
inferior conj	1906 Nov 30	05:18	7°♐06'06	-1°24'13
minimum elong	1906 Nov 30	08:31	7°♐01'12	1°23'10
min. Earth dist.	1906 Nov 30	11:40	6°♐56'24	0.26506 AU
asc. node	1906 Dec 05	15:23	3°♐54'30	
morning rise	1906 Dec 06	11:35	3°♐27'16	
	1906 Dec 15	11:43	30°℞♏	
direct	1906 Dec 20	16:26	29°♏26'49	
	1906 Dec 25	23:48	0°♐	
greatest brilliancy	1906 Dec 31	02:13	1°♐29'48	-4.9m
	1907 Feb 06	16:28	0°♑	
morning max el	1907 Feb 09	04:25	2°♑29'55	46°52'59
	1907 Mar 06	20:44	0°♒	
desc. node	1907 Mar 27	04:58	23°♒11'51	
	1907 Apr 02	01:28	0°♓	
	1907 Apr 27	12:29	0°♈	
	1907 May 22	15:18	0°♉	
	1907 Jun 16	13:14	0°♊	
	1907 Jul 11	06:42	0°♋	
asc. node	1907 Jul 18	08:14	8°♋37'02	
	1907 Aug 04	19:08	0°♌	
morning set	1907 Aug 09	10:37	5°♌42'56	
	1907 Aug 29	02:30	0°♍	
max. Earth dist.	1907 Sep 11	13:10	16°♍41'20	1.72478 AU
superior conj	1907 Sep 15	01:36	21°♍03'53	1°24'35
minimum elong	1907 Sep 15	03:10	21°♍08'46	1°24'35
	1907 Sep 22	05:52	0°♎	
	1907 Oct 16	06:55	0°♏	
evening rise	1907 Oct 23	02:43	8°♏31'31	
desc. node	1907 Nov 06	21:47	27°♏00'48	
	1907 Nov 09	07:08	0°♐	
	1907 Dec 03	07:26	0°♑	
	1907 Dec 27	08:53	0°♒	
	1908 Jan 20	13:49	0°♓	
	1908 Feb 14	02:55	0°♈	
asc. node	1908 Feb 28	01:00	16°♈41'30	
	1908 Mar 10	08:06	0°♉	
	1908 Apr 05	20:57	0°♊	
evening max el	1908 Apr 26	19:04	21°♊38'32	45°37'09
	1908 May 05	17:44	0°♋	
greatest brilliancy	1908 Jun 03	16:57	19°♋42'00	-4.7m
retrograde	1908 Jun 14	14:51	21°♋51'17	
desc. node	1908 Jun 18	14:19	21°♋32'31	
evening set	1908 Jun 29	22:04	17°♋22'01	
inferior conj	1908 Jul 06	03:30	13°♋38'16	-3°58'34
minimum elong	1908 Jul 05	19:34	13°♋50'41	3°56'30
min. Earth dist.	1908 Jul 06	01:44	13°♋41'03	0.28999 AU
morning rise	1908 Jul 11	16:54	10°♋15'58	
direct	1908 Jul 27	18:25	5°♋20'38	
greatest brilliancy	1908 Aug 07	06:45	7°♋19'03	-4.7m
	1908 Sep 08	22:32	0°♌	
morning max el	1908 Sep 14	21:28	5°♌38'14	46°02'11
	1908 Oct 08	06:13	0°♍	
asc. node	1908 Oct 09	17:52	1°♍38'20	
	1908 Nov 03	11:29	0°♎	
	1908 Nov 28	10:43	0°♏	
	1908 Dec 22	20:01	0°♐	
	1909 Jan 15	23:20	0°♑	
desc. node	1909 Jan 29	07:07	16°♑36'54	
	1909 Feb 09	00:41	0°♒	
	1909 Mar 05	02:11	0°♓	
morning set	1909 Mar 21	05:03	20°♓03'20	
	1909 Mar 29	05:12	0°♈	
	1909 Apr 22	10:35	0°♉	
superior conj	1909 Apr 28	17:50	7°♉47'01	-0°52'31
minimum elong	1909 Apr 29	03:18	8°♉16'16	0°52'10
max. Earth dist.	1909 May 01	06:37	10°♉54'32	1.73066 AU
	1909 May 16	18:31	0°♊	
asc. node	1909 May 22	10:38	6°♊58'41	
evening rise	1909 Jun 05	02:43	23°♊46'09	
	1909 Jun 10	04:37	0°♋	
	1909 Jul 04	16:32	0°♌	
	1909 Jul 29	06:42	0°♍	
	1909 Aug 23	00:34	0°♎	
desc. node	1909 Sep 10	23:59	22°♎48'45	
	1909 Sep 17	00:21	0°♏	
	1909 Oct 12	09:28	0°♐	
	1909 Nov 07	12:11	0°♑	
evening max el	1909 Dec 02	17:37	27°♑10'23	47°18'32
	1909 Dec 05	13:01	0°♒	
asc. node	1910 Jan 02	03:13	23°♒32'04	
greatest brilliancy	1910 Jan 12	10:03	28°♒53'08	-4.9m
	1910 Jan 15	20:55	0°♓	
retrograde	1910 Jan 22	17:24	0°♓55'51	
	1910 Jan 29	09:12	30°℞♒	
evening set	1910 Feb 08	15:25	25°♒18'06	
min. Earth dist.	1910 Feb 11	16:00	23°♒27'24	0.27265 AU
inferior conj	1910 Feb 12	12:22	22°♒55'45	8°15'30
minimum elong	1910 Feb 12	05:08	23°♒07'00	8°14'41
morning rise	1910 Feb 15	19:06	20°♒55'02	
direct	1910 Mar 05	01:55	15°♒07'12	
greatest brilliancy	1910 Mar 14	02:29	16°♒39'21	-4.8m
	1910 Apr 05	09:53	0°♓	
morning max el	1910 Apr 23	15:02	16°♓21'07	46°13'03
desc. node	1910 Apr 23	16:38	16°♓25'01	

	1910 May 07 02:27	0°♈	
	1910 Jun 03 14:58	0°♉	
	1910 Jun 29 19:32	0°♊	
	1910 Jul 25 07:01	0°♋	
asc. node	1910 Aug 14 20:07	24°♋39'33	
	1910 Aug 19 05:56	0°♌	
	1910 Sep 12 18:29	0°♍	
	1910 Oct 06 23:11	0°♎	
morning set	1910 Oct 18 05:20	14°♎03'15	
	1910 Oct 30 22:53	0°♏	
	1910 Nov 23 20:09	0°♐	
max. Earth dist.	1910 Nov 25 17:17	2°♐21'52	1.71197 AU
superior conj	1910 Nov 26 13:53	3°♐26'39	0°18'36
minimum elong	1910 Nov 26 18:36	3°♐41'27	0°18'21
desc. node	1910 Dec 04 09:31	13°♐16'40	
	1910 Dec 17 16:38	0°♑	
evening rise	1911 Jan 06 22:16	25°♑26'15	
	1911 Jan 10 13:28	0°♒	
	1911 Feb 03 12:03	0°♓	
	1911 Feb 27 14:29	0°♈	
	1911 Mar 23 23:35	0°♉	
asc. node	1911 Mar 27 13:00	4°♉20'25	
	1911 Apr 17 18:56	0°♊	
	1911 May 13 05:42	0°♋	
	1911 Jun 08 18:48	0°♌	
evening max el	1911 Jul 07 16:02	29°♌52'46	45°29'03
	1911 Jul 07 19:04	0°♍	
desc. node	1911 Jul 17 02:09	8°♍30'28	
greatest brilliancy	1911 Aug 15 17:00	27°♍49'05	-4.7m
retrograde	1911 Aug 25 07:54	29°♍28'40	
evening set	1911 Sep 12 08:39	23°♍25'48	
inferior conj	1911 Sep 15 11:56	21°♍30'52	-8°42'20
minimum elong	1911 Sep 15 13:36	21°♍28'18	8°42'18
min. Earth dist.	1911 Sep 16 04:13	21°♍05'44	0.28289 AU
morning rise	1911 Sep 18 18:24	19°♍30'56	
direct	1911 Oct 06 20:24	13°♍22'50	
greatest brilliancy	1911 Oct 17 21:18	15°♍38'33	-4.8m
asc. node	1911 Nov 07 05:30	28°♍29'40	
	1911 Nov 09 00:55	0°♎	
morning max el	1911 Nov 26 08:33	16°♎15'13	46°45'05
	1911 Dec 09 09:23	0°♏	
	1912 Jan 04 18:38	0°♐	
	1912 Jan 29 22:45	0°♑	
	1912 Feb 23 15:29	0°♒	
desc. node	1912 Feb 26 19:05	3°♒50'47	
	1912 Mar 19 03:48	0°♓	
	1912 Apr 12 14:50	0°♈	
	1912 May 07 01:57	0°♉	
morning set	1912 May 30 12:01	28°♉42'29	
	1912 May 31 13:19	0°♊	
asc. node	1912 Jun 18 22:28	22°♊32'44	
	1912 Jun 25 00:12	0°♋	
max. Earth dist.	1912 Jul 04 16:10	11°♋52'23	1.73558 AU
superior conj	1912 Jul 06 02:31	13°♋37'58	0°39'18
minimum elong	1912 Jul 05 19:22	13°♋15'58	0°39'00
	1912 Jul 19 09:44	0°♌	
evening rise	1912 Aug 10 21:56	27°♌44'54	
	1912 Aug 12 17:43	0°♍	
	1912 Sep 06 00:53	0°♎	
	1912 Sep 30 08:26	0°♏	
desc. node	1912 Oct 08 11:53	10°♏01'59	
	1912 Oct 24 17:25	0°♐	
	1912 Nov 18 05:03	0°♑	
	1912 Dec 12 22:23	0°♒	
	1913 Jan 07 05:27	0°♓	
asc. node	1913 Jan 29 15:09	25°♓19'07	
	1913 Feb 02 23:22	0°♈	
evening max el	1913 Feb 12 14:26	10°♈00'33	46°43'26
	1913 Mar 06 17:09	0°♉	
greatest brilliancy	1913 Mar 24 03:38	10°♉23'09	-4.8m
retrograde	1913 Apr 03 19:46	12°♉29'54	
evening set	1913 Apr 20 06:21	7°♉13'20	
inferior conj	1913 Apr 25 01:48	4°♉15'05	5°43'14
minimum elong	1913 Apr 25 11:30	3°♉59'45	5°41'04
min. Earth dist.	1913 Apr 25 01:06	4°♉16'11	0.28547 AU
morning rise	1913 Apr 30 17:05	0°♉49'19	
	1913 May 02 05:12	30°℞♈	
direct	1913 May 16 09:38	26°♈04'44	
desc. node	1913 May 21 04:21	26°♈30'45	
greatest brilliancy	1913 May 26 05:08	27°♈50'10	-4.7m
	1913 May 31 09:45	0°♉	
morning max el	1913 Jul 04 04:00	25°♉55'03	45°43'51
	1913 Jul 08 09:16	0°♊	
	1913 Aug 05 23:33	0°♋	
	1913 Sep 01 09:19	0°♌	
asc. node	1913 Sep 11 08:06	11°♌40'54	
	1913 Sep 26 16:04	0°♍	
	1913 Oct 21 06:02	0°♎	
	1913 Nov 14 09:54	0°♏	
	1913 Dec 08 08:38	0°♐	
desc. node	1913 Dec 31 21:20	29°♐34'33	
morning set	1914 Jan 01 02:58	29°♐52'16	
	1914 Jan 01 05:25	0°♑	
	1914 Jan 25 02:09	0°♒	
superior conj	1914 Feb 11 20:36	22°♒18'05	-1°19'13
minimum elong	1914 Feb 11 11:59	21°♒51'05	1°19'03
max. Earth dist.	1914 Feb 15 13:03	26°♒55'08	1.71502 AU
	1914 Feb 18 00:05	0°♓	
	1914 Mar 14 00:30	0°♈	
evening rise	1914 Mar 24 04:15	12°♈37'44	
	1914 Apr 07 04:48	0°♉	
asc. node	1914 Apr 24 00:51	20°♉44'08	
	1914 May 01 14:11	0°♊	
	1914 May 26 05:33	0°♋	
	1914 Jun 20 04:26	0°♌	
	1914 Jul 15 14:10	0°♍	
	1914 Aug 10 18:11	0°♎	
desc. node	1914 Aug 13 14:04	3°♎09'51	
	1914 Sep 07 10:58	0°♏	
evening max el	1914 Sep 18 10:01	11°♏00'16	46°26'43
	1914 Oct 10 01:49	0°♐	
greatest brilliancy	1914 Oct 28 19:42	10°♐40'09	-4.9m
retrograde	1914 Nov 07 03:11	12°♐17'20	
evening set	1914 Nov 21 18:57	8°♐06'34	
inferior conj	1914 Nov 27 17:35	4°♐38'50	-1°48'12
minimum elong	1914 Nov 27 21:41	4°♐32'36	1°46'54
min. Earth dist.	1914 Nov 28 01:49	4°♐26'18	0.26538 AU
morning rise	1914 Dec 03 23:55	0°♐59'47	
asc. node	1914 Dec 04 17:23	0°♐37'01	
	1914 Dec 05 23:20	30°℞♏	
direct	1914 Dec 18 04:29	26°♏58'33	
greatest brilliancy	1914 Dec 28 17:10	29°♏04'00	-4.9m
	1914 Dec 30 23:15	0°♐	
morning max el	1915 Feb 06 17:25	0°♑03'41	46°53'54
	1915 Feb 06 15:57	0°♑	
	1915 Mar 06 13:15	0°♒	
desc. node	1915 Mar 26 06:58	22°♒36'09	
	1915 Apr 01 15:19	0°♓	
	1915 Apr 27 00:56	0°♈	
	1915 May 22 02:56	0°♉	
	1915 Jun 16 00:21	0°♊	

	1915 Jul 10	17:31	0°♋	
asc. node	1915 Jul 17	10:21	8°♋10'42	
	1915 Aug 04	05:47	0°♌	
morning set	1915 Aug 07	04:14	3°♌36'39	
	1915 Aug 28	13:06	0°♍	
max. Earth dist.	1915 Sep 09	07:40	14°♍36'38	1.72530 AU
superior conj	1915 Sep 12	18:19	18°♍53'31	1°24'46
minimum elong	1915 Sep 12	19:09	18°♍56'06	1°24'47
	1915 Sep 21	16:31	0°♎	
	1915 Oct 15	17:42	0°♏	
evening rise	1915 Oct 20	16:19	6°♏10'17	
desc. node	1915 Nov 05	23:44	26°♏32'39	
	1915 Nov 08	18:06	0°♐	
	1915 Dec 02	18:38	0°♑	
	1915 Dec 26	20:21	0°♒	
	1916 Jan 20	01:40	0°♓	
	1916 Feb 13	15:24	0°♈	
asc. node	1916 Feb 27	03:04	16°♈08'58	
	1916 Mar 09	21:49	0°♉	
	1916 Apr 05	13:31	0°♊	
evening max el	1916 Apr 24	10:33	19°♊27'04	45°38'52
	1916 May 05	20:37	0°♋	
greatest brilliancy	1916 Jun 01	08:19	17°♋33'04	-4.7m
retrograde	1916 Jun 12	07:48	19°♋43'52	
desc. node	1916 Jun 17	16:20	19°♋09'34	
evening set	1916 Jun 27	13:14	15°♋15'47	
inferior conj	1916 Jul 03	19:56	11°♋30'21	-3°40'57
minimum elong	1916 Jul 03	12:27	11°♋42'03	3°38'57
min. Earth dist.	1916 Jul 03	17:53	11°♋33'35	0.28999 AU
morning rise	1916 Jul 09	11:35	8°♋05'11	
direct	1916 Jul 25	10:48	3°♋12'36	
greatest brilliancy	1916 Aug 04	22:52	5°♋11'03	-4.7m
	1916 Sep 08	22:26	0°♌	
morning max el	1916 Sep 12	13:57	3°♌28'56	46°00'52
	1916 Oct 07	22:11	0°♍	
asc. node	1916 Oct 08	19:48	0°♍59'55	
	1916 Nov 03	00:59	0°♎	
	1916 Nov 27	23:07	0°♏	
	1916 Dec 22	07:50	0°♐	
	1917 Jan 15	10:46	0°♑	
desc. node	1917 Jan 28	09:16	16°♑08'26	
	1917 Feb 08	11:50	0°♒	
	1917 Mar 04	13:09	0°♓	
morning set	1917 Mar 18	17:55	17°♓40'17	
	1917 Mar 28	16:01	0°♈	
	1917 Apr 21	21:17	0°♉	
superior conj	1917 Apr 26	09:27	5°♉34'08	-0°55'12
minimum elong	1917 Apr 26	19:11	6°♉04'11	0°54'50
max. Earth dist.	1917 Apr 29	00:23	8°♉48'24	1.73022 AU
	1917 May 16	05:08	0°♊	
asc. node	1917 May 21	12:42	6°♊32'20	
evening rise	1917 Jun 02	20:42	21°♊41'30	
	1917 Jun 09	15:15	0°♋	
	1917 Jul 04	03:20	0°♌	
	1917 Jul 28	17:52	0°♍	
	1917 Aug 22	12:19	0°♎	
desc. node	1917 Sep 10	01:58	22°♎17'38	
	1917 Sep 16	13:00	0°♏	
	1917 Oct 11	23:33	0°♐	
	1917 Nov 07	05:01	0°♑	
evening max el	1917 Nov 30	08:48	24°♑49'50	47°18'14
	1917 Dec 05	13:14	0°♒	
asc. node	1918 Jan 01	05:22	22°♒04'18	
greatest brilliancy	1918 Jan 09	23:22	26°♒27'27	-4.9m
retrograde	1918 Jan 20	07:51	28°♒30'51	
evening set	1918 Feb 06	01:10	22°♒59'05	
min. Earth dist.	1918 Feb 09	04:34	21°♒04'17	0.27208 AU
inferior conj	1918 Feb 10	01:45	20°♒31'25	8°06'58
minimum elong	1918 Feb 09	17:53	20°♒43'38	8°05'58
morning rise	1918 Feb 13	10:54	18°♒27'23	
direct	1918 Mar 02	15:24	12°♒43'56	
greatest brilliancy	1918 Mar 11	14:39	14°♒15'28	-4.8m
	1918 Apr 05	20:11	0°♓	
morning max el	1918 Apr 21	05:42	14°♓04'03	46°14'31
desc. node	1918 Apr 22	18:39	15°♓34'36	
	1918 May 06	20:58	0°♈	
	1918 Jun 03	05:27	0°♉	
	1918 Jun 29	08:12	0°♊	
	1918 Jul 24	18:43	0°♋	
asc. node	1918 Aug 13	22:14	24°♋11'59	
	1918 Aug 18	17:06	0°♌	
	1918 Sep 12	05:23	0°♍	
	1918 Oct 06	10:00	0°♎	
morning set	1918 Oct 15	19:58	11°♎45'14	
	1918 Oct 30	09:43	0°♏	
max. Earth dist.	1918 Nov 23	00:18	29°♏38'51	1.71221 AU
	1918 Nov 23	07:02	0°♐	
superior conj	1918 Nov 24	01:05	0°♐56'45	0°22'21
minimum elong	1918 Nov 24	06:39	1°♐14'14	0°22'05
desc. node	1918 Dec 03	11:38	12°♐48'58	
	1918 Dec 17	03:34	0°♑	
evening rise	1919 Jan 04	08:11	22°♑52'06	
	1919 Jan 10	00:28	0°♒	
	1919 Feb 02	23:08	0°♓	
	1919 Feb 27	01:43	0°♈	
	1919 Mar 23	11:08	0°♉	
asc. node	1919 Mar 26	14:57	3°♉51'04	
	1919 Apr 17	07:03	0°♊	
	1919 May 12	18:59	0°♋	
	1919 Jun 08	10:35	0°♌	
evening max el	1919 Jul 05	07:08	27°♌40'13	45°28'05
	1919 Jul 07	18:17	0°♍	
desc. node	1919 Jul 16	04:21	7°♍34'01	
greatest brilliancy	1919 Aug 13	06:34	25°♍34'34	-4.7m
retrograde	1919 Aug 22	21:51	27°♍14'23	
evening set	1919 Sep 09	23:02	21°♍11'59	
inferior conj	1919 Sep 13	02:49	19°♍16'02	-8°43'07
minimum elong	1919 Sep 13	03:38	19°♍14'47	8°43'07
min. Earth dist.	1919 Sep 13	18:20	18°♍52'02	0.28342 AU
morning rise	1919 Sep 16	08:04	17°♍17'36	
direct	1919 Oct 04	11:46	11°♍07'25	
greatest brilliancy	1919 Oct 15	12:00	13°♍21'46	-4.8m
asc. node	1919 Nov 06	07:35	27°♍24'33	
	1919 Nov 09	08:05	0°♎	
morning max el	1919 Nov 23	22:17	13°♎52'46	46°43'42
	1919 Dec 09	03:29	0°♏	
	1920 Jan 04	09:20	0°♐	
	1920 Jan 29	11:55	0°♑	
	1920 Feb 23	03:47	0°♒	
desc. node	1920 Feb 25	21:06	3°♒19'40	
	1920 Mar 18	15:31	0°♓	
	1920 Apr 12	02:07	0°♈	
	1920 May 06	12:55	0°♉	
morning set	1920 May 28	05:32	26°♉36'01	
	1920 May 31	00:05	0°♊	
asc. node	1920 Jun 18	00:35	22°♊06'22	
	1920 Jun 24	10:53	0°♋	
max. Earth dist.	1920 Jul 02	11:41	9°♋52'06	1.73567 AU
superior conj	1920 Jul 03	20:51	11°♋33'59	0°36'30
minimum elong	1920 Jul 03	14:05	11°♋13'11	0°36'11

	1920 Jul 18 20:25	0°♌	
evening rise	1920 Aug 08 16:18	25°♌40'13	
	1920 Aug 12 04:30	0°♍	
	1920 Sep 05 11:53	0°♎	
	1920 Sep 29 19:45	0°♏	
desc. node	1920 Oct 07 13:54	9°♏32'55	
	1920 Oct 24 05:11	0°♐	
	1920 Nov 17 17:28	0°♑	
	1920 Dec 12 11:46	0°♒	
	1921 Jan 06 20:32	0°♓	
asc. node	1921 Jan 28 17:12	24°♓35'26	
	1921 Feb 02 18:35	0°♈	
evening max el	1921 Feb 10 04:28	7°♈39'54	46°45'41
	1921 Mar 07 09:18	0°♉	
greatest brilliancy	1921 Mar 21 21:03	8°♉11'03	-4.8m
retrograde	1921 Apr 01 11:19	10°♉16'29	
evening set	1921 Apr 18 01:01	4°♉56'05	
inferior conj	1921 Apr 22 17:37	2°♉02'01	5°58'43
minimum elong	1921 Apr 23 03:25	1°♉46'31	5°56'35
min. Earth dist.	1921 Apr 22 16:56	2°♉03'06	0.28518 AU
	1921 Apr 25 23:46	30℞♈	
morning rise	1921 Apr 28 06:09	28°♈39'49	
direct	1921 May 14 00:27	23°♈52'08	
desc. node	1921 May 20 06:28	24°♈35'56	
greatest brilliancy	1921 May 23 20:03	25°♈37'12	-4.7m
	1921 Jun 02 04:21	0°♉	
morning max el	1921 Jul 01 18:31	23°♉41'12	45°44'07
	1921 Jul 08 05:57	0°♊	
	1921 Aug 05 14:42	0°♋	
	1921 Aug 31 22:24	0°♌	
asc. node	1921 Sep 10 09:59	11°♌09'13	
	1921 Sep 26 04:08	0°♍	
	1921 Oct 20 17:35	0°♎	
	1921 Nov 13 21:11	0°♏	
	1921 Dec 07 19:47	0°♐	
morning set	1921 Dec 29 12:59	27°♐17'55	
desc. node	1921 Dec 30 23:27	29°♐06'20	
	1921 Dec 31 16:31	0°♑	
	1922 Jan 24 13:13	0°♒	
superior conj	1922 Feb 09 07:16	19°♒46'32	-1°17'37
minimum elong	1922 Feb 08 21:55	19°♒17'11	1°17'24
max. Earth dist.	1922 Feb 12 17:50	24°♒05'15	1.71460 AU
	1922 Feb 17 11:06	0°♓	
	1922 Mar 13 11:30	0°♈	
evening rise	1922 Mar 21 16:43	10°♈13'12	
	1922 Apr 06 15:50	0°♉	
asc. node	1922 Apr 23 02:53	20°♉16'16	
	1922 May 01 01:21	0°♊	
	1922 May 25 17:04	0°♋	
	1922 Jun 19 16:32	0°♌	
	1922 Jul 15 03:22	0°♍	
	1922 Aug 10 09:30	0°♎	
desc. node	1922 Aug 12 16:03	2°♎31'56	
	1922 Sep 07 07:15	0°♏	
evening max el	1922 Sep 15 22:28	8°♏36'18	46°24'22
	1922 Oct 10 22:33	0°♐	
greatest brilliancy	1922 Oct 26 08:48	8°♐13'44	-4.9m
retrograde	1922 Nov 04 15:21	9°♐50'19	
evening set	1922 Nov 19 09:05	5°♐36'32	
inferior conj	1922 Nov 25 05:57	2°♐11'35	-2°11'53
minimum elong	1922 Nov 25 10:54	2°♐04'04	2°10'20
min. Earth dist.	1922 Nov 25 15:45	1°♐56'42	0.26571 AU
	1922 Nov 28 21:47	30℞♏	
morning rise	1922 Dec 01 12:10	28°♏32'54	
asc. node	1922 Dec 03 19:28	27°♏23'41	
direct	1922 Dec 15 17:08	24°♏30'20	
greatest brilliancy	1922 Dec 26 07:46	26°♏37'58	-4.9m
	1923 Jan 02 07:27	0°♐	
morning max el	1923 Feb 04 07:26	27°♐39'44	46°54'38
	1923 Feb 06 14:34	0°♑	
	1923 Mar 06 05:38	0°♒	
desc. node	1923 Mar 25 08:57	22°♒00'00	
	1923 Apr 01 05:16	0°♓	
	1923 Apr 26 13:36	0°♈	
	1923 May 21 14:50	0°♉	
	1923 Jun 15 11:46	0°♊	
	1923 Jul 10 04:36	0°♋	
asc. node	1923 Jul 16 12:24	7°♋43'16	
	1923 Aug 03 16:42	0°♌	
morning set	1923 Aug 04 21:44	1°♌29'15	
	1923 Aug 27 23:59	0°♍	
max. Earth dist.	1923 Sep 07 02:22	12°♍31'39	1.72581 AU
superior conj	1923 Sep 10 11:01	16°♍42'13	1°24'51
minimum elong	1923 Sep 10 11:07	16°♍42'32	1°24'51
	1923 Sep 21 03:28	0°♎	
	1923 Oct 15 04:49	0°♏	
evening rise	1923 Oct 18 06:04	3°♏48'39	
desc. node	1923 Nov 05 01:52	26°♏04'09	
	1923 Nov 08 05:23	0°♐	
	1923 Dec 02 06:06	0°♑	
	1923 Dec 26 08:03	0°♒	
	1924 Jan 19 13:45	0°♓	
	1924 Feb 13 04:10	0°♈	
asc. node	1924 Feb 26 05:00	15°♈35'11	
	1924 Mar 09 11:55	0°♉	
	1924 Apr 05 06:46	0°♊	
evening max el	1924 Apr 22 02:58	17°♊16'50	45°40'30
	1924 May 06 01:49	0°♋	
greatest brilliancy	1924 May 29 23:50	15°♋23'07	-4.7m
retrograde	1924 Jun 10 00:50	17°♋35'00	
desc. node	1924 Jun 16 18:28	16°♋40'35	
evening set	1924 Jun 25 04:36	13°♋08'11	
inferior conj	1924 Jul 01 12:20	9°♋21'06	-3°22'54
minimum elong	1924 Jul 01 05:21	9°♋32'00	3°21'00
min. Earth dist.	1924 Jul 01 09:53	9°♋24'56	0.28996 AU
morning rise	1924 Jul 07 06:08	5°♋53'08	
direct	1924 Jul 23 03:34	1°♋03'27	
greatest brilliancy	1924 Aug 02 14:23	3°♋01'13	-4.7m
	1924 Sep 08 21:43	0°♌	
morning max el	1924 Sep 10 06:32	1°♌19'00	45°59'30
asc. node	1924 Oct 07 21:57	0°♍21'22	
	1924 Oct 07 14:16	0°♍	
	1924 Nov 02 14:43	0°♎	
	1924 Nov 27 11:48	0°♏	
	1924 Dec 21 19:56	0°♐	
	1925 Jan 14 22:28	0°♑	
desc. node	1925 Jan 27 11:16	15°♑38'36	
	1925 Feb 07 23:16	0°♒	
	1925 Mar 04 00:21	0°♓	
morning set	1925 Mar 16 07:05	15°♓17'23	
	1925 Mar 28 03:04	0°♈	
	1925 Apr 21 08:14	0°♉	
superior conj	1925 Apr 24 01:11	3°♉20'43	-0°57'47
minimum elong	1925 Apr 24 11:06	3°♉51'19	0°57'25
max. Earth dist.	1925 Apr 26 20:05	6°♉47'19	1.72981 AU
	1925 May 15 16:04	0°♊	
asc. node	1925 May 20 14:51	6°♊05'18	
evening rise	1925 May 31 14:40	19°♊35'44	
	1925 Jun 09 02:14	0°♋	
	1925 Jul 03 14:31	0°♌	
	1925 Jul 28 05:25	0°♍	

	1925 Aug 22 00:28	0°♎	
desc. node	1925 Sep 09 03:59	21°♎45'30	
	1925 Sep 16 02:05	0°♏	
	1925 Oct 11 14:10	0°♐	
	1925 Nov 06 22:34	0°♑	
evening max el	1925 Nov 28 00:19	22°♑28'58	47°17'44
	1925 Dec 05 15:09	0°♒	
asc. node	1925 Dec 31 07:26	20°♒32'10	
greatest brilliancy	1926 Jan 07 13:17	24°♒01'26	-4.9m
retrograde	1926 Jan 17 22:10	26°♒04'36	
evening set	1926 Feb 03 10:55	20°♒39'22	
min. Earth dist.	1926 Feb 06 17:30	18°♒39'48	0.27146 AU
inferior conj	1926 Feb 07 15:08	18°♒06'12	7°57'31
minimum elong	1926 Feb 07 06:43	18°♒19'17	7°56'19
morning rise	1926 Feb 11 02:53	15°♒58'24	
direct	1926 Feb 28 04:47	10°♒20'01	
greatest brilliancy	1926 Mar 09 03:01	11°♒50'50	-4.9m
	1926 Apr 06 03:59	0°♓	
morning max el	1926 Apr 18 19:38	11°♓44'30	46°16'02
desc. node	1926 Apr 21 20:48	14°♓44'52	
	1926 May 06 15:13	0°♈	
	1926 Jun 02 19:59	0°♉	
	1926 Jun 28 21:04	0°♊	
	1926 Jul 24 06:42	0°♋	
asc. node	1926 Aug 13 00:11	23°♋42'53	
	1926 Aug 18 04:35	0°♌	
	1926 Sep 11 16:37	0°♍	
	1926 Oct 05 21:07	0°♎	
morning set	1926 Oct 13 10:37	9°♎26'21	
	1926 Oct 29 20:50	0°♏	
max. Earth dist.	1926 Nov 20 05:27	26°♏49'08	1.71249 AU
superior conj	1926 Nov 21 12:27	28°♏26'31	0°26'03
minimum elong	1926 Nov 21 18:49	28°♏46'32	0°25'45
	1926 Nov 22 18:12	0°♐	
desc. node	1926 Dec 02 13:43	12°♐20'16	
	1926 Dec 16 14:48	0°♑	
evening rise	1927 Jan 01 18:08	20°♑17'02	
	1927 Jan 09 11:48	0°♒	
	1927 Feb 02 10:33	0°♓	
	1927 Feb 26 13:16	0°♈	
	1927 Mar 22 22:56	0°♉	
asc. node	1927 Mar 25 17:04	3°♉21'25	
	1927 Apr 16 19:25	0°♊	
	1927 May 12 08:33	0°♋	
	1927 Jun 08 02:51	0°♌	
evening max el	1927 Jul 02 21:33	25°♌25'18	45°27'02
	1927 Jul 07 18:54	0°♍	
desc. node	1927 Jul 15 06:17	6°♍34'58	
greatest brilliancy	1927 Aug 10 20:28	23°♍19'42	-4.7m
retrograde	1927 Aug 20 11:42	24°♍59'46	
evening set	1927 Sep 07 13:07	18°♍58'14	
inferior conj	1927 Sep 10 17:51	17°♍00'51	-8°43'03
minimum elong	1927 Sep 10 17:49	17°♍00'55	8°43'03
min. Earth dist.	1927 Sep 11 08:56	16°♍37'28	0.28396 AU
morning rise	1927 Sep 13 22:18	15°♍03'23	
direct	1927 Oct 02 02:50	8°♍51'24	
greatest brilliancy	1927 Oct 13 03:32	11°♍05'24	-4.8m
asc. node	1927 Nov 05 09:42	26°♍20'22	
	1927 Nov 09 13:26	0°♎	
morning max el	1927 Nov 21 11:45	11°♎28'57	46°42'23
	1927 Dec 08 21:26	0°♏	
	1928 Jan 04 00:06	0°♐	
	1928 Jan 29 01:13	0°♑	
	1928 Feb 22 16:15	0°♒	
desc. node	1928 Feb 24 23:04	2°♒47'45	
	1928 Mar 18 03:25	0°♓	
	1928 Apr 11 13:35	0°♈	
	1928 May 06 00:03	0°♉	
morning set	1928 May 25 23:20	24°♉29'55	
	1928 May 30 11:00	0°♊	
asc. node	1928 Jun 17 02:37	21°♊39'20	
	1928 Jun 23 21:42	0°♋	
max. Earth dist.	1928 Jun 30 07:54	7°♋53'34	1.73577 AU
superior conj	1928 Jul 01 15:31	9°♋30'42	0°33'39
minimum elong	1928 Jul 01 09:10	9°♋11'10	0°33'22
	1928 Jul 18 07:16	0°♌	
evening rise	1928 Aug 06 11:00	23°♌36'12	
	1928 Aug 11 15:29	0°♍	
	1928 Sep 04 23:05	0°♎	
	1928 Sep 29 07:18	0°♏	
desc. node	1928 Oct 06 16:01	9°♏03'29	
	1928 Oct 23 17:12	0°♐	
	1928 Nov 17 06:09	0°♑	
	1928 Dec 12 01:25	0°♒	
	1929 Jan 06 12:01	0°♓	
asc. node	1929 Jan 27 19:10	23°♓50'25	
	1929 Feb 02 14:34	0°♈	
evening max el	1929 Feb 07 18:12	5°♈17'47	46°47'55
	1929 Mar 08 07:29	0°♉	
greatest brilliancy	1929 Mar 19 14:09	5°♉57'48	-4.8m
retrograde	1929 Mar 30 03:03	8°♉02'37	
evening set	1929 Apr 15 19:42	2°♉38'00	
inferior conj	1929 Apr 20 09:25	29°♈48'24	6°13'40
minimum elong	1929 Apr 20 19:16	29°♈32'51	6°11'37
	1929 Apr 20 02:05	30°℞♈	
min. Earth dist.	1929 Apr 20 08:46	29°♈49'26	0.28489 AU
morning rise	1929 Apr 25 19:06	26°♈30'11	
direct	1929 May 11 15:01	21°♈38'50	
desc. node	1929 May 19 08:31	22°♈44'56	
greatest brilliancy	1929 May 21 11:08	23°♈24'06	-4.7m
	1929 Jun 03 09:47	0°♉	
morning max el	1929 Jun 29 09:45	21°♉28'57	45°44'39
	1929 Jul 08 02:00	0°♊	
	1929 Aug 05 05:39	0°♋	
	1929 Aug 31 11:24	0°♌	
asc. node	1929 Sep 09 12:10	10°♌38'27	
	1929 Sep 25 16:13	0°♍	
	1929 Oct 20 05:12	0°♎	
	1929 Nov 13 08:35	0°♏	
	1929 Dec 07 07:03	0°♐	
morning set	1929 Dec 26 22:52	24°♐42'47	
desc. node	1929 Dec 30 01:27	28°♐37'21	
	1929 Dec 31 03:44	0°♑	
	1930 Jan 24 00:22	0°♒	
superior conj	1930 Feb 06 17:39	17°♒13'48	-1°15'48
minimum elong	1930 Feb 06 07:37	16°♒42'18	1°15'34
max. Earth dist.	1930 Feb 09 22:10	21°♒13'42	1.71420 AU
	1930 Feb 16 22:11	0°♓	
	1930 Mar 12 22:33	0°♈	
evening rise	1930 Mar 19 05:08	7°♈48'14	
	1930 Apr 06 02:57	0°♉	
asc. node	1930 Apr 22 05:03	19°♉48'33	
	1930 Apr 30 12:37	0°♊	
	1930 May 25 04:36	0°♋	
	1930 Jun 19 04:39	0°♌	
	1930 Jul 14 16:34	0°♍	
	1930 Aug 10 00:54	0°♎	
desc. node	1930 Aug 11 18:05	1°♎54'12	
	1930 Sep 07 04:05	0°♏	
evening max el	1930 Sep 13 11:50	6°♏15'07	46°21'51
	1930 Oct 12 02:45	0°♐	

greatest brilliancy	1930 Oct 23 21:10	5°♐46'45	-4.9m
retrograde	1930 Nov 02 03:50	7°♐23'16	
evening set	1930 Nov 16 23:23	3°♐06'14	
	1930 Nov 22 07:44	30°℞♏	
inferior conj	1930 Nov 22 18:16	29°♏44'03	-2°35'22
minimum elong	1930 Nov 23 00:02	29°♏35'18	2°33'34
min. Earth dist.	1930 Nov 23 05:18	29°♏27'19	0.26613 AU
morning rise	1930 Nov 29 00:08	26°♏06'09	
asc. node	1930 Dec 02 21:32	24°♏14'44	
direct	1930 Dec 13 06:23	22°♏01'58	
greatest brilliancy	1930 Dec 23 21:57	24°♏11'05	-4.9m
	1931 Jan 03 20:03	0°♐	
morning max el	1931 Feb 01 22:10	25°♐17'24	46°55'17
	1931 Feb 06 12:24	0°♑	
	1931 Mar 05 21:46	0°♒	
desc. node	1931 Mar 24 11:09	21°♒24'46	
	1931 Mar 31 19:04	0°♓	
	1931 Apr 26 02:10	0°♈	
	1931 May 21 02:38	0°♉	
	1931 Jun 14 23:04	0°♊	
	1931 Jul 09 15:35	0°♋	
asc. node	1931 Jul 15 14:25	7°♋16'03	
morning set	1931 Aug 02 15:40	29°♋23'39	
	1931 Aug 03 03:29	0°♌	
	1931 Aug 27 10:42	0°♍	
max. Earth dist.	1931 Sep 04 20:54	10°♍26'49	1.72627 AU
superior conj	1931 Sep 08 04:11	14°♍33'02	1°24'48
minimum elong	1931 Sep 08 03:33	14°♍31'04	1°24'48
	1931 Sep 20 14:15	0°♎	
	1931 Oct 14 15:45	0°♏	
evening rise	1931 Oct 15 20:13	1°♏28'53	
desc. node	1931 Nov 04 03:57	25°♏36'00	
	1931 Nov 07 16:32	0°♐	
	1931 Dec 01 17:29	0°♑	
	1931 Dec 25 19:44	0°♒	
	1932 Jan 19 01:51	0°♓	
	1932 Feb 12 16:58	0°♈	
asc. node	1932 Feb 25 07:10	15°♈02'01	
	1932 Mar 09 02:07	0°♉	
	1932 Apr 05 00:19	0°♊	
evening max el	1932 Apr 19 19:45	15°♊07'40	45°42'14
	1932 May 06 09:04	0°♋	
greatest brilliancy	1932 May 27 15:48	13°♋14'00	-4.7m
retrograde	1932 Jun 07 17:35	15°♋26'13	
desc. node	1932 Jun 15 20:28	14°♋07'15	
evening set	1932 Jun 22 20:06	11°♋00'49	
inferior conj	1932 Jun 29 04:39	7°♋12'10	-3°04'29
minimum elong	1932 Jun 28 22:13	7°♋22'13	3°02'43
min. Earth dist.	1932 Jun 29 01:55	7°♋16'27	0.28987 AU
morning rise	1932 Jul 05 00:27	3°♋41'24	
	1932 Jul 13 10:33	30°℞♊	
direct	1932 Jul 20 20:22	28°♊54'48	
	1932 Jul 28 12:35	0°♋	
greatest brilliancy	1932 Jul 31 05:30	0°♋51'21	-4.7m
morning max el	1932 Sep 07 22:35	29°♋08'39	45°58'20
	1932 Sep 08 19:45	0°♌	
asc. node	1932 Oct 07 00:02	29°♌44'00	
	1932 Oct 07 05:46	0°♍	
	1932 Nov 02 04:01	0°♎	
	1932 Nov 27 00:06	0°♏	
	1932 Dec 21 07:43	0°♐	
	1933 Jan 14 09:56	0°♑	
desc. node	1933 Jan 26 13:18	15°♑09'31	
	1933 Feb 07 10:30	0°♒	
	1933 Mar 03 11:24	0°♓	
morning set	1933 Mar 13 19:34	12°♓52'49	
	1933 Mar 27 13:58	0°♈	
	1933 Apr 20 19:00	0°♉	
superior conj	1933 Apr 21 16:20	1°♉05'56	-1°00'18
minimum elong	1933 Apr 22 02:21	1°♉36'53	0°59'57
max. Earth dist.	1933 Apr 24 16:17	4°♉48'14	1.72935 AU
	1933 May 15 02:47	0°♊	
asc. node	1933 May 19 16:48	5°♊38'20	
evening rise	1933 May 29 08:12	17°♊29'13	
	1933 Jun 08 13:01	0°♋	
	1933 Jul 03 01:29	0°♌	
	1933 Jul 27 16:45	0°♍	
	1933 Aug 21 12:23	0°♎	
desc. node	1933 Sep 08 06:09	21°♎14'42	
	1933 Sep 15 14:54	0°♏	
	1933 Oct 11 04:32	0°♐	
	1933 Nov 06 16:02	0°♑	
evening max el	1933 Nov 25 15:04	20°♑07'24	47°16'58
	1933 Dec 05 18:00	0°♒	
asc. node	1933 Dec 30 09:23	18°♒57'20	
greatest brilliancy	1934 Jan 05 03:30	21°♒36'27	-4.9m
retrograde	1934 Jan 15 11:45	23°♒38'34	
evening set	1934 Jan 31 20:24	18°♒20'09	
min. Earth dist.	1934 Feb 04 06:45	16°♒15'00	0.27091 AU
inferior conj	1934 Feb 05 04:23	15°♒41'22	7°46'55
minimum elong	1934 Feb 04 19:27	15°♒55'15	7°45'34
morning rise	1934 Feb 08 18:54	13°♒29'21	
direct	1934 Feb 25 17:42	7°♒56'15	
greatest brilliancy	1934 Mar 06 16:07	9°♒27'00	-4.9m
	1934 Apr 06 09:22	0°♓	
morning max el	1934 Apr 16 08:33	9°♓22'33	46°17'29
desc. node	1934 Apr 20 22:49	13°♓56'00	
	1934 May 06 08:54	0°♈	
	1934 Jun 02 10:11	0°♉	
	1934 Jun 28 09:38	0°♊	
	1934 Jul 23 18:21	0°♋	
asc. node	1934 Aug 12 02:18	23°♋15'11	
	1934 Aug 17 15:45	0°♌	
	1934 Sep 11 03:32	0°♍	
	1934 Oct 05 07:56	0°♎	
morning set	1934 Oct 11 01:29	7°♎09'08	
	1934 Oct 29 07:37	0°♏	
max. Earth dist.	1934 Nov 17 11:08	24°♏02'20	1.71276 AU
superior conj	1934 Nov 19 00:19	25°♏59'08	0°29'39
minimum elong	1934 Nov 19 07:25	26°♏21'26	0°29'19
	1934 Nov 22 04:59	0°♐	
desc. node	1934 Dec 01 15:42	11°♐52'27	
	1934 Dec 16 01:39	0°♑	
evening rise	1934 Dec 30 04:30	17°♑44'34	
	1935 Jan 08 22:43	0°♒	
	1935 Feb 01 21:36	0°♓	
	1935 Feb 26 00:29	0°♈	
	1935 Mar 22 10:29	0°♉	
asc. node	1935 Mar 24 19:09	2°♉52'26	
	1935 Apr 16 07:37	0°♊	
	1935 May 11 22:01	0°♋	
	1935 Jun 07 19:11	0°♌	
evening max el	1935 Jun 30 11:13	23°♌09'22	45°26'13
	1935 Jul 07 20:33	0°♍	
desc. node	1935 Jul 14 08:20	5°♍35'26	
greatest brilliancy	1935 Aug 08 09:56	21°♍05'06	-4.7m
retrograde	1935 Aug 18 01:41	22°♍46'09	
evening set	1935 Sep 05 02:44	16°♍45'40	
inferior conj	1935 Sep 08 08:48	14°♍46'25	-8°42'08
minimum elong	1935 Sep 08 07:55	14°♍47'47	8°42'07
min. Earth dist.	1935 Sep 08 23:27	14°♍23'43	0.28448 AU

morning rise	1935 Sep 11 12:53	12°♍49'30	
direct	1935 Sep 29 17:46	6°♍35'59	
greatest brilliancy	1935 Oct 10 19:28	8°♍50'29	-4.8m
asc. node	1935 Nov 04 11:41	25°♍18'21	
	1935 Nov 09 16:34	0°♎	
morning max el	1935 Nov 19 01:41	9°♎07'24	46°41'17
	1935 Dec 08 14:36	0°♏	
	1936 Jan 03 14:16	0°♐	
	1936 Jan 28 14:00	0°♑	
	1936 Feb 22 04:14	0°♒	
desc. node	1936 Feb 24 01:15	2°♒17'54	
	1936 Mar 17 14:53	0°♓	
	1936 Apr 11 00:41	0°♈	
	1936 May 05 10:53	0°♉	
morning set	1936 May 23 16:42	22°♉23'09	
	1936 May 29 21:39	0°♊	
asc. node	1936 Jun 16 04:38	21°♊12'59	
	1936 Jun 23 08:16	0°♋	
max. Earth dist.	1936 Jun 28 03:57	5°♋55'16	1.73586 AU
superior conj	1936 Jun 29 09:43	7°♋26'42	0°30'44
minimum elong	1936 Jun 29 03:49	7°♋08'35	0°30'28
	1936 Jul 17 17:51	0°♌	
evening rise	1936 Aug 04 05:23	21°♌32'07	
	1936 Aug 11 02:11	0°♍	
	1936 Sep 04 10:02	0°♎	
	1936 Sep 28 18:36	0°♏	
desc. node	1936 Oct 05 18:02	8°♏34'32	
	1936 Oct 23 05:00	0°♐	
	1936 Nov 16 18:36	0°♑	
	1936 Dec 11 14:51	0°♒	
	1937 Jan 06 03:18	0°♓	
asc. node	1937 Jan 26 21:21	23°♓06'40	
	1937 Feb 02 10:39	0°♈	
evening max el	1937 Feb 05 08:16	2°♈57'50	46°50'14
	1937 Mar 09 13:19	0°♉	
greatest brilliancy	1937 Mar 17 06:25	3°♉44'50	-4.8m
retrograde	1937 Mar 27 19:06	5°♉50'01	
evening set	1937 Apr 13 14:21	0°♉20'50	
	1937 Apr 14 04:19	30°℞♈	
inferior conj	1937 Apr 18 01:13	27°♈35'45	6°27'56
minimum elong	1937 Apr 18 11:03	27°♈20'14	6°25'58
min. Earth dist.	1937 Apr 18 00:17	27°♈37'14	0.28465 AU
morning rise	1937 Apr 23 07:59	24°♈21'54	
direct	1937 May 09 05:56	19°♈26'22	
desc. node	1937 May 18 10:31	20°♈58'54	
greatest brilliancy	1937 May 19 02:05	21°♈11'50	-4.7m
	1937 Jun 04 06:41	0°♉	
morning max el	1937 Jun 27 01:52	19°♉19'29	45°45'01
	1937 Jul 07 21:12	0°♊	
	1937 Aug 04 20:14	0°♋	
	1937 Aug 31 00:07	0°♌	
asc. node	1937 Sep 08 14:15	10°♌08'02	
	1937 Sep 25 04:03	0°♍	
	1937 Oct 19 16:33	0°♎	
	1937 Nov 12 19:42	0°♏	
	1937 Dec 06 18:06	0°♐	
morning set	1937 Dec 24 08:52	22°♐08'44	
desc. node	1937 Dec 29 03:29	28°♐09'13	
	1937 Dec 30 14:42	0°♑	
	1938 Jan 23 11:16	0°♒	
superior conj	1938 Feb 04 04:04	14°♒41'48	-1°13'51
minimum elong	1938 Feb 03 17:27	14°♒08'29	1°13'35
max. Earth dist.	1938 Feb 07 04:42	18°♒29'37	1.71379 AU
	1938 Feb 16 09:00	0°♓	
	1938 Mar 12 09:20	0°♈	
evening rise	1938 Mar 16 17:43	5°♈24'41	
	1938 Apr 05 13:46	0°♉	
asc. node	1938 Apr 21 07:00	19°♉21'08	
	1938 Apr 29 23:35	0°♊	
	1938 May 24 15:56	0°♋	
	1938 Jun 18 16:37	0°♌	
	1938 Jul 14 05:44	0°♍	
	1938 Aug 09 16:26	0°♎	
desc. node	1938 Aug 10 20:15	1°♎16'44	
	1938 Sep 07 01:36	0°♏	
evening max el	1938 Sep 11 01:53	3°♏56'03	46°19'25
	1938 Oct 13 18:49	0°♐	
greatest brilliancy	1938 Oct 21 09:12	3°♐19'59	-4.9m
retrograde	1938 Oct 30 16:22	4°♐56'24	
evening set	1938 Nov 14 13:51	0°♐36'14	
	1938 Nov 15 16:07	30°℞♏	
inferior conj	1938 Nov 20 06:30	27°♏16'46	-2°58'24
minimum elong	1938 Nov 20 13:02	27°♏06'51	2°56'24
min. Earth dist.	1938 Nov 20 18:30	26°♏58'33	0.26655 AU
morning rise	1938 Nov 26 11:45	23°♏39'52	
asc. node	1938 Dec 01 23:33	21°♏11'03	
direct	1938 Dec 10 19:52	19°♏34'04	
greatest brilliancy	1938 Dec 21 11:34	21°♏43'49	-4.9m
	1939 Jan 04 21:48	0°♐	
morning max el	1939 Jan 30 12:43	22°♐54'55	46°55'51
	1939 Feb 06 09:20	0°♑	
	1939 Mar 05 13:29	0°♒	
desc. node	1939 Mar 23 13:06	20°♒49'24	
	1939 Mar 31 08:34	0°♓	
	1939 Apr 25 14:28	0°♈	
	1939 May 20 14:13	0°♉	
	1939 Jun 14 10:11	0°♊	
	1939 Jul 09 02:25	0°♋	
asc. node	1939 Jul 14 16:32	6°♋49'30	
morning set	1939 Jul 31 09:31	27°♋18'07	
	1939 Aug 02 14:11	0°♌	
	1939 Aug 26 21:24	0°♍	
max. Earth dist.	1939 Sep 02 12:55	8°♍14'20	1.72677 AU
superior conj	1939 Sep 05 21:14	12°♍23'34	1°24'36
minimum elong	1939 Sep 05 19:52	12°♍19'22	1°24'36
	1939 Sep 20 01:02	0°♎	
evening rise	1939 Oct 13 10:09	29°♎08'26	
	1939 Oct 14 02:41	0°♏	
desc. node	1939 Nov 03 05:53	25°♏07'24	
	1939 Nov 07 03:40	0°♐	
	1939 Dec 01 04:52	0°♑	
	1939 Dec 25 07:25	0°♒	
	1940 Jan 18 14:00	0°♓	
	1940 Feb 12 05:51	0°♈	
asc. node	1940 Feb 24 09:13	14°♈28'25	
	1940 Mar 08 16:25	0°♉	
	1940 Apr 04 18:10	0°♊	
evening max el	1940 Apr 17 12:21	12°♊58'14	45°44'05
	1940 May 06 18:47	0°♋	
greatest brilliancy	1940 May 25 08:30	11°♋06'25	-4.7m
retrograde	1940 Jun 05 10:05	13°♋18'16	
desc. node	1940 Jun 14 22:29	11°♋30'22	
evening set	1940 Jun 20 12:02	8°♋54'08	
inferior conj	1940 Jun 26 21:13	5°♋04'11	-2°46'02
minimum elong	1940 Jun 26 15:22	5°♋13'21	2°44'24
min. Earth dist.	1940 Jun 26 18:22	5°♋08'38	0.28978 AU
morning rise	1940 Jul 02 18:51	1°♋30'35	
	1940 Jul 05 16:17	30°℞♊	
direct	1940 Jul 18 13:13	26°♊47'07	
greatest brilliancy	1940 Jul 28 21:00	28°♊42'22	-4.7m
	1940 Aug 01 02:20	0°♋	

morning max el	1940 Sep 05 13:53	26°♋56'29	45°56'55
	1940 Sep 08 16:59	0°♌	
asc. node	1940 Oct 06 01:58	29°♌06'07	
	1940 Oct 06 21:10	0°♍	
	1940 Nov 01 17:24	0°♎	
	1940 Nov 26 12:32	0°♏	
	1940 Dec 20 19:36	0°♐	
	1941 Jan 13 21:29	0°♑	
desc. node	1941 Jan 25 15:26	14°♑40'26	
	1941 Feb 06 21:49	0°♒	
	1941 Mar 02 22:33	0°♓	
morning set	1941 Mar 11 07:57	10°♓27'28	
	1941 Mar 27 00:58	0°♈	
superior conj	1941 Apr 19 07:34	28°♈50'59	-1°02'44
minimum elong	1941 Apr 19 17:38	29°♈22'08	1°02'24
	1941 Apr 20 05:53	0°♉	
max. Earth dist.	1941 Apr 22 11:58	2°♉47'09	1.72883 AU
	1941 May 14 13:36	0°♊	
asc. node	1941 May 18 18:53	5°♊11'27	
evening rise	1941 May 27 01:50	15°♊22'42	
	1941 Jun 07 23:53	0°♋	
	1941 Jul 02 12:33	0°♌	
	1941 Jul 27 04:12	0°♍	
	1941 Aug 21 00:29	0°♎	
desc. node	1941 Sep 07 08:06	20°♎42'35	
	1941 Sep 15 04:01	0°♏	
	1941 Oct 10 19:21	0°♐	
	1941 Nov 06 10:17	0°♑	
evening max el	1941 Nov 23 04:55	17°♑42'23	47°16'05
	1941 Dec 05 23:04	0°♒	
asc. node	1941 Dec 29 11:32	17°♒17'56	
greatest brilliancy	1942 Jan 02 18:02	19°♒10'29	-4.9m
retrograde	1942 Jan 13 00:41	21°♒11'14	
evening set	1942 Jan 29 05:44	15°♒59'36	
min. Earth dist.	1942 Feb 01 20:14	13°♒48'30	0.27034 AU
inferior conj	1942 Feb 02 17:32	13°♒15'23	7°35'30
minimum elong	1942 Feb 02 08:08	13°♒29'59	7°33'56
morning rise	1942 Feb 06 10:54	10°♒59'03	
direct	1942 Feb 23 06:02	5°♒31'09	
greatest brilliancy	1942 Mar 04 05:40	7°♒02'34	-4.9m
	1942 Apr 06 13:14	0°♓	
morning max el	1942 Apr 13 20:54	6°♓58'17	46°19'05
desc. node	1942 Apr 20 00:50	13°♓07'12	
	1942 May 06 02:25	0°♈	
	1942 Jun 02 00:26	0°♉	
	1942 Jun 27 22:18	0°♊	
	1942 Jul 23 06:10	0°♋	
asc. node	1942 Aug 11 04:24	22°♋46'57	
	1942 Aug 17 03:04	0°♌	
	1942 Sep 10 14:38	0°♍	
	1942 Oct 04 18:57	0°♎	
morning set	1942 Oct 08 16:31	4°♎51'49	
	1942 Oct 28 18:40	0°♏	
max. Earth dist.	1942 Nov 14 18:24	21°♏19'30	1.71314 AU
superior conj	1942 Nov 16 12:09	23°♏30'36	0°33'12
minimum elong	1942 Nov 16 19:55	23°♏55'00	0°32'50
	1942 Nov 21 16:07	0°♐	
desc. node	1942 Nov 30 17:49	11°♐24'00	
	1942 Dec 15 12:53	0°♑	
evening rise	1942 Dec 27 14:31	15°♑09'53	
	1943 Jan 08 10:03	0°♒	
	1943 Feb 01 09:01	0°♓	
	1943 Feb 25 12:04	0°♈	
	1943 Mar 21 22:24	0°♉	
asc. node	1943 Mar 23 21:06	2°♉22'01	
	1943 Apr 15 20:12	0°♊	
	1943 May 11 11:56	0°♋	
	1943 Jun 07 12:08	0°♌	
evening max el	1943 Jun 28 01:24	20°♌54'09	45°25'41
	1943 Jul 07 23:56	0°♍	
desc. node	1943 Jul 13 10:31	4°♍34'15	
greatest brilliancy	1943 Aug 05 23:03	18°♍50'15	-4.7m
retrograde	1943 Aug 15 16:36	20°♍33'09	
evening set	1943 Sep 02 16:17	14°♍34'03	
inferior conj	1943 Sep 06 00:05	12°♍32'22	-8°40'19
minimum elong	1943 Sep 05 22:22	12°♍35'02	8°40'17
min. Earth dist.	1943 Sep 06 13:52	12°♍11'02	0.28500 AU
morning rise	1943 Sep 09 04:13	10°♍35'29	
direct	1943 Sep 27 09:15	4°♍21'04	
greatest brilliancy	1943 Oct 08 11:21	6°♍35'54	-4.8m
asc. node	1943 Nov 03 13:46	24°♍17'36	
	1943 Nov 09 18:25	0°♎	
morning max el	1943 Nov 16 16:36	6°♎47'53	46°39'52
	1943 Dec 08 07:44	0°♏	
	1944 Jan 03 04:43	0°♐	
	1944 Jan 28 03:11	0°♑	
	1944 Feb 21 16:40	0°♒	
desc. node	1944 Feb 23 03:15	1°♒46'05	
	1944 Mar 17 02:46	0°♓	
	1944 Apr 10 12:09	0°♈	
	1944 May 04 22:04	0°♉	
morning set	1944 May 21 09:54	20°♉14'44	
	1944 May 29 08:39	0°♊	
asc. node	1944 Jun 15 06:45	20°♊45'57	
	1944 Jun 22 19:12	0°♋	
max. Earth dist.	1944 Jun 26 01:27	4°♋00'23	1.73592 AU
superior conj	1944 Jun 27 03:57	5°♋21'46	0°27'47
minimum elong	1944 Jun 26 22:32	5°♋05'08	0°27'31
	1944 Jul 17 04:47	0°♌	
evening rise	1944 Aug 02 00:07	19°♌28'08	
	1944 Aug 10 13:13	0°♍	
	1944 Sep 03 21:16	0°♎	
	1944 Sep 28 06:12	0°♏	
desc. node	1944 Oct 04 20:03	8°♏04'46	
	1944 Oct 22 17:07	0°♐	
	1944 Nov 16 07:26	0°♑	
	1944 Dec 11 04:47	0°♒	
	1945 Jan 05 19:18	0°♓	
asc. node	1945 Jan 25 23:21	22°♓20'05	
	1945 Feb 02 08:07	0°♈	
evening max el	1945 Feb 02 23:14	0°♈38'23	46°52'25
	1945 Mar 11 11:17	0°♉	
greatest brilliancy	1945 Mar 14 22:03	1°♉28'52	-4.8m
retrograde	1945 Mar 25 11:24	3°♉34'51	
	1945 Apr 07 19:15	30°℞♈	
evening set	1945 Apr 11 08:47	28°♈01'07	
inferior conj	1945 Apr 15 16:44	25°♈20'33	6°41'48
minimum elong	1945 Apr 16 02:29	25°♈05'12	6°39'57
min. Earth dist.	1945 Apr 15 15:09	25°♈23'02	0.28435 AU
morning rise	1945 Apr 20 20:26	22°♈11'28	
direct	1945 May 06 21:03	17°♈11'36	
greatest brilliancy	1945 May 16 16:12	18°♈56'47	-4.7m
desc. node	1945 May 17 12:38	19°♈14'53	
	1945 Jun 04 22:58	0°♉	
morning max el	1945 Jun 24 18:16	17°♉09'29	45°45'30
	1945 Jul 07 16:20	0°♊	
	1945 Aug 04 10:59	0°♋	
	1945 Aug 30 13:05	0°♌	
asc. node	1945 Sep 07 16:09	9°♌36'17	
	1945 Sep 24 16:06	0°♍	
	1945 Oct 19 04:09	0°♎	

	1945 Nov 12 07:05	0°♏	
	1945 Dec 06 05:22	0°♐	
morning set	1945 Dec 21 19:25	19°♐35'39	
desc. node	1945 Dec 28 05:38	27°♐40'38	
	1945 Dec 30 01:56	0°♑	
	1946 Jan 22 22:28	0°♒	
superior conj	1946 Feb 01 14:19	12°♒08'10	-1°11'44
minimum elong	1946 Feb 01 03:14	11°♒33'20	1°11'25
max. Earth dist.	1946 Feb 04 13:26	15°♒51'20	1.71348 AU
	1946 Feb 15 20:11	0°♓	
	1946 Mar 11 20:31	0°♈	
evening rise	1946 Mar 14 05:47	2°♈58'11	
	1946 Apr 05 01:01	0°♉	
asc. node	1946 Apr 20 09:03	18°♉52'44	
	1946 Apr 29 10:59	0°♊	
	1946 May 24 03:39	0°♋	
	1946 Jun 18 05:00	0°♌	
	1946 Jul 13 19:22	0°♍	
	1946 Aug 09 08:34	0°♎	
desc. node	1946 Aug 09 22:12	0°♎37'25	
	1946 Sep 07 00:16	0°♏	
evening max el	1946 Sep 08 16:25	1°♏37'36	46°17'01
	1946 Oct 16 10:45	0°♐	
greatest brilliancy	1946 Oct 18 21:47	0°♐54'06	-4.8m
retrograde	1946 Oct 28 04:52	2°♐29'49	
	1946 Nov 08 08:56	30°℞♏	
evening set	1946 Nov 12 04:46	28°♏06'43	
inferior conj	1946 Nov 17 19:01	24°♏50'05	-3°20'49
minimum elong	1946 Nov 18 02:16	24°♏39'04	3°18'39
min. Earth dist.	1946 Nov 18 08:00	24°♏30'23	0.26695 AU
morning rise	1946 Nov 23 23:22	21°♏14'15	
asc. node	1946 Dec 01 01:38	18°♏13'21	
direct	1946 Dec 08 09:32	17°♏06'56	
greatest brilliancy	1946 Dec 19 01:17	19°♏16'49	-4.9m
	1947 Jan 05 16:45	0°♐	
morning max el	1947 Jan 28 02:23	20°♐29'52	46°56'11
	1947 Feb 06 05:41	0°♑	
	1947 Mar 05 05:09	0°♒	
desc. node	1947 Mar 22 15:07	20°♒13'48	
	1947 Mar 30 22:14	0°♓	
	1947 Apr 25 03:02	0°♈	
	1947 May 20 02:05	0°♉	
	1947 Jun 13 21:35	0°♊	
	1947 Jul 08 13:30	0°♋	
asc. node	1947 Jul 13 18:34	6°♋21'58	
morning set	1947 Jul 29 03:13	25°♋11'30	
	1947 Aug 02 01:06	0°♌	
	1947 Aug 26 08:17	0°♍	
max. Earth dist.	1947 Aug 31 04:26	5°♍59'52	1.72725 AU
superior conj	1947 Sep 03 14:23	10°♍14'01	1°24'18
minimum elong	1947 Sep 03 12:21	10°♍07'40	1°24'18
	1947 Sep 19 12:01	0°♎	
evening rise	1947 Oct 11 00:25	26°♎48'34	
	1947 Oct 13 13:49	0°♏	
desc. node	1947 Nov 02 08:02	24°♏38'56	
	1947 Nov 06 14:59	0°♐	
	1947 Nov 30 16:23	0°♑	
	1947 Dec 24 19:13	0°♒	
	1948 Jan 18 02:14	0°♓	
	1948 Feb 11 18:51	0°♈	
asc. node	1948 Feb 23 11:09	13°♈54'07	
	1948 Mar 08 06:59	0°♉	
	1948 Apr 04 12:40	0°♊	
evening max el	1948 Apr 15 04:01	10°♊45'37	45°45'42
	1948 May 07 08:27	0°♋	
greatest brilliancy	1948 May 23 01:37	8°♋58'00	-4.7m
retrograde	1948 Jun 03 02:01	11°♋09'01	
desc. node	1948 Jun 14 00:37	8°♋47'27	
evening set	1948 Jun 18 03:55	6°♋45'53	
inferior conj	1948 Jun 24 13:37	2°♋55'04	-2°27'13
minimum elong	1948 Jun 24 08:23	3°♋03'17	2°25'43
min. Earth dist.	1948 Jun 24 11:05	2°♋59'03	0.28968 AU
	1948 Jun 29 07:58	30°℞♊	
morning rise	1948 Jun 30 12:57	29°♊18'42	
direct	1948 Jul 16 05:25	24°♊38'14	
greatest brilliancy	1948 Jul 26 12:56	26°♊32'52	-4.7m
	1948 Aug 03 02:15	0°♋	
morning max el	1948 Sep 03 04:10	24°♋41'24	45°55'44
	1948 Sep 08 13:40	0°♌	
asc. node	1948 Oct 05 04:08	28°♌28'58	
	1948 Oct 06 12:25	0°♍	
	1948 Nov 01 06:42	0°♎	
	1948 Nov 26 00:55	0°♏	
	1948 Dec 20 07:28	0°♐	
	1949 Jan 13 09:01	0°♑	
desc. node	1949 Jan 24 17:24	14°♑10'55	
	1949 Feb 06 09:05	0°♒	
	1949 Mar 02 09:38	0°♓	
morning set	1949 Mar 08 20:26	8°♓02'31	
	1949 Mar 26 11:54	0°♈	
superior conj	1949 Apr 16 22:48	26°♈36'10	-1°05'03
minimum elong	1949 Apr 17 08:51	27°♈07'15	1°04'44
	1949 Apr 19 16:44	0°♉	
max. Earth dist.	1949 Apr 20 06:47	0°♉43'28	1.72835 AU
	1949 May 14 00:25	0°♊	
asc. node	1949 May 17 20:59	4°♊44'38	
evening rise	1949 May 24 19:12	13°♊15'17	
	1949 Jun 07 10:47	0°♋	
	1949 Jul 01 23:40	0°♌	
	1949 Jul 26 15:43	0°♍	
	1949 Aug 20 12:39	0°♎	
desc. node	1949 Sep 06 10:08	20°♎10'37	
	1949 Sep 14 17:12	0°♏	
	1949 Oct 10 10:18	0°♐	
	1949 Nov 06 04:53	0°♑	
evening max el	1949 Nov 20 17:48	15°♑15'18	47°15'11
	1949 Dec 06 06:05	0°♒	
asc. node	1949 Dec 28 13:34	15°♒34'50	
greatest brilliancy	1949 Dec 31 08:35	16°♒44'44	-4.9m
retrograde	1950 Jan 10 13:35	18°♒44'25	
evening set	1950 Jan 26 15:03	13°♒39'08	
min. Earth dist.	1950 Jan 30 09:51	11°♒22'07	0.26978 AU
inferior conj	1950 Jan 31 06:40	10°♒49'48	7°23'07
minimum elong	1950 Jan 30 20:54	11°♒04'59	7°21'22
morning rise	1950 Feb 04 03:04	8°♒29'07	
direct	1950 Feb 20 18:04	3°♒06'14	
greatest brilliancy	1950 Mar 01 19:30	4°♒38'58	-4.9m
	1950 Apr 06 15:13	0°♓	
morning max el	1950 Apr 11 09:29	4°♓35'06	46°20'47
desc. node	1950 Apr 19 02:59	12°♓20'12	
	1950 May 05 19:19	0°♈	
	1950 Jun 01 14:19	0°♉	
	1950 Jun 27 10:45	0°♊	
	1950 Jul 22 17:50	0°♋	
asc. node	1950 Aug 10 06:19	22°♋18'29	
	1950 Aug 16 14:17	0°♌	
	1950 Sep 10 01:37	0°♍	
	1950 Oct 04 05:51	0°♎	
morning set	1950 Oct 06 07:30	2°♎34'50	
	1950 Oct 28 05:33	0°♏	
max. Earth dist.	1950 Nov 12 05:10	18°♏48'17	1.71350 AU

superior conj	1950 Nov 13 23:59	21°♏02'44	0°36'40
minimum elong	1950 Nov 14 08:22	21°♏29'05	0°36'17
	1950 Nov 21 03:03	0°♐	
desc. node	1950 Nov 29 19:53	10°♐56'01	
	1950 Dec 14 23:54	0°♑	
evening rise	1950 Dec 25 00:41	12°♑36'21	
	1951 Jan 07 21:10	0°♒	
	1951 Jan 31 20:14	0°♓	
	1951 Feb 24 23:26	0°♈	
	1951 Mar 21 10:05	0°♉	
asc. node	1951 Mar 22 23:13	1°♉52'52	
	1951 Apr 15 08:33	0°♊	
	1951 May 11 01:41	0°♋	
	1951 Jun 07 05:10	0°♌	
evening max el	1951 Jun 25 16:08	18°♌40'58	45°25'02
	1951 Jul 08 04:54	0°♍	
desc. node	1951 Jul 12 12:27	3°♍31'25	
greatest brilliancy	1951 Aug 03 11:34	16°♍35'03	-4.7m
retrograde	1951 Aug 13 07:51	18°♍20'05	
evening set	1951 Aug 31 05:20	12°♍22'55	
inferior conj	1951 Sep 03 15:08	10°♍18'17	-8°37'46
minimum elong	1951 Sep 03 12:37	10°♍22'11	8°37'41
min. Earth dist.	1951 Sep 04 03:48	9°♍58'42	0.28551 AU
morning rise	1951 Sep 06 19:43	8°♍20'53	
direct	1951 Sep 25 00:58	2°♍06'14	
greatest brilliancy	1951 Oct 06 02:32	4°♍20'48	-4.8m
asc. node	1951 Nov 02 15:51	23°♍18'36	
	1951 Nov 09 18:48	0°♎	
morning max el	1951 Nov 14 08:07	4°♎30'42	46°38'33
	1951 Dec 08 00:19	0°♏	
	1952 Jan 02 18:44	0°♐	
	1952 Jan 27 15:58	0°♑	
	1952 Feb 21 04:42	0°♒	
desc. node	1952 Feb 22 05:14	1°♒15'17	
	1952 Mar 16 14:18	0°♓	
	1952 Apr 09 23:17	0°♈	
	1952 May 04 08:55	0°♉	
morning set	1952 May 19 03:17	18°♉07'52	
	1952 May 28 19:19	0°♊	
asc. node	1952 Jun 14 08:45	20°♊19'37	
	1952 Jun 22 05:46	0°♋	
max. Earth dist.	1952 Jun 24 00:50	2°♋12'16	1.73598 AU
superior conj	1952 Jun 24 22:17	3°♋18'11	0°24'47
minimum elong	1952 Jun 24 17:23	3°♋03'07	0°24'33
	1952 Jul 16 15:23	0°♌	
evening rise	1952 Jul 30 18:58	17°♌25'26	
	1952 Aug 09 23:58	0°♍	
	1952 Sep 03 08:17	0°♎	
	1952 Sep 27 17:36	0°♏	
desc. node	1952 Oct 03 22:11	7°♏35'59	
	1952 Oct 22 05:02	0°♐	
	1952 Nov 15 20:03	0°♑	
	1952 Dec 10 18:30	0°♒	
	1953 Jan 05 11:10	0°♓	
asc. node	1953 Jan 25 01:19	21°♓33'53	
evening max el	1953 Jan 31 14:55	28°♓21'49	46°54'35
	1953 Feb 02 05:54	0°♈	
greatest brilliancy	1953 Mar 12 13:35	29°♈13'58	-4.8m
	1953 Mar 14 18:57	0°♉	
retrograde	1953 Mar 23 03:53	1°♉20'36	
	1953 Mar 31 05:17	30°℞♈	
evening set	1953 Apr 09 03:18	25°♈42'30	
inferior conj	1953 Apr 13 08:15	23°♈06'18	6°55'09
minimum elong	1953 Apr 13 17:52	22°♈51'09	6°53'24
min. Earth dist.	1953 Apr 13 05:43	23°♈10'17	0.28404 AU
morning rise	1953 Apr 18 08:45	20°♈02'08	
direct	1953 May 04 12:33	14°♈58'03	
greatest brilliancy	1953 May 14 05:44	16°♈42'07	-4.7m
desc. node	1953 May 16 14:40	17°♈35'36	
	1953 Jun 05 10:34	0°♉	
morning max el	1953 Jun 22 10:39	15°♉00'37	45°46'01
	1953 Jul 07 10:29	0°♊	
	1953 Aug 04 01:08	0°♋	
	1953 Aug 30 01:35	0°♌	
asc. node	1953 Sep 06 18:19	9°♌06'33	
	1953 Sep 24 03:48	0°♍	
	1953 Oct 18 15:27	0°♎	
	1953 Nov 11 18:12	0°♏	
	1953 Dec 05 16:24	0°♐	
morning set	1953 Dec 19 05:45	17°♐02'45	
desc. node	1953 Dec 27 07:37	27°♐12'24	
	1953 Dec 29 12:53	0°♑	
	1954 Jan 22 09:20	0°♒	
superior conj	1954 Jan 30 00:17	9°♒34'37	-1°09'27
minimum elong	1954 Jan 29 12:48	8°♒58'33	1°09'06
max. Earth dist.	1954 Feb 01 23:51	13°♒19'17	1.71312 AU
	1954 Feb 15 07:01	0°♓	
	1954 Mar 11 07:22	0°♈	
evening rise	1954 Mar 11 17:43	0°♈32'14	
	1954 Apr 04 11:55	0°♉	
asc. node	1954 Apr 19 11:11	18°♉25'37	
	1954 Apr 28 22:03	0°♊	
	1954 May 23 15:04	0°♋	
	1954 Jun 17 17:04	0°♌	
	1954 Jul 13 08:43	0°♍	
desc. node	1954 Aug 09 00:16	29°♍59'12	
	1954 Aug 09 00:34	0°♎	
evening max el	1954 Sep 06 06:12	29°♎18'24	46°14'22
	1954 Sep 06 23:28	0°♏	
greatest brilliancy	1954 Oct 16 10:40	28°♏29'15	-4.8m
	1954 Oct 23 22:06	0°♐	
retrograde	1954 Oct 25 16:36	0°♐03'39	
	1954 Oct 27 10:43	30°℞♏	
evening set	1954 Nov 09 19:41	25°♏37'25	
inferior conj	1954 Nov 15 07:26	22°♏23'51	-3°42'57
minimum elong	1954 Nov 15 15:19	22°♏11'50	3°40'38
min. Earth dist.	1954 Nov 15 21:38	22°♏02'13	0.26742 AU
morning rise	1954 Nov 21 10:32	18°♏49'12	
asc. node	1954 Nov 30 03:39	15°♏21'18	
direct	1954 Dec 05 22:39	14°♏40'02	
greatest brilliancy	1954 Dec 16 15:22	16°♏50'25	-4.9m
	1955 Jan 06 06:48	0°♐	
morning max el	1955 Jan 25 15:06	18°♐02'37	46°56'36
	1955 Feb 06 01:15	0°♑	
	1955 Mar 04 20:21	0°♒	
desc. node	1955 Mar 21 17:19	19°♒39'40	
	1955 Mar 30 11:30	0°♓	
	1955 Apr 24 15:13	0°♈	
	1955 May 19 13:35	0°♉	
	1955 Jun 13 08:38	0°♊	
	1955 Jul 08 00:15	0°♋	
asc. node	1955 Jul 12 20:33	5°♋55'16	
morning set	1955 Jul 26 21:11	23°♋06'39	
	1955 Aug 01 11:43	0°♌	
	1955 Aug 25 18:52	0°♍	
max. Earth dist.	1955 Aug 28 20:42	3°♍48'43	1.72773 AU
superior conj	1955 Sep 01 07:57	8°♍06'46	1°23'52
minimum elong	1955 Sep 01 05:14	7°♍58'19	1°23'51
	1955 Sep 18 22:41	0°♎	
evening rise	1955 Oct 08 15:05	24°♎31'00	
	1955 Oct 13 00:39	0°♏	

desc. node	1955 Nov 01	10:06	24°♏11'05	
	1955 Nov 06	02:02	0°♐	
	1955 Nov 30	03:42	0°♑	
	1955 Dec 24	06:52	0°♒	
	1956 Jan 17	14:22	0°♓	
	1956 Feb 11	07:46	0°♈	
asc. node	1956 Feb 22	13:18	13°♈20'42	
	1956 Mar 07	21:31	0°♉	
	1956 Apr 04	07:23	0°♊	
evening max el	1956 Apr 12	18:45	8°♊31'25	45°47'35
	1956 May 08	02:17	0°♋	
greatest brilliancy	1956 May 20	18:46	6°♋50'32	-4.7m
retrograde	1956 May 31	18:04	9°♋01'06	
desc. node	1956 Jun 13	02:35	6°♋01'47	
evening set	1956 Jun 15	20:03	4°♋38'21	
inferior conj	1956 Jun 22	06:09	0°♋47'05	-2°08'09
minimum elong	1956 Jun 22	01:33	0°♋54'18	2°06'50
min. Earth dist.	1956 Jun 22	04:04	0°♋50'20	0.28958 AU
	1956 Jun 23	12:10	30°℞♊	
morning rise	1956 Jun 28	07:04	27°♊08'11	
direct	1956 Jul 13	21:20	22°♊30'16	
greatest brilliancy	1956 Jul 24	05:27	24°♊24'58	-4.7m
	1956 Aug 04	09:49	0°♋	
morning max el	1956 Aug 31	18:43	22°♋27'48	45°54'44
	1956 Sep 08	09:23	0°♌	
asc. node	1956 Oct 04	06:10	27°♌52'33	
	1956 Oct 06	03:12	0°♍	
	1956 Oct 31	19:40	0°♎	
	1956 Nov 25	13:01	0°♏	
	1956 Dec 19	19:07	0°♐	
	1957 Jan 12	20:23	0°♑	
desc. node	1957 Jan 23	19:29	13°♑42'07	
	1957 Feb 05	20:16	0°♒	
	1957 Mar 01	20:39	0°♓	
morning set	1957 Mar 06	08:16	5°♓35'36	
	1957 Mar 25	22:46	0°♈	
superior conj	1957 Apr 14	13:39	24°♈20'18	-1°07'18
minimum elong	1957 Apr 14	23:36	24°♈51'06	1°06'59
max. Earth dist.	1957 Apr 17	23:16	28°♈32'48	1.72780 AU
	1957 Apr 19	03:28	0°♉	
	1957 May 13	11:08	0°♊	
asc. node	1957 May 16	22:57	4°♊17'43	
evening rise	1957 May 22	12:22	11°♊07'37	
	1957 Jun 06	21:35	0°♋	
	1957 Jul 01	10:42	0°♌	
	1957 Jul 26	03:10	0°♍	
	1957 Aug 20	00:44	0°♎	
desc. node	1957 Sep 05	12:17	19°♎39'18	
	1957 Sep 14	06:20	0°♏	
	1957 Oct 10	01:16	0°♐	
	1957 Nov 05	23:46	0°♑	
evening max el	1957 Nov 18	06:36	12°♑48'44	47°14'14
	1957 Dec 06	15:26	0°♒	
asc. node	1957 Dec 27	15:32	13°♒47'57	
greatest brilliancy	1957 Dec 28	22:34	14°♒18'34	-4.9m
retrograde	1958 Jan 08	02:47	16°♒17'59	
evening set	1958 Jan 24	00:21	11°♒18'27	
min. Earth dist.	1958 Jan 27	23:17	8°♒55'54	0.26930 AU
inferior conj	1958 Jan 28	19:47	8°♒24'11	7°09'41
minimum elong	1958 Jan 28	09:42	8°♒39'47	7°07'46
morning rise	1958 Feb 01	19:21	5°♒59'08	
direct	1958 Feb 18	06:17	0°♒41'02	
greatest brilliancy	1958 Feb 27	09:16	2°♒15'07	-4.9m
	1958 Apr 06	16:00	0°♓	
morning max el	1958 Apr 08	23:02	2°♓13'51	46°22'26
desc. node	1958 Apr 18	05:00	11°♓33'19	
	1958 May 05	11:59	0°♈	
	1958 Jun 01	04:07	0°♉	
	1958 Jun 26	23:08	0°♊	
	1958 Jul 22	05:26	0°♋	
asc. node	1958 Aug 09	08:28	21°♋50'49	
	1958 Aug 16	01:28	0°♌	
	1958 Sep 09	12:35	0°♍	
morning set	1958 Oct 03	22:52	0°♎19'08	
	1958 Oct 03	16:44	0°♎	
	1958 Oct 27	16:26	0°♏	
max. Earth dist.	1958 Nov 09	17:50	16°♏23'00	1.71382 AU
superior conj	1958 Nov 11	12:20	18°♏36'29	0°40'02
minimum elong	1958 Nov 11	21:16	19°♏04'29	0°39'38
	1958 Nov 20	13:59	0°♐	
desc. node	1958 Nov 28	21:52	10°♐27'51	
	1958 Dec 14	10:55	0°♑	
evening rise	1958 Dec 22	11:19	10°♑04'24	
	1959 Jan 07	08:16	0°♒	
	1959 Jan 31	07:28	0°♓	
	1959 Feb 24	10:53	0°♈	
	1959 Mar 20	21:55	0°♉	
asc. node	1959 Mar 22	01:17	1°♉23'07	
	1959 Apr 14	21:08	0°♊	
	1959 May 10	15:45	0°♋	
	1959 Jun 06	22:42	0°♌	
evening max el	1959 Jun 23	07:50	16°♌29'55	45°24'39
	1959 Jul 08	12:08	0°♍	
desc. node	1959 Jul 11	14:31	2°♍27'06	
greatest brilliancy	1959 Aug 01	00:14	14°♍20'17	-4.7m
retrograde	1959 Aug 10	23:16	16°♍07'16	
evening set	1959 Aug 28	18:20	10°♍12'37	
inferior conj	1959 Sep 01	06:23	8°♍04'30	-8°34'29
minimum elong	1959 Sep 01	03:06	8°♍09'35	8°34'19
min. Earth dist.	1959 Sep 01	17:41	7°♍47'01	0.28596 AU
morning rise	1959 Sep 04	11:41	6°♍06'02	
	1959 Sep 20	03:01	30°℞♌	
direct	1959 Sep 22	17:15	29°♌51'55	
	1959 Sep 25	08:14	0°♍	
greatest brilliancy	1959 Oct 03	17:11	2°♍05'16	-4.8m
asc. node	1959 Nov 01	17:51	22°♍20'29	
	1959 Nov 09	18:11	0°♎	
morning max el	1959 Nov 12	00:02	2°♎14'26	46°37'09
	1959 Dec 07	16:41	0°♏	
	1960 Jan 02	08:43	0°♐	
	1960 Jan 27	04:45	0°♑	
	1960 Feb 20	16:47	0°♒	
desc. node	1960 Feb 21	07:26	0°♒45'00	
	1960 Mar 16	01:53	0°♓	
	1960 Apr 09	10:32	0°♈	
	1960 May 03	19:56	0°♉	
morning set	1960 May 16	20:33	15°♉59'58	
	1960 May 28	06:11	0°♊	
asc. node	1960 Jun 13	10:48	19°♊52'46	
	1960 Jun 21	16:34	0°♋	
max. Earth dist.	1960 Jun 21	23:55	0°♋22'36	1.73598 AU
superior conj	1960 Jun 22	16:24	1°♋13'15	0°21'44
minimum elong	1960 Jun 22	12:04	0°♋59'54	0°21'32
	1960 Jul 16	02:11	0°♌	
evening rise	1960 Jul 28	13:39	15°♌21'45	
	1960 Aug 09	10:54	0°♍	
	1960 Sep 02	19:29	0°♎	
	1960 Sep 27	05:13	0°♏	
desc. node	1960 Oct 03	00:11	7°♏06'11	
	1960 Oct 21	17:12	0°♐	
	1960 Nov 15	08:57	0°♑	

	1960 Dec 10 08:34	0°♒	
	1961 Jan 05 03:31	0°♓	
asc. node	1961 Jan 24 03:31	20°♓47'04	
evening max el	1961 Jan 29 06:53	26°♓05'17	46°56'42
	1961 Feb 02 04:46	0°♈	
greatest brilliancy	1961 Mar 10 05:37	26°♈59'15	-4.8m
retrograde	1961 Mar 20 20:13	29°♈05'45	
evening set	1961 Apr 06 21:53	23°♈23'40	
inferior conj	1961 Apr 10 23:51	20°♈51'40	7°07'47
minimum elong	1961 Apr 11 09:16	20°♈36'49	7°06'09
min. Earth dist.	1961 Apr 10 20:22	20°♈57'09	0.28371 AU
morning rise	1961 Apr 15 21:01	17°♈52'21	
direct	1961 May 02 04:15	12°♈44'15	
greatest brilliancy	1961 May 11 19:10	14°♈26'41	-4.8m
desc. node	1961 May 15 16:42	15°♈59'15	
	1961 Jun 05 19:25	0°♉	
morning max el	1961 Jun 20 02:27	12°♉49'31	45°46'26
	1961 Jul 07 04:32	0°♊	
	1961 Aug 03 15:28	0°♋	
	1961 Aug 29 14:18	0°♌	
asc. node	1961 Sep 05 20:24	8°♌35'41	
	1961 Sep 23 15:43	0°♍	
	1961 Oct 18 02:58	0°♎	
	1961 Nov 11 05:32	0°♏	
greatest brilliancy	1961 Nov 16 20:36	7°♏02'35	-3.9m
	1961 Dec 05 03:40	0°♐	
morning set	1961 Dec 16 16:10	14°♐29'15	
desc. node	1961 Dec 26 09:40	26°♐43'36	
	1961 Dec 29 00:07	0°♑	
	1962 Jan 21 20:31	0°♒	
superior conj	1962 Jan 27 10:19	7°♒00'18	-1°07'00
minimum elong	1962 Jan 26 22:33	6°♒23'22	1°06'39
max. Earth dist.	1962 Jan 30 08:26	10°♒40'29	1.71274 AU
	1962 Feb 14 18:09	0°♓	
evening rise	1962 Mar 09 05:39	28°♓05'21	
	1962 Mar 10 18:28	0°♈	
	1962 Apr 03 23:05	0°♉	
asc. node	1962 Apr 18 13:09	17°♉57'12	
	1962 Apr 28 09:23	0°♊	
	1962 May 23 02:46	0°♋	
	1962 Jun 17 05:31	0°♌	
	1962 Jul 12 22:32	0°♍	
desc. node	1962 Aug 08 02:25	29°♍19'44	
	1962 Aug 08 17:13	0°♎	
evening max el	1962 Sep 03 19:14	26°♎56'35	46°11'51
	1962 Sep 07 00:11	0°♏	
greatest brilliancy	1962 Oct 14 00:15	26°♏04'50	-4.8m
retrograde	1962 Oct 23 04:14	27°♏37'36	
evening set	1962 Nov 07 10:55	23°♏07'49	
inferior conj	1962 Nov 12 20:06	19°♏57'42	-4°04'20
minimum elong	1962 Nov 13 04:35	19°♏44'47	4°01'54
min. Earth dist.	1962 Nov 13 11:47	19°♏33'49	0.26792 AU
morning rise	1962 Nov 18 21:43	16°♏24'30	
asc. node	1962 Nov 29 05:42	12°♏34'57	
direct	1962 Dec 03 11:26	12°♏12'56	
greatest brilliancy	1962 Dec 14 06:10	14°♏24'34	-4.9m
	1963 Jan 06 17:35	0°♐	
morning max el	1963 Jan 23 03:34	15°♐33'45	46°56'54
	1963 Feb 05 20:35	0°♑	
	1963 Mar 04 11:41	0°♒	
desc. node	1963 Mar 20 19:15	19°♒04'02	
	1963 Mar 30 01:00	0°♓	
	1963 Apr 24 03:39	0°♈	
	1963 May 19 01:21	0°♉	
	1963 Jun 12 19:57	0°♊	
	1963 Jul 07 11:18	0°♋	
asc. node	1963 Jul 11 22:42	5°♋28'09	
morning set	1963 Jul 24 15:10	21°♋00'54	
	1963 Jul 31 22:38	0°♌	
	1963 Aug 25 05:48	0°♍	
max. Earth dist.	1963 Aug 26 13:57	1°♍39'33	1.72824 AU
superior conj	1963 Aug 30 01:30	5°♍58'28	1°23'19
minimum elong	1963 Aug 29 22:07	5°♍47'58	1°23'17
	1963 Sep 18 09:43	0°♎	
evening rise	1963 Oct 06 05:47	22°♎12'33	
	1963 Oct 12 11:50	0°♏	
desc. node	1963 Oct 31 12:03	23°♏41'51	
	1963 Nov 05 13:25	0°♐	
	1963 Nov 29 15:21	0°♑	
	1963 Dec 23 18:53	0°♒	
	1964 Jan 17 02:53	0°♓	
	1964 Feb 10 21:09	0°♈	
asc. node	1964 Feb 21 15:21	12°♈45'36	
	1964 Mar 07 12:38	0°♉	
	1964 Apr 04 03:03	0°♊	
evening max el	1964 Apr 10 09:11	6°♊15'21	45°49'38
	1964 May 09 03:16	0°♋	
greatest brilliancy	1964 May 18 11:31	4°♋41'36	-4.7m
retrograde	1964 May 29 10:29	6°♋52'25	
desc. node	1964 Jun 12 04:39	3°♋11'26	
evening set	1964 Jun 13 12:20	2°♋29'34	
	1964 Jun 17 18:17	30°℞♊	
inferior conj	1964 Jun 19 22:40	28°♊38'15	-1°48'57
minimum elong	1964 Jun 19 18:43	28°♊44'27	1°47'49
min. Earth dist.	1964 Jun 19 20:59	28°♊40'53	0.28949 AU
morning rise	1964 Jun 26 01:06	24°♊57'12	
direct	1964 Jul 11 13:00	20°♊21'23	
greatest brilliancy	1964 Jul 21 22:05	22°♊16'34	-4.7m
	1964 Aug 05 08:53	0°♋	
morning max el	1964 Aug 29 10:04	20°♋15'21	45°53'42
	1964 Sep 08 04:53	0°♌	
asc. node	1964 Oct 03 08:09	27°♌15'14	
	1964 Oct 05 18:10	0°♍	
	1964 Oct 31 08:54	0°♎	
	1964 Nov 25 01:25	0°♏	
	1964 Dec 19 07:02	0°♐	
	1965 Jan 12 08:00	0°♑	
desc. node	1965 Jan 22 21:36	13°♑12'43	
	1965 Feb 05 07:41	0°♒	
	1965 Mar 01 07:55	0°♓	
morning set	1965 Mar 03 19:49	3°♓06'54	
	1965 Mar 25 09:54	0°♈	
superior conj	1965 Apr 12 04:21	22°♈03'04	-1°09'26
minimum elong	1965 Apr 12 14:10	22°♈33'28	1°09'09
max. Earth dist.	1965 Apr 15 13:37	26°♈14'34	1.72727 AU
	1965 Apr 18 14:31	0°♉	
	1965 May 12 22:08	0°♊	
asc. node	1965 May 16 01:03	3°♊50'21	
evening rise	1965 May 20 05:28	8°♊58'55	
	1965 Jun 06 08:39	0°♋	
	1965 Jun 30 21:59	0°♌	
	1965 Jul 25 14:51	0°♍	
	1965 Aug 19 13:06	0°♎	
desc. node	1965 Sep 04 14:14	19°♎06'24	
	1965 Sep 13 19:50	0°♏	
	1965 Oct 09 16:46	0°♐	
	1965 Nov 05 19:36	0°♑	
evening max el	1965 Nov 15 20:12	10°♑23'16	47°13'13
	1965 Dec 07 04:37	0°♒	
greatest brilliancy	1965 Dec 26 11:52	11°♒50'11	-4.9m
asc. node	1965 Dec 26 17:43	11°♒55'36	

retrograde	1966 Jan 05 16:21	13°♒49'56	
evening set	1966 Jan 21 09:29	8°♒55'56	
min. Earth dist.	1966 Jan 25 12:11	6°♒28'23	0.26881 AU
inferior conj	1966 Jan 26 08:37	5°♒56'51	6°55'17
minimum elong	1966 Jan 25 22:18	6°♒12'46	6°53'12
morning rise	1966 Jan 30 11:27	3°♒27'31	
	1966 Feb 06 12:46	30°℞♑	
direct	1966 Feb 15 18:41	28°♑14'17	
greatest brilliancy	1966 Feb 24 22:15	29°♑49'14	-4.9m
	1966 Feb 25 10:54	0°♒	
morning max el	1966 Apr 06 13:18	29°♒53'38	46°24'02
	1966 Apr 06 15:53	0°♓	
desc. node	1966 Apr 17 07:02	10°♓46'30	
	1966 May 05 04:33	0°♈	
	1966 May 31 18:00	0°♉	
	1966 Jun 26 11:40	0°♊	
	1966 Jul 21 17:11	0°♋	
asc. node	1966 Aug 08 10:32	21°♋22'29	
	1966 Aug 15 12:47	0°♌	
	1966 Sep 08 23:40	0°♍	
morning set	1966 Oct 01 14:24	28°♍03'39	
	1966 Oct 03 03:44	0°♎	
	1966 Oct 27 03:28	0°♏	
max. Earth dist.	1966 Nov 07 05:24	13°♏53'52	1.71420 AU
superior conj	1966 Nov 09 00:40	16°♏09'39	0°43'19
minimum elong	1966 Nov 09 10:01	16°♏39'02	0°42'54
	1966 Nov 20 01:06	0°♐	
desc. node	1966 Nov 27 24:00	9°♐59'30	
	1966 Dec 13 22:09	0°♑	
evening rise	1966 Dec 19 21:33	7°♑30'29	
	1967 Jan 06 19:36	0°♒	
	1967 Jan 30 18:53	0°♓	
	1967 Feb 23 22:29	0°♈	
	1967 Mar 20 09:56	0°♉	
asc. node	1967 Mar 21 03:15	0°♉52'35	
	1967 Apr 14 09:54	0°♊	
	1967 May 10 06:05	0°♋	
	1967 Jun 06 16:48	0°♌	
evening max el	1967 Jun 21 00:05	14°♌19'54	45°24'17
	1967 Jul 08 22:11	0°♍	
desc. node	1967 Jul 10 16:41	1°♍20'58	
greatest brilliancy	1967 Jul 29 13:27	12°♍06'09	-4.7m
retrograde	1967 Aug 08 14:29	13°♍54'24	
evening set	1967 Aug 26 07:09	8°♍03'06	
inferior conj	1967 Aug 29 21:40	5°♍51'00	-8°30'23
minimum elong	1967 Aug 29 17:38	5°♍57'14	8°30'09
min. Earth dist.	1967 Aug 30 07:40	5°♍35'30	0.28636 AU
morning rise	1967 Sep 02 04:00	3°♍50'51	
	1967 Sep 09 11:58	30°℞♌	
direct	1967 Sep 20 09:34	27°♌38'09	
greatest brilliancy	1967 Oct 01 07:22	29°♌49'32	-4.8m
	1967 Oct 01 18:07	0°♍	
asc. node	1967 Oct 31 19:56	21°♍23'58	
morning max el	1967 Nov 09 15:17	29°♍56'50	46°35'34
	1967 Nov 09 16:32	0°♎	
	1967 Dec 07 08:48	0°♏	
	1968 Jan 01 22:37	0°♐	
	1968 Jan 26 17:35	0°♑	
desc. node	1968 Feb 20 09:23	0°♒13'43	
	1968 Feb 20 04:55	0°♒	
	1968 Mar 15 13:32	0°♓	
	1968 Apr 08 21:48	0°♈	
	1968 May 03 06:56	0°♉	
morning set	1968 May 14 13:30	13°♉51'08	
	1968 May 27 17:02	0°♊	
asc. node	1968 Jun 12 12:55	19°♊26'10	
superior conj	1968 Jun 20 10:22	29°♊07'51	0°18'39
minimum elong	1968 Jun 20 06:36	28°♊56'16	0°18'28
max. Earth dist.	1968 Jun 19 22:24	28°♊31'07	1.73596 AU
	1968 Jun 21 03:20	0°♋	
	1968 Jul 15 12:59	0°♌	
evening rise	1968 Jul 26 08:20	13°♌18'03	
	1968 Aug 08 21:49	0°♍	
	1968 Sep 02 06:39	0°♎	
	1968 Sep 26 16:45	0°♏	
desc. node	1968 Oct 02 02:13	6°♏36'45	
	1968 Oct 21 05:16	0°♐	
	1968 Nov 14 21:47	0°♑	
	1968 Dec 09 22:40	0°♒	
	1969 Jan 04 20:07	0°♓	
asc. node	1969 Jan 23 05:30	19°♓58'45	
evening max el	1969 Jan 26 22:18	23°♓47'01	46°58'31
	1969 Feb 02 04:45	0°♈	
greatest brilliancy	1969 Mar 07 22:06	24°♈44'13	-4.8m
retrograde	1969 Mar 18 11:49	26°♈49'42	
evening set	1969 Apr 04 16:11	21°♈03'56	
inferior conj	1969 Apr 08 15:10	18°♈36'08	7°19'50
minimum elong	1969 Apr 09 00:19	18°♈21'42	7°18'22
min. Earth dist.	1969 Apr 08 11:02	18°♈42'40	0.28334 AU
morning rise	1969 Apr 13 08:49	15°♈41'44	
direct	1969 Apr 29 19:20	10°♈29'39	
greatest brilliancy	1969 May 09 08:36	12°♈10'38	-4.8m
desc. node	1969 May 14 18:47	14°♈25'51	
	1969 Jun 06 01:48	0°♉	
morning max el	1969 Jun 17 17:06	10°♉35'38	45°46'57
	1969 Jul 06 22:04	0°♊	
	1969 Aug 03 05:30	0°♋	
	1969 Aug 29 02:48	0°♌	
asc. node	1969 Sep 04 22:18	8°♌04'53	
	1969 Sep 23 03:26	0°♍	
	1969 Oct 17 14:17	0°♎	
	1969 Nov 10 16:40	0°♏	
greatest brilliancy	1969 Nov 21 19:32	13°♏55'47	-3.9m
	1969 Dec 04 14:41	0°♐	
morning set	1969 Dec 14 03:00	11°♐57'53	
desc. node	1969 Dec 25 11:47	26°♐15'48	
	1969 Dec 28 11:04	0°♑	
	1970 Jan 21 07:26	0°♒	
superior conj	1970 Jan 24 20:27	4°♒27'04	-1°04'26
minimum elong	1970 Jan 24 08:32	3°♒49'39	1°04'02
max. Earth dist.	1970 Jan 27 14:32	7°♒54'36	1.71244 AU
	1970 Feb 14 05:04	0°♓	
evening rise	1970 Mar 06 17:15	25°♓37'49	
	1970 Mar 10 05:25	0°♈	
	1970 Apr 03 10:05	0°♉	
asc. node	1970 Apr 17 15:14	17°♉29'38	
	1970 Apr 27 20:33	0°♊	
	1970 May 22 14:19	0°♋	
	1970 Jun 16 17:49	0°♌	
	1970 Jul 12 12:16	0°♍	
desc. node	1970 Aug 07 04:21	28°♍39'53	
	1970 Aug 08 09:59	0°♎	
evening max el	1970 Sep 01 07:37	24°♎33'59	46°09'25
	1970 Sep 07 01:54	0°♏	
greatest brilliancy	1970 Oct 11 13:54	23°♏41'26	-4.8m
retrograde	1970 Oct 20 15:57	25°♏12'53	
evening set	1970 Nov 05 02:15	20°♏39'00	
inferior conj	1970 Nov 10 08:49	17°♏32'47	-4°25'06
minimum elong	1970 Nov 10 17:49	17°♏19'04	4°22'36
min. Earth dist.	1970 Nov 11 02:02	17°♏06'31	0.26842 AU
morning rise	1970 Nov 16 08:43	14°♏01'32	
asc. node	1970 Nov 28 07:47	9°♏55'36	

direct	1970 Dec 01 00:03	9°♏46'50	
greatest brilliancy	1970 Dec 11 21:15	12°♏00'25	-4.9m
	1971 Jan 07 01:00	0°♐	
morning max el	1971 Jan 20 16:24	13°♐07'03	46°57'19
	1971 Feb 05 14:57	0°♑	
	1971 Mar 04 02:24	0°♒	
desc. node	1971 Mar 19 21:17	18°♒30'02	
	1971 Mar 29 14:02	0°♓	
	1971 Apr 23 15:44	0°♈	
	1971 May 18 12:48	0°♉	
	1971 Jun 12 06:58	0°♊	
	1971 Jul 06 22:02	0°♋	
asc. node	1971 Jul 11 00:43	5°♋01'33	
morning set	1971 Jul 22 08:54	18°♋55'19	
	1971 Jul 31 09:15	0°♌	
max. Earth dist.	1971 Aug 24 09:14	29°♌37'45	1.72874 AU
	1971 Aug 24 16:25	0°♍	
superior conj	1971 Aug 27 18:54	3°♍50'42	1°22'38
minimum elong	1971 Aug 27 14:53	3°♍38'16	1°22'36
	1971 Sep 17 20:25	0°♎	
evening rise	1971 Oct 03 20:36	19°♎55'32	
	1971 Oct 11 22:43	0°♏	
desc. node	1971 Oct 30 14:11	23°♏14'07	
	1971 Nov 05 00:30	0°♐	
	1971 Nov 29 02:41	0°♑	
	1971 Dec 23 06:32	0°♒	
	1972 Jan 16 15:01	0°♓	
	1972 Feb 10 10:08	0°♈	
asc. node	1972 Feb 20 17:18	12°♈11'30	
	1972 Mar 07 03:25	0°♉	
	1972 Apr 03 22:48	0°♊	
evening max el	1972 Apr 08 00:08	4°♊01'48	45°51'37
	1972 May 10 13:51	0°♋	
greatest brilliancy	1972 May 16 03:42	2°♋32'55	-4.7m
retrograde	1972 May 27 03:14	4°♋44'38	
evening set	1972 Jun 11 04:43	0°♋21'19	
desc. node	1972 Jun 11 06:45	0°♋18'33	
	1972 Jun 11 20:09	30°℞♊	
inferior conj	1972 Jun 17 15:09	26°♊30'09	-1°29'34
minimum elong	1972 Jun 17 11:53	26°♊35'16	1°28'37
min. Earth dist.	1972 Jun 17 13:40	26°♊32'29	0.28942 AU
morning rise	1972 Jun 23 19:01	22°♊47'18	
direct	1972 Jul 09 04:55	18°♊13'11	
greatest brilliancy	1972 Jul 19 14:33	20°♊08'57	-4.7m
	1972 Aug 06 01:26	0°♋	
morning max el	1972 Aug 27 02:15	18°♋06'08	45°52'41
	1972 Sep 07 23:27	0°♌	
asc. node	1972 Oct 02 10:19	26°♌39'49	
	1972 Oct 05 08:33	0°♍	
	1972 Oct 30 21:40	0°♎	
	1972 Nov 24 13:23	0°♏	
	1972 Dec 18 18:34	0°♐	
	1973 Jan 11 19:15	0°♑	
desc. node	1973 Jan 21 23:33	12°♑43'57	
	1973 Feb 04 18:43	0°♒	
	1973 Feb 28 18:45	0°♓	
morning set	1973 Mar 01 07:37	0°♓40'11	
	1973 Mar 24 20:34	0°♈	
superior conj	1973 Apr 09 19:13	19°♈47'38	-1°11'27
minimum elong	1973 Apr 10 04:50	20°♈17'25	1°11'11
max. Earth dist.	1973 Apr 13 05:00	24°♈00'53	1.72677 AU
	1973 Apr 18 01:05	0°♉	
	1973 May 12 08:42	0°♊	
asc. node	1973 May 15 03:09	3°♊24'19	
evening rise	1973 May 17 22:41	6°♊51'49	
	1973 Jun 05 19:20	0°♋	
	1973 Jun 30 08:55	0°♌	
	1973 Jul 25 02:13	0°♍	
	1973 Aug 19 01:10	0°♎	
desc. node	1973 Sep 03 16:17	18°♎34'42	
	1973 Sep 13 09:05	0°♏	
	1973 Oct 09 08:08	0°♐	
	1973 Nov 05 15:39	0°♑	
evening max el	1973 Nov 13 10:43	8°♑01'15	47°12'04
	1973 Dec 07 21:37	0°♒	
greatest brilliancy	1973 Dec 24 00:51	9°♒22'17	-4.9m
asc. node	1973 Dec 25 19:43	9°♒59'19	
retrograde	1974 Jan 03 06:07	11°♒22'25	
evening set	1974 Jan 18 18:41	6°♒33'55	
min. Earth dist.	1974 Jan 23 00:55	4°♒01'30	0.26830 AU
inferior conj	1974 Jan 23 21:20	3°♒30'05	6°40'03
minimum elong	1974 Jan 23 10:52	3°♒46'12	6°37'49
morning rise	1974 Jan 28 03:27	0°♒56'25	
	1974 Jan 29 19:51	30°℞♑	
direct	1974 Feb 13 07:28	25°♑48'16	
greatest brilliancy	1974 Feb 22 10:47	27°♑23'33	-4.9m
	1974 Feb 28 14:25	0°♒	
morning max el	1974 Apr 04 03:49	27°♒35'13	46°25'46
	1974 Apr 06 14:17	0°♓	
desc. node	1974 Apr 16 09:09	10°♓01'52	
	1974 May 04 20:21	0°♈	
	1974 May 31 07:19	0°♉	
	1974 Jun 25 23:44	0°♊	
	1974 Jul 21 04:34	0°♋	
asc. node	1974 Aug 07 12:29	20°♋54'50	
	1974 Aug 14 23:46	0°♌	
	1974 Sep 08 10:27	0°♍	
morning set	1974 Sep 29 05:57	25°♍49'16	
	1974 Oct 02 14:27	0°♎	
	1974 Oct 26 14:12	0°♏	
max. Earth dist.	1974 Nov 04 15:00	11°♏19'35	1.71457 AU
superior conj	1974 Nov 06 13:09	13°♏44'21	0°46'29
minimum elong	1974 Nov 06 22:52	14°♏14'50	0°46'05
	1974 Nov 19 11:56	0°♐	
desc. node	1974 Nov 27 02:02	9°♐31'49	
	1974 Dec 13 09:06	0°♑	
evening rise	1974 Dec 17 07:49	4°♑57'32	
	1975 Jan 06 06:39	0°♒	
	1975 Jan 30 06:05	0°♓	
	1975 Feb 23 09:53	0°♈	
	1975 Mar 19 21:42	0°♉	
asc. node	1975 Mar 20 05:23	0°♉23'18	
	1975 Apr 13 22:26	0°♊	
	1975 May 09 20:11	0°♋	
	1975 Jun 06 10:54	0°♌	
evening max el	1975 Jun 18 16:07	12°♌10'22	45°23'52
	1975 Jul 09 11:06	0°♍	
desc. node	1975 Jul 09 18:35	0°♍13'39	
greatest brilliancy	1975 Jul 27 03:24	9°♍53'59	-4.7m
retrograde	1975 Aug 06 05:21	11°♍42'47	
evening set	1975 Aug 23 19:55	5°♍55'20	
inferior conj	1975 Aug 27 13:11	3°♍38'52	-8°25'34
minimum elong	1975 Aug 27 08:25	3°♍46'16	8°25'15
min. Earth dist.	1975 Aug 27 22:13	3°♍24'49	0.28675 AU
morning rise	1975 Aug 30 20:46	1°♍36'32	
	1975 Sep 02 15:34	30°℞♌	
direct	1975 Sep 18 01:46	25°♌25'42	
greatest brilliancy	1975 Sep 28 22:13	27°♌35'24	-4.8m
	1975 Oct 04 05:19	0°♍	
asc. node	1975 Oct 30 22:01	20°♍29'08	
morning max el	1975 Nov 07 05:46	27°♍37'55	46°33'57

	1975 Nov 09 13:52	0°♎	
	1975 Dec 07 00:29	0°♏	
	1976 Jan 01 12:14	0°♐	
	1976 Jan 26 06:09	0°♑	
desc. node	1976 Feb 19 11:25	29°♑43'19	
	1976 Feb 19 16:50	0°♒	
	1976 Mar 15 00:59	0°♓	
	1976 Apr 08 08:56	0°♈	
	1976 May 02 17:49	0°♉	
morning set	1976 May 12 06:38	11°♉43'16	
	1976 May 27 03:43	0°♊	
asc. node	1976 Jun 11 14:55	18°♊59'44	
superior conj	1976 Jun 18 04:36	27°♊03'55	0°15'34
minimum elong	1976 Jun 18 01:25	26°♊54'10	0°15'25
behind sun begin	1976 Jun 17 20:15	26°♊38'15	
behind sun end	1976 Jun 18 06:36	27°♊10'05	
max. Earth dist.	1976 Jun 17 20:26	26°♊38'52	1.73588 AU
	1976 Jun 20 13:56	0°♋	
	1976 Jul 14 23:36	0°♌	
evening rise	1976 Jul 24 03:18	11°♌15'50	
	1976 Aug 08 08:36	0°♍	
	1976 Sep 01 17:44	0°♎	
	1976 Sep 26 04:17	0°♏	
desc. node	1976 Oct 01 04:20	6°♏07'40	
	1976 Oct 20 17:22	0°♐	
	1976 Nov 14 10:42	0°♑	
	1976 Dec 09 12:53	0°♒	
	1977 Jan 04 13:01	0°♓	
asc. node	1977 Jan 22 07:29	19°♓09'46	
evening max el	1977 Jan 24 12:43	21°♓26'03	47°00'17
	1977 Feb 02 05:54	0°♈	
greatest brilliancy	1977 Mar 05 14:57	22°♈29'20	-4.8m
retrograde	1977 Mar 16 03:01	24°♈33'28	
evening set	1977 Apr 02 10:24	18°♈44'02	
inferior conj	1977 Apr 06 06:29	16°♈20'29	7°31'22
minimum elong	1977 Apr 06 15:17	16°♈06'35	7°30'01
min. Earth dist.	1977 Apr 06 02:01	16°♈27'33	0.28296 AU
morning rise	1977 Apr 10 20:30	13°♈31'06	
direct	1977 Apr 27 09:49	8°♈14'45	
greatest brilliancy	1977 May 06 22:35	9°♈54'56	-4.8m
desc. node	1977 May 13 20:50	12°♈55'28	
	1977 Jun 06 06:10	0°♉	
morning max el	1977 Jun 15 07:23	8°♉20'44	45°47'45
	1977 Jul 06 15:09	0°♊	
	1977 Aug 02 19:19	0°♋	
	1977 Aug 28 15:09	0°♌	
asc. node	1977 Sep 04 00:29	7°♌35'14	
	1977 Sep 22 15:05	0°♍	
	1977 Oct 17 01:37	0°♎	
	1977 Nov 10 03:52	0°♏	
greatest brilliancy	1977 Nov 24 07:19	17°♏43'40	-3.9m
	1977 Dec 04 01:49	0°♐	
morning set	1977 Dec 11 13:40	9°♐25'28	
desc. node	1977 Dec 24 13:45	25°♐47'07	
	1977 Dec 27 22:09	0°♑	
	1978 Jan 20 18:29	0°♒	
superior conj	1978 Jan 22 06:15	1°♒52'23	-1°01'42
minimum elong	1978 Jan 21 18:16	1°♒14'42	1°01'17
max. Earth dist.	1978 Jan 24 17:51	4°♒59'35	1.71213 AU
	1978 Feb 13 16:07	0°♓	
evening rise	1978 Mar 04 04:33	23°♓08'57	
	1978 Mar 09 16:29	0°♈	
	1978 Apr 02 21:14	0°♉	
asc. node	1978 Apr 16 17:19	17°♉01'35	
	1978 Apr 27 07:53	0°♊	
	1978 May 22 02:03	0°♋	
	1978 Jun 16 06:19	0°♌	
	1978 Jul 12 02:14	0°♍	
desc. node	1978 Aug 06 06:26	27°♍59'56	
	1978 Aug 08 03:08	0°♎	
evening max el	1978 Aug 29 19:54	22°♎11'17	46°07'02
	1978 Sep 07 05:07	0°♏	
greatest brilliancy	1978 Oct 09 02:50	21°♏17'19	-4.8m
retrograde	1978 Oct 18 03:58	22°♏48'20	
evening set	1978 Nov 02 17:42	18°♏09'45	
inferior conj	1978 Nov 07 21:34	15°♏07'32	-4°45'13
minimum elong	1978 Nov 08 07:01	14°♏53'09	4°42'40
min. Earth dist.	1978 Nov 08 16:03	14°♏39'23	0.26903 AU
morning rise	1978 Nov 13 19:37	11°♏38'46	
asc. node	1978 Nov 27 09:48	7°♏21'45	
direct	1978 Nov 28 13:09	7°♏20'09	
greatest brilliancy	1978 Dec 09 12:25	9°♏35'49	-4.9m
	1979 Jan 07 06:38	0°♐	
morning max el	1979 Jan 18 06:20	10°♐42'05	46°57'34
	1979 Feb 05 09:16	0°♑	
	1979 Mar 03 17:18	0°♒	
desc. node	1979 Mar 18 23:28	17°♒55'40	
	1979 Mar 29 03:18	0°♓	
	1979 Apr 23 04:02	0°♈	
	1979 May 18 00:29	0°♉	
	1979 Jun 11 18:13	0°♊	
	1979 Jul 06 09:02	0°♋	
asc. node	1979 Jul 10 02:43	4°♋34'06	
morning set	1979 Jul 20 02:50	16°♋49'32	
	1979 Jul 30 20:07	0°♌	
max. Earth dist.	1979 Aug 22 05:51	27°♌39'23	1.72917 AU
	1979 Aug 24 03:16	0°♍	
superior conj	1979 Aug 25 12:38	1°♍43'21	1°21'51
minimum elong	1979 Aug 25 08:02	1°♍29'05	1°21'47
	1979 Sep 17 07:21	0°♎	
evening rise	1979 Oct 01 11:57	17°♎39'40	
	1979 Oct 11 09:48	0°♏	
desc. node	1979 Oct 29 16:14	22°♏45'23	
	1979 Nov 04 11:50	0°♐	
	1979 Nov 28 14:20	0°♑	
	1979 Dec 22 18:34	0°♒	
	1980 Jan 16 03:37	0°♓	
	1980 Feb 09 23:39	0°♈	
asc. node	1980 Feb 19 19:27	11°♈36'24	
	1980 Mar 06 18:54	0°♉	
	1980 Apr 03 19:46	0°♊	
evening max el	1980 Apr 05 15:45	1°♊48'31	45°53'47
	1980 May 12 20:52	0°♋	
greatest brilliancy	1980 May 13 19:26	0°♋22'17	-4.7m
retrograde	1980 May 24 20:10	2°♋35'09	
	1980 Jun 05 05:44	30°℞♊	
evening set	1980 Jun 08 21:11	28°♊11'17	
desc. node	1980 Jun 10 08:43	27°♊21'17	
inferior conj	1980 Jun 15 07:27	24°♊20'18	-1°09'54
minimum elong	1980 Jun 15 04:53	24°♊24'18	1°09'09
min. Earth dist.	1980 Jun 15 05:53	24°♊22'44	0.28932 AU
morning rise	1980 Jun 21 12:40	20°♊35'55	
direct	1980 Jul 06 21:15	16°♊03'21	
greatest brilliancy	1980 Jul 17 06:21	17°♊59'08	-4.7m
	1980 Aug 06 14:25	0°♋	
morning max el	1980 Aug 24 19:05	15°♋57'26	45°51'50
	1980 Sep 07 17:57	0°♌	
asc. node	1980 Oct 01 12:19	26°♌03'18	
	1980 Oct 04 23:07	0°♍	
	1980 Oct 30 10:38	0°♎	
	1980 Nov 24 01:35	0°♏	

	1980 Dec 18 06:21	0°♐	
	1981 Jan 11 06:48	0°♑	
desc. node	1981 Jan 21 01:38	12°♑14'33	
	1981 Feb 04 06:07	0°♒	
morning set	1981 Feb 26 18:52	28°♒10'12	
	1981 Feb 28 06:01	0°♓	
	1981 Mar 24 07:43	0°♈	
superior conj	1981 Apr 07 09:22	17°♈28'20	-1°13'23
minimum elong	1981 Apr 07 18:41	17°♈57'14	1°13'08
max. Earth dist.	1981 Apr 10 20:39	21°♈46'26	1.72626 AU
	1981 Apr 17 12:08	0°♉	
	1981 May 11 19:45	0°♊	
asc. node	1981 May 14 05:05	2°♊56'19	
evening rise	1981 May 15 15:18	4°♊41'28	
	1981 Jun 05 06:29	0°♋	
	1981 Jun 29 20:20	0°♌	
	1981 Jul 24 14:04	0°♍	
	1981 Aug 18 13:44	0°♎	
desc. node	1981 Sep 02 18:25	18°♎01'55	
	1981 Sep 12 22:51	0°♏	
	1981 Oct 09 00:04	0°♐	
	1981 Nov 05 12:39	0°♑	
evening max el	1981 Nov 11 01:55	5°♑40'20	47°10'52
	1981 Dec 08 20:52	0°♒	
greatest brilliancy	1981 Dec 21 13:52	6°♒53'57	-4.9m
asc. node	1981 Dec 24 21:40	7°♒57'42	
retrograde	1981 Dec 31 19:45	8°♒54'05	
evening set	1982 Jan 16 04:09	4°♒11'06	
min. Earth dist.	1982 Jan 20 13:48	1°♒33'48	0.26783 AU
inferior conj	1982 Jan 21 10:06	1°♒02'34	6°23'58
minimum elong	1982 Jan 20 23:36	1°♒18'43	6°21'37
	1982 Jan 23 02:56	30°℞♑	
morning rise	1982 Jan 25 19:32	28°♑24'23	
direct	1982 Feb 10 20:38	23°♑21'39	
greatest brilliancy	1982 Feb 19 23:30	24°♑56'53	-4.9m
	1982 Mar 02 11:25	0°♒	
morning max el	1982 Apr 01 17:50	25°♒14'03	46°27'10
	1982 Apr 06 12:20	0°♓	
desc. node	1982 Apr 15 11:09	9°♓16'08	
	1982 May 04 12:27	0°♈	
	1982 May 30 21:02	0°♉	
	1982 Jun 25 12:13	0°♊	
	1982 Jul 20 16:21	0°♋	
asc. node	1982 Aug 06 14:37	20°♋26'33	
	1982 Aug 14 11:09	0°♌	
	1982 Sep 07 21:38	0°♍	
morning set	1982 Sep 26 21:31	23°♍33'46	
	1982 Oct 02 01:32	0°♎	
	1982 Oct 26 01:19	0°♏	
max. Earth dist.	1982 Nov 01 22:13	8°♏36'50	1.71491 AU
superior conj	1982 Nov 04 02:02	11°♏19'20	0°49'33
minimum elong	1982 Nov 04 12:02	11°♏50'42	0°49'08
	1982 Nov 18 23:07	0°♐	
desc. node	1982 Nov 26 04:01	9°♐02'58	
	1982 Dec 12 20:20	0°♑	
evening rise	1982 Dec 14 18:29	2°♑24'56	
	1983 Jan 05 17:58	0°♒	
	1983 Jan 29 17:31	0°♓	
	1983 Feb 22 21:35	0°♈	
asc. node	1983 Mar 19 07:24	29°♈52'33	
	1983 Mar 19 09:51	0°♉	
	1983 Apr 13 11:26	0°♊	
	1983 May 09 10:56	0°♋	
	1983 Jun 06 06:04	0°♌	
evening max el	1983 Jun 16 07:15	9°♌57'08	45°23'33
desc. node	1983 Jul 08 20:41	29°♌03'19	
	1983 Jul 10 05:25	0°♍	
greatest brilliancy	1983 Jul 24 17:39	7°♍40'37	-4.7m
retrograde	1983 Aug 03 19:44	9°♍29'46	
evening set	1983 Aug 21 08:24	3°♍46'23	
inferior conj	1983 Aug 25 04:35	1°♍25'26	-8°20'03
minimum elong	1983 Aug 24 23:08	1°♍33'55	8°19'36
min. Earth dist.	1983 Aug 25 12:59	1°♍12'20	0.28712 AU
	1983 Aug 27 11:44	30°℞♌	
morning rise	1983 Aug 28 13:41	29°♌20'34	
direct	1983 Sep 15 17:22	23°♌11'49	
greatest brilliancy	1983 Sep 26 13:34	25°♌20'36	-4.8m
	1983 Oct 05 19:35	0°♍	
asc. node	1983 Oct 29 24:00	19°♍34'04	
morning max el	1983 Nov 04 19:22	25°♍15'47	46°32'29
	1983 Nov 09 10:52	0°♎	
	1983 Dec 06 16:15	0°♏	
	1984 Jan 01 02:00	0°♐	
	1984 Jan 25 18:51	0°♑	
desc. node	1984 Feb 18 13:34	29°♑12'53	
	1984 Feb 19 04:52	0°♒	
	1984 Mar 14 12:35	0°♓	
	1984 Apr 07 20:13	0°♈	
	1984 May 02 04:53	0°♉	
morning set	1984 May 09 23:33	9°♉33'55	
	1984 May 26 14:40	0°♊	
asc. node	1984 Jun 10 16:57	18°♊32'36	
superior conj	1984 Jun 15 22:32	24°♊58'13	0°12'25
minimum elong	1984 Jun 15 19:59	24°♊50'22	0°12'18
behind sun begin	1984 Jun 15 05:37	24°♊06'14	
behind sun end	1984 Jun 16 10:22	25°♊34'31	
max. Earth dist.	1984 Jun 15 16:12	24°♊38'44	1.73583 AU
	1984 Jun 20 00:48	0°♋	
	1984 Jul 14 10:30	0°♌	
evening rise	1984 Jul 21 21:56	9°♌11'46	
	1984 Aug 07 19:40	0°♍	
	1984 Sep 01 05:07	0°♎	
	1984 Sep 25 16:05	0°♏	
desc. node	1984 Sep 30 06:19	5°♏37'18	
	1984 Oct 20 05:45	0°♐	
	1984 Nov 13 23:54	0°♑	
	1984 Dec 09 03:26	0°♒	
	1985 Jan 04 06:23	0°♓	
asc. node	1985 Jan 21 09:40	18°♓20'17	
evening max el	1985 Jan 22 02:29	19°♓03'11	47°02'12
	1985 Feb 02 08:29	0°♈	
greatest brilliancy	1985 Mar 03 07:46	20°♈14'31	-4.9m
retrograde	1985 Mar 13 18:18	22°♈17'46	
evening set	1985 Mar 31 04:42	16°♈24'32	
inferior conj	1985 Apr 03 22:00	14°♈05'18	7°42'02
minimum elong	1985 Apr 04 06:25	13°♈52'00	7°40'49
min. Earth dist.	1985 Apr 03 17:17	14°♈12'47	0.28260 AU
morning rise	1985 Apr 08 08:24	11°♈21'03	
direct	1985 Apr 25 00:09	6°♈00'06	
greatest brilliancy	1985 May 04 13:14	7°♈40'12	-4.8m
desc. node	1985 May 12 22:50	11°♈28'18	
	1985 Jun 06 08:53	0°♉	
morning max el	1985 Jun 12 21:56	6°♉06'10	45°48'24
	1985 Jul 06 08:01	0°♊	
	1985 Aug 02 09:10	0°♋	
	1985 Aug 28 03:39	0°♌	
asc. node	1985 Sep 03 02:31	7°♌04'39	
	1985 Sep 22 02:53	0°♍	
	1985 Oct 16 13:04	0°♎	
	1985 Nov 09 15:08	0°♏	
greatest brilliancy	1985 Nov 25 08:57	19°♏44'14	-3.9m

	1985 Dec 03 13:00	0°♐	
morning set	1985 Dec 09 00:23	6°♐53'02	
desc. node	1985 Dec 23 15:51	25°♐18'37	
	1985 Dec 27 09:17	0°♑	
superior conj	1986 Jan 19 16:05	29°♑17'32	-0°58'50
minimum elong	1986 Jan 19 04:06	28°♑39'53	0°58'24
	1986 Jan 20 05:36	0°♒	
max. Earth dist.	1986 Jan 21 20:19	2°♒01'40	1.71185 AU
	1986 Feb 13 03:11	0°♓	
evening rise	1986 Mar 01 16:02	20°♓40'36	
	1986 Mar 09 03:32	0°♈	
	1986 Apr 02 08:19	0°♉	
asc. node	1986 Apr 15 19:17	16°♉33'19	
	1986 Apr 26 19:10	0°♊	
	1986 May 21 13:46	0°♋	
	1986 Jun 15 18:52	0°♌	
	1986 Jul 11 16:23	0°♍	
desc. node	1986 Aug 05 08:33	27°♍19'22	
	1986 Aug 07 20:46	0°♎	
evening max el	1986 Aug 27 08:52	19°♎50'15	46°04'43
	1986 Sep 07 10:15	0°♏	
greatest brilliancy	1986 Oct 06 15:08	18°♏52'32	-4.8m
retrograde	1986 Oct 15 16:33	20°♏23'49	
evening set	1986 Oct 31 09:14	15°♏40'22	
inferior conj	1986 Nov 05 10:16	12°♏42'11	-5°04'46
minimum elong	1986 Nov 05 20:06	12°♏27'14	5°02'11
min. Earth dist.	1986 Nov 06 05:37	12°♏12'46	0.26964 AU
morning rise	1986 Nov 11 06:18	9°♏16'27	
direct	1986 Nov 26 02:46	4°♏53'38	
asc. node	1986 Nov 26 11:50	4°♏53'49	
greatest brilliancy	1986 Dec 07 03:01	7°♏10'48	-4.9m
	1987 Jan 07 10:20	0°♐	
morning max el	1987 Jan 15 20:58	8°♐19'13	46°57'45
	1987 Feb 05 03:03	0°♑	
	1987 Mar 03 07:55	0°♒	
desc. node	1987 Mar 18 01:23	17°♒21'09	
	1987 Mar 28 16:20	0°♓	
	1987 Apr 22 16:07	0°♈	
	1987 May 17 11:56	0°♉	
	1987 Jun 11 05:15	0°♊	
	1987 Jul 05 19:50	0°♋	
asc. node	1987 Jul 09 04:52	4°♋07'45	
morning set	1987 Jul 17 20:59	14°♋45'05	
	1987 Jul 30 06:49	0°♌	
max. Earth dist.	1987 Aug 20 02:12	25°♌40'37	1.72964 AU
superior conj	1987 Aug 23 06:25	29°♌36'30	1°20'57
minimum elong	1987 Aug 23 01:14	29°♌20'27	1°20'52
	1987 Aug 23 14:00	0°♍	
	1987 Sep 16 18:12	0°♎	
evening rise	1987 Sep 29 03:13	15°♎23'47	
	1987 Oct 10 20:49	0°♏	
desc. node	1987 Oct 28 18:12	22°♏16'42	
	1987 Nov 03 23:04	0°♐	
	1987 Nov 28 01:51	0°♑	
	1987 Dec 22 06:29	0°♒	
	1988 Jan 15 16:04	0°♓	
	1988 Feb 09 13:04	0°♈	
asc. node	1988 Feb 18 21:27	11°♈01'15	
	1988 Mar 06 10:21	0°♉	
evening max el	1988 Apr 03 08:18	29°♉38'22	45°56'04
	1988 Apr 03 17:07	0°♊	
greatest brilliancy	1988 May 11 11:40	28°♊13'44	-4.7m
	1988 May 17 16:26	0°♋	
retrograde	1988 May 22 13:26	0°♋27'14	
	1988 May 27 07:36	30°℞♊	

evening set	1988 Jun 06 14:07	26°♊02'58	
desc. node	1988 Jun 09 10:47	24°♊23'50	
inferior conj	1988 Jun 12 24:00	22°♊12'10	-0°50'15
minimum elong	1988 Jun 12 22:09	22°♊15'03	0°49'43
min. Earth dist.	1988 Jun 12 22:10	22°♊15'02	0.28918 AU
morning rise	1988 Jun 19 06:23	18°♊26'26	
direct	1988 Jul 04 14:09	13°♊55'32	
greatest brilliancy	1988 Jul 14 21:44	15°♊50'30	-4.7m
	1988 Aug 06 23:24	0°♋	
morning max el	1988 Aug 22 11:46	13°♋49'43	45°50'44
	1988 Sep 07 11:37	0°♌	
asc. node	1988 Sep 30 14:18	25°♌27'50	
	1988 Oct 04 13:15	0°♍	
	1988 Oct 29 23:20	0°♎	
	1988 Nov 23 13:34	0°♏	
	1988 Dec 17 17:56	0°♐	
	1989 Jan 10 18:08	0°♑	
desc. node	1989 Jan 20 03:46	11°♑46'08	
	1989 Feb 03 17:15	0°♒	
morning set	1989 Feb 24 05:58	25°♒40'45	
	1989 Feb 27 16:59	0°♓	
	1989 Mar 23 18:32	0°♈	
superior conj	1989 Apr 04 23:29	15°♈09'50	-1°15'12
minimum elong	1989 Apr 05 08:27	15°♈37'39	1°14'59
max. Earth dist.	1989 Apr 08 13:57	19°♈37'56	1.72573 AU
	1989 Apr 16 22:52	0°♉	
	1989 May 11 06:28	0°♊	
evening rise	1989 May 13 08:02	2°♊32'25	
asc. node	1989 May 13 07:13	2°♊29'53	
	1989 Jun 04 17:17	0°♋	
	1989 Jun 29 07:21	0°♌	
	1989 Jul 24 01:31	0°♍	
	1989 Aug 18 01:58	0°♎	
desc. node	1989 Sep 01 20:22	17°♎29'31	
	1989 Sep 12 12:22	0°♏	
	1989 Oct 08 16:00	0°♐	
	1989 Nov 05 10:13	0°♑	
evening max el	1989 Nov 08 16:49	3°♑19'13	47°09'19
	1989 Dec 10 04:54	0°♒	
greatest brilliancy	1989 Dec 19 03:20	4°♒26'19	-4.9m
asc. node	1989 Dec 23 23:51	5°♒51'17	
retrograde	1989 Dec 29 08:50	6°♒25'30	
evening set	1990 Jan 13 13:36	1°♒48'14	
	1990 Jan 16 15:23	30°℞♑	
min. Earth dist.	1990 Jan 18 02:54	29°♑05'40	0.26734 AU
inferior conj	1990 Jan 18 22:42	28°♑35'10	6°06'56
minimum elong	1990 Jan 18 12:14	28°♑51'17	6°04'30
morning rise	1990 Jan 23 11:21	25°♑52'23	
direct	1990 Feb 08 09:16	20°♑55'16	
greatest brilliancy	1990 Feb 17 12:26	22°♑30'41	-4.9m
	1990 Mar 03 17:52	0°♒	
morning max el	1990 Mar 30 06:41	22°♒50'46	46°28'40
	1990 Apr 06 09:13	0°♓	
desc. node	1990 Apr 14 13:13	8°♓32'16	
	1990 May 04 03:52	0°♈	
	1990 May 30 10:13	0°♉	
	1990 Jun 25 00:14	0°♊	
	1990 Jul 20 03:41	0°♋	
asc. node	1990 Aug 05 16:40	19°♋59'20	
	1990 Aug 13 22:05	0°♌	
	1990 Sep 07 08:21	0°♍	
morning set	1990 Sep 24 13:32	21°♍21'01	
	1990 Oct 01 12:13	0°♎	
	1990 Oct 25 12:03	0°♏	
max. Earth dist.	1990 Oct 30 05:53	5°♏56'42	1.71538 AU

superior conj	1990 Nov 01 15:15	8°♏56'30	0°52'29
minimum elong	1990 Nov 02 01:27	9°♏28'28	0°52'05
	1990 Nov 18 09:58	0°♐	
desc. node	1990 Nov 25 06:10	8°♐35'33	
evening rise	1990 Dec 12 04:57	29°♐52'35	
	1990 Dec 12 07:18	0°♑	
	1991 Jan 05 05:03	0°♒	
	1991 Jan 29 04:44	0°♓	
	1991 Feb 22 09:02	0°♈	
asc. node	1991 Mar 18 09:23	29°♈22'34	
	1991 Mar 18 21:45	0°♉	
	1991 Apr 13 00:10	0°♊	
	1991 May 09 01:28	0°♋	
	1991 Jun 06 01:16	0°♌	
evening max el	1991 Jun 13 21:50	7°♌43'55	45°23'25
desc. node	1991 Jul 07 22:50	27°♌52'46	
	1991 Jul 11 05:06	0°♍	
greatest brilliancy	1991 Jul 22 08:14	5°♍29'31	-4.7m
retrograde	1991 Aug 01 10:35	7°♍19'26	
evening set	1991 Aug 18 21:03	1°♍40'03	
	1991 Aug 21 15:06	30°℞♌	
inferior conj	1991 Aug 22 20:21	29°♌14'34	-8°13'43
minimum elong	1991 Aug 22 14:15	29°♌24'04	8°13'10
min. Earth dist.	1991 Aug 23 04:14	29°♌02'17	0.28745 AU
morning rise	1991 Aug 26 07:14	27°♌06'54	
direct	1991 Sep 13 08:56	21°♌00'25	
greatest brilliancy	1991 Sep 24 05:37	23°♌09'01	-4.8m
	1991 Oct 06 21:15	0°♍	
asc. node	1991 Oct 29 02:07	18°♍42'06	
morning max el	1991 Nov 02 09:07	22°♍55'46	46°30'56
	1991 Nov 09 06:36	0°♎	
	1991 Dec 06 07:21	0°♏	
	1991 Dec 31 15:19	0°♐	
	1992 Jan 25 07:14	0°♑	
desc. node	1992 Feb 17 15:32	28°♑42'32	
	1992 Feb 18 16:40	0°♒	
	1992 Mar 13 23:57	0°♓	
	1992 Apr 07 07:16	0°♈	
	1992 May 01 15:41	0°♉	
morning set	1992 May 07 16:10	7°♉24'28	
	1992 May 26 01:18	0°♊	
asc. node	1992 Jun 09 19:05	18°♊06'39	
superior conj	1992 Jun 13 16:30	22°♊53'34	0°09'16
minimum elong	1992 Jun 13 14:35	22°♊47'40	0°09'11
behind sun begin	1992 Jun 12 19:57	21°♊50'27	
behind sun end	1992 Jun 14 09:13	23°♊44'53	
max. Earth dist.	1992 Jun 13 11:35	22°♊38'26	1.73575 AU
	1992 Jun 19 11:22	0°♋	
	1992 Jul 13 21:07	0°♌	
evening rise	1992 Jul 19 16:53	7°♌09'43	
	1992 Aug 07 06:25	0°♍	
	1992 Aug 31 16:09	0°♎	
	1992 Sep 25 03:31	0°♏	
desc. node	1992 Sep 29 08:23	5°♏08'22	
	1992 Oct 19 17:47	0°♐	
	1992 Nov 13 12:48	0°♑	
	1992 Dec 08 17:49	0°♒	
	1993 Jan 03 23:54	0°♓	
evening max el	1993 Jan 19 16:06	16°♓40'12	47°03'49
asc. node	1993 Jan 20 11:39	17°♓29'49	
	1993 Feb 02 12:37	0°♈	
greatest brilliancy	1993 Feb 28 23:51	17°♈58'14	-4.9m
retrograde	1993 Mar 11 09:28	20°♈01'23	
evening set	1993 Mar 28 22:31	14°♈04'11	
inferior conj	1993 Apr 01 13:11	11°♈49'15	7°51'58
minimum elong	1993 Apr 01 21:09	11°♈36'42	7°50'56
min. Earth dist.	1993 Apr 01 08:04	11°♈57'20	0.28224 AU
morning rise	1993 Apr 05 19:59	9°♈10'27	
direct	1993 Apr 22 14:13	3°♈44'27	
greatest brilliancy	1993 May 02 03:36	5°♈24'50	-4.8m
desc. node	1993 May 12 00:58	10°♈04'02	
	1993 Jun 06 10:03	0°♉	
morning max el	1993 Jun 10 12:54	3°♉52'53	45°49'19
	1993 Jul 06 00:21	0°♊	
	1993 Aug 01 22:38	0°♋	
	1993 Aug 27 15:48	0°♌	
asc. node	1993 Sep 02 04:27	6°♌34'42	
	1993 Sep 21 14:22	0°♍	
	1993 Oct 16 00:13	0°♎	
	1993 Nov 09 02:07	0°♏	
greatest brilliancy	1993 Nov 25 21:54	21°♏06'02	-3.9m
	1993 Dec 02 23:54	0°♐	
morning set	1993 Dec 06 11:47	4°♐23'44	
desc. node	1993 Dec 22 17:57	24°♐51'03	
	1993 Dec 26 20:09	0°♑	
superior conj	1994 Jan 17 02:04	26°♑43'52	-0°55'50
minimum elong	1994 Jan 16 14:13	26°♑06'39	0°55'24
max. Earth dist.	1994 Jan 19 01:44	29°♑13'42	1.71168 AU
	1994 Jan 19 16:28	0°♒	
	1994 Feb 12 14:04	0°♓	
evening rise	1994 Feb 27 03:22	18°♓12'11	
	1994 Mar 08 14:28	0°♈	
	1994 Apr 01 19:20	0°♉	
asc. node	1994 Apr 14 21:23	16°♉05'39	
	1994 Apr 26 06:24	0°♊	
	1994 May 21 01:26	0°♋	
	1994 Jun 15 07:23	0°♌	
	1994 Jul 11 06:33	0°♍	
desc. node	1994 Aug 04 10:30	26°♍38'23	
	1994 Aug 07 14:36	0°♎	
evening max el	1994 Aug 24 22:52	17°♎32'30	46°02'32
	1994 Sep 07 17:12	0°♏	
greatest brilliancy	1994 Oct 04 03:13	16°♏28'53	-4.8m
retrograde	1994 Oct 13 05:41	18°♏00'39	
evening set	1994 Oct 29 01:07	13°♏12'27	
inferior conj	1994 Nov 02 23:12	10°♏18'11	-5°23'31
minimum elong	1994 Nov 03 09:21	10°♏02'46	5°20'57
min. Earth dist.	1994 Nov 03 18:58	9°♏48'09	0.27023 AU
morning rise	1994 Nov 08 16:58	6°♏55'45	
direct	1994 Nov 23 16:57	2°♏28'47	
asc. node	1994 Nov 25 13:57	2°♏33'03	
greatest brilliancy	1994 Dec 04 17:02	4°♏46'19	-4.9m
	1995 Jan 07 12:07	0°♐	
morning max el	1995 Jan 13 11:55	5°♐58'05	46°57'49
	1995 Feb 04 20:12	0°♑	
	1995 Mar 02 22:10	0°♒	
desc. node	1995 Mar 17 03:27	16°♒47'44	
	1995 Mar 28 05:10	0°♓	
	1995 Apr 22 04:07	0°♈	
	1995 May 16 23:22	0°♉	
	1995 Jun 10 16:18	0°♊	
	1995 Jul 05 06:39	0°♋	
asc. node	1995 Jul 08 06:51	3°♋40'51	
morning set	1995 Jul 15 14:55	12°♋39'56	
	1995 Jul 29 17:32	0°♌	
max. Earth dist.	1995 Aug 17 21:49	23°♌39'47	1.73005 AU
superior conj	1995 Aug 21 00:04	27°♌29'25	1°19'55
minimum elong	1995 Aug 20 18:21	27°♌11'45	1°19'50
	1995 Aug 23 00:43	0°♍	
	1995 Sep 16 05:01	0°♎	
evening rise	1995 Sep 26 18:35	13°♎08'21	

	1995 Oct 10 07:48	0°♏	
desc. node	1995 Oct 27 20:21	21°♏48'34	
	1995 Nov 03 10:18	0°♐	
	1995 Nov 27 13:23	0°♑	
	1995 Dec 21 18:23	0°♒	
	1996 Jan 15 04:30	0°♓	
	1996 Feb 09 02:30	0°♈	
asc. node	1996 Feb 17 23:28	10°♈26'05	
	1996 Mar 06 02:01	0°♉	
evening max el	1996 Apr 01 00:47	27°♉27'41	45°58'03
	1996 Apr 03 15:26	0°♊	
greatest brilliancy	1996 May 09 04:18	26°♊04'43	-4.7m
retrograde	1996 May 20 06:08	28°♊17'53	
evening set	1996 Jun 04 07:00	23°♊53'18	
desc. node	1996 Jun 08 12:53	21°♊23'03	
inferior conj	1996 Jun 10 16:19	20°♊02'46	-0°30'24
minimum elong	1996 Jun 10 15:11	20°♊04'32	0°30'04
min. Earth dist.	1996 Jun 10 14:24	20°♊05'46	0.28906 AU
morning rise	1996 Jun 16 23:40	16°♊15'39	
direct	1996 Jul 02 06:51	11°♊46'33	
greatest brilliancy	1996 Jul 12 12:52	13°♊40'20	-4.7m
	1996 Aug 07 06:15	0°♋	
morning max el	1996 Aug 20 03:28	11°♋38'57	45°49'48
	1996 Sep 07 05:07	0°♌	
asc. node	1996 Sep 29 16:29	24°♌52'46	
	1996 Oct 04 03:22	0°♍	
	1996 Oct 29 12:02	0°♎	
	1996 Nov 23 01:34	0°♏	
	1996 Dec 17 05:34	0°♐	
	1997 Jan 10 05:32	0°♑	
desc. node	1997 Jan 19 05:41	11°♑16'43	
	1997 Feb 03 04:28	0°♒	
morning set	1997 Feb 21 17:16	23°♒11'32	
	1997 Feb 27 04:01	0°♓	
	1997 Mar 23 05:26	0°♈	
superior conj	1997 Apr 02 13:45	12°♈51'24	-1°16'52
minimum elong	1997 Apr 02 22:18	13°♈17'55	1°16'41
max. Earth dist.	1997 Apr 06 09:07	17°♈34'52	1.72520 AU
	1997 Apr 16 09:43	0°♉	
	1997 May 10 17:20	0°♊	
evening rise	1997 May 11 00:42	0°♊22'38	
asc. node	1997 May 12 09:18	2°♊02'54	
	1997 Jun 04 04:18	0°♋	
	1997 Jun 28 18:38	0°♌	
	1997 Jul 23 13:16	0°♍	
	1997 Aug 17 14:31	0°♎	
desc. node	1997 Aug 31 22:26	16°♎56'37	
	1997 Sep 12 02:17	0°♏	
	1997 Oct 08 08:25	0°♐	
	1997 Nov 05 08:50	0°♑	
evening max el	1997 Nov 06 06:37	0°♑54'45	47°07'46
	1997 Dec 12 04:39	0°♒	
greatest brilliancy	1997 Dec 16 17:22	1°♒58'42	-4.9m
asc. node	1997 Dec 23 01:51	3°♒38'57	
retrograde	1997 Dec 26 21:21	3°♒56'17	
	1998 Jan 09 21:03	30°℞♑	
evening set	1998 Jan 10 23:14	29°♑24'24	
min. Earth dist.	1998 Jan 15 16:26	26°♑36'18	0.26688 AU
inferior conj	1998 Jan 16 11:18	26°♑07'14	5°49'11
minimum elong	1998 Jan 16 00:58	26°♑23'10	5°46'39
morning rise	1998 Jan 21 03:08	23°♑19'46	
direct	1998 Feb 05 21:26	18°♑28'03	
greatest brilliancy	1998 Feb 15 02:03	20°♑04'22	-4.9m
	1998 Mar 04 16:14	0°♒	
morning max el	1998 Mar 27 18:39	20°♒24'27	46°30'18
	1998 Apr 06 05:38	0°♓	
desc. node	1998 Apr 13 15:19	7°♓48'34	
	1998 May 03 19:16	0°♈	
	1998 May 29 23:32	0°♉	
	1998 Jun 24 12:27	0°♊	
	1998 Jul 19 15:17	0°♋	
asc. node	1998 Aug 04 18:38	19°♋30'55	
	1998 Aug 13 09:19	0°♌	
	1998 Sep 06 19:24	0°♍	
morning set	1998 Sep 22 05:18	19°♍06'29	
	1998 Sep 30 23:13	0°♎	
	1998 Oct 24 23:06	0°♏	
max. Earth dist.	1998 Oct 27 15:53	3°♏22'57	1.71582 AU
superior conj	1998 Oct 30 04:22	6°♏32'32	0°55'20
minimum elong	1998 Oct 30 14:42	7°♏04'53	0°54'56
	1998 Nov 17 21:06	0°♐	
desc. node	1998 Nov 24 08:11	8°♐06'51	
evening rise	1998 Dec 09 15:26	27°♐19'34	
	1998 Dec 11 18:33	0°♑	
	1999 Jan 04 16:25	0°♒	
	1999 Jan 28 16:17	0°♓	
	1999 Feb 21 20:49	0°♈	
asc. node	1999 Mar 17 11:32	28°♈52'03	
	1999 Mar 18 09:59	0°♉	
	1999 Apr 12 13:17	0°♊	
	1999 May 08 16:29	0°♋	
	1999 Jun 05 21:25	0°♌	
evening max el	1999 Jun 11 11:54	5°♌28'36	45°23'18
desc. node	1999 Jul 07 00:44	26°♌38'36	
	1999 Jul 12 15:18	0°♍	
greatest brilliancy	1999 Jul 19 22:09	3°♍16'25	-4.7m
retrograde	1999 Jul 30 01:42	5°♍07'48	
	1999 Aug 15 14:12	30°℞♌	
evening set	1999 Aug 16 09:21	29°♌32'18	
inferior conj	1999 Aug 20 11:58	27°♌02'08	-8°06'36
minimum elong	1999 Aug 20 05:14	27°♌12'36	8°05'55
min. Earth dist.	1999 Aug 20 19:15	26°♌50'48	0.28782 AU
morning rise	1999 Aug 24 00:52	24°♌51'30	
direct	1999 Sep 11 00:23	18°♌47'17	
greatest brilliancy	1999 Sep 21 21:50	20°♌56'14	-4.8m
	1999 Oct 07 16:51	0°♍	
asc. node	1999 Oct 28 04:11	17°♍49'32	
morning max el	1999 Oct 30 23:35	20°♍36'12	46°29'30
	1999 Nov 09 02:19	0°♎	
	1999 Dec 05 22:41	0°♏	
	1999 Dec 31 04:54	0°♐	
	2000 Jan 24 19:52	0°♑	
desc. node	2000 Feb 16 17:35	28°♑11'38	
	2000 Feb 18 04:43	0°♒	
	2000 Mar 13 11:36	0°♓	
	2000 Apr 06 18:37	0°♈	
	2000 May 01 02:49	0°♉	
morning set	2000 May 05 08:46	5°♉13'45	
	2000 May 25 12:15	0°♊	
asc. node	2000 Jun 08 21:04	17°♊39'17	
superior conj	2000 Jun 11 10:31	20°♊48'01	0°06'07
minimum elong	2000 Jun 11 09:15	20°♊44'07	0°06'03
behind sun begin	2000 Jun 10 12:07	19°♊39'13	
behind sun end	2000 Jun 12 06:22	21°♊49'02	
max. Earth dist.	2000 Jun 11 07:54	20°♊39'59	1.73566 AU
	2000 Jun 18 22:15	0°♋	
	2000 Jul 13 08:02	0°♌	
evening rise	2000 Jul 17 11:57	5°♌07'05	
	2000 Aug 06 17:32	0°♍	
	2000 Aug 31 03:35	0°♎	
	2000 Sep 24 15:26	0°♏	

desc. node	2000 Sep 28 10:29	4°♏38'07	
	2000 Oct 19 06:18	0°♐	
	2000 Nov 13 02:14	0°♑	
	2000 Dec 08 08:48	0°♒	
	2001 Jan 03 18:14	0°♓	
evening max el	2001 Jan 17 06:09	14°♓17'16	47°05'36
asc. node	2001 Jan 19 13:39	16°♓37'30	
	2001 Feb 02 19:14	0°♈	
greatest brilliancy	2001 Feb 26 15:12	15°♈39'55	-4.9m
retrograde	2001 Mar 09 01:07	17°♈43'46	
evening set	2001 Mar 26 16:11	11°♈42'31	
inferior conj	2001 Mar 30 04:17	9°♈31'43	8°01'17
minimum elong	2001 Mar 30 11:43	9°♈19'59	8°00'24
min. Earth dist.	2001 Mar 29 22:20	9°♈41'04	0.28187 AU
morning rise	2001 Apr 03 07:29	6°♈58'33	
direct	2001 Apr 20 04:34	1°♈27'23	
greatest brilliancy	2001 Apr 29 17:22	3°♈07'39	-4.8m
desc. node	2001 May 11 03:00	8°♈41'20	
	2001 Jun 06 10:25	0°♉	
morning max el	2001 Jun 08 04:41	1°♉40'35	45°50'18
	2001 Jul 05 16:44	0°♊	
	2001 Aug 01 12:18	0°♋	
	2001 Aug 27 04:12	0°♌	
asc. node	2001 Sep 01 06:39	6°♌04'47	
	2001 Sep 21 02:09	0°♍	
	2001 Oct 15 11:42	0°♎	
	2001 Nov 08 13:28	0°♏	
greatest brilliancy	2001 Nov 26 05:38	22°♏10'09	-3.9m
	2001 Dec 02 11:11	0°♐	
morning set	2001 Dec 03 22:56	1°♐52'22	
desc. node	2001 Dec 21 19:55	24°♐21'47	
	2001 Dec 26 07:25	0°♑	
superior conj	2002 Jan 14 11:32	24°♑07'22	-0°52'42
minimum elong	2002 Jan 13 23:57	23°♑30'55	0°52'14
max. Earth dist.	2002 Jan 16 09:00	26°♑30'18	1.71147 AU
	2002 Jan 19 03:42	0°♒	
	2002 Feb 12 01:18	0°♓	
evening rise	2002 Feb 24 14:23	15°♓41'48	
	2002 Mar 08 01:42	0°♈	
	2002 Apr 01 06:39	0°♉	
asc. node	2002 Apr 13 23:28	15°♉36'58	
	2002 Apr 25 17:57	0°♊	
	2002 May 20 13:27	0°♋	
	2002 Jun 14 20:16	0°♌	
	2002 Jul 10 21:09	0°♍	
desc. node	2002 Aug 03 12:37	25°♍56'42	
	2002 Aug 07 09:09	0°♎	
evening max el	2002 Aug 22 13:18	15°♎15'19	46°00'16
	2002 Sep 08 03:05	0°♏	
greatest brilliancy	2002 Oct 01 15:14	14°♏04'44	-4.8m
retrograde	2002 Oct 10 18:35	15°♏36'35	
evening set	2002 Oct 26 17:04	10°♏43'53	
inferior conj	2002 Oct 31 12:06	7°♏53'26	-5°41'32
minimum elong	2002 Oct 31 22:27	7°♏37'40	5°39'01
min. Earth dist.	2002 Nov 01 08:07	7°♏22'57	0.27088 AU
morning rise	2002 Nov 06 03:21	4°♏34'19	
direct	2002 Nov 21 07:13	0°♏03'13	
asc. node	2002 Nov 24 15:57	0°♏16'50	
greatest brilliancy	2002 Dec 02 06:44	2°♏20'20	-4.9m
	2003 Jan 07 13:07	0°♐	
morning max el	2003 Jan 11 02:27	3°♐34'33	46°57'41
	2003 Feb 04 13:27	0°♑	
	2003 Mar 02 12:40	0°♒	
desc. node	2003 Mar 16 05:37	16°♒13'47	
	2003 Mar 27 18:14	0°♓	
	2003 Apr 21 16:18	0°♈	
	2003 May 16 10:58	0°♉	
	2003 Jun 10 03:32	0°♊	
	2003 Jul 04 17:39	0°♋	
asc. node	2003 Jul 07 08:53	3°♋13'28	
morning set	2003 Jul 13 09:02	10°♋34'52	
	2003 Jul 29 04:25	0°♌	
max. Earth dist.	2003 Aug 15 16:06	21°♌34'19	1.73042 AU
superior conj	2003 Aug 18 18:05	25°♌23'02	1°18'47
minimum elong	2003 Aug 18 11:53	25°♌03'53	1°18'41
	2003 Aug 22 11:36	0°♍	
	2003 Sep 15 15:58	0°♎	
evening rise	2003 Sep 24 10:22	10°♎53'51	
	2003 Oct 09 18:56	0°♏	
desc. node	2003 Oct 26 22:22	21°♏19'37	
	2003 Nov 02 21:42	0°♐	
	2003 Nov 27 01:07	0°♑	
	2003 Dec 21 06:32	0°♒	
	2004 Jan 14 17:16	0°♓	
	2004 Feb 08 16:20	0°♈	
asc. node	2004 Feb 17 01:36	9°♈50'16	
	2004 Mar 05 18:12	0°♉	
evening max el	2004 Mar 29 16:40	25°♉14'45	46°00'16
	2004 Apr 03 14:57	0°♊	
greatest brilliancy	2004 May 06 21:39	23°♊56'09	-4.7m
retrograde	2004 May 17 22:28	26°♊08'18	
evening set	2004 Jun 02 00:07	21°♊43'16	
desc. node	2004 Jun 07 14:51	18°♊21'26	
inferior conj	2004 Jun 08 08:43	17°♊53'21	-0°10'34
minimum elong	2004 Jun 08 08:20	17°♊53'57	0°10'27
transit middle	2004 Jun 08 08:20	17°♊53'57	0°10'27
transit begin	2004 Jun 08 05:14	17°♊58'50	
transit end	2004 Jun 08 11:26	17°♊49'05	
min. Earth dist.	2004 Jun 08 06:58	17°♊56'06	0.28888 AU
morning rise	2004 Jun 14 16:52	14°♊04'50	
direct	2004 Jun 29 23:15	9°♊37'32	
greatest brilliancy	2004 Jul 10 04:16	11°♊30'16	-4.7m
	2004 Aug 07 11:02	0°♋	
morning max el	2004 Aug 17 18:31	9°♋26'32	45°48'58
	2004 Sep 06 22:16	0°♌	
asc. node	2004 Sep 28 18:28	24°♌17'26	
	2004 Oct 03 17:20	0°♍	
	2004 Oct 29 00:39	0°♎	
	2004 Nov 22 13:31	0°♏	
	2004 Dec 16 17:10	0°♐	
	2005 Jan 09 16:56	0°♑	
desc. node	2005 Jan 18 07:48	10°♑47'54	
	2005 Feb 02 15:42	0°♒	
morning set	2005 Feb 19 04:05	20°♒40'30	
	2005 Feb 26 15:07	0°♓	
	2005 Mar 22 16:25	0°♈	
superior conj	2005 Mar 31 03:30	10°♈31'04	-1°18'27
minimum elong	2005 Mar 31 11:32	10°♈56'00	1°18'16
max. Earth dist.	2005 Apr 04 02:17	15°♈25'15	1.72462 AU
	2005 Apr 15 20:37	0°♉	
evening rise	2005 May 08 16:49	28°♉11'02	
	2005 May 10 04:14	0°♊	
asc. node	2005 May 11 11:15	1°♊35'21	
	2005 Jun 03 15:18	0°♋	
	2005 Jun 28 05:53	0°♌	
	2005 Jul 23 01:01	0°♍	
	2005 Aug 17 03:05	0°♎	
desc. node	2005 Aug 31 00:33	16°♎23'55	
	2005 Sep 11 16:14	0°♏	
	2005 Oct 08 01:00	0°♐	
evening max el	2005 Nov 03 19:34	28°♐28'48	47°06'10

	2005 Nov 05 08:10	0°♉	
greatest brilliancy	2005 Dec 14 07:35	29°♉31'59	-4.9m
	2005 Dec 15 15:58	0°♒	
asc. node	2005 Dec 22 03:50	1°♒21'58	
retrograde	2005 Dec 24 09:36	1°♒28'01	
	2006 Jan 01 20:18	30°℞♉	
evening set	2006 Jan 08 09:05	27°♉00'49	
inferior conj	2006 Jan 13 23:59	23°♉40'06	5°30'44
minimum elong	2006 Jan 13 13:50	23°♉55'44	5°28'08
min. Earth dist.	2006 Jan 13 06:16	24°♉07'23	0.26649 AU
morning rise	2006 Jan 18 18:57	20°♉48'06	
direct	2006 Feb 03 09:19	16°♉01'19	
greatest brilliancy	2006 Feb 12 16:13	17°♉39'14	-4.9m
	2006 Mar 05 08:39	0°♒	
morning max el	2006 Mar 25 06:45	17°♒58'28	46°31'49
	2006 Apr 06 01:21	0°♓	
desc. node	2006 Apr 12 17:19	7°♓05'21	
	2006 May 03 10:25	0°♈	
	2006 May 29 12:41	0°♉	
	2006 Jun 24 00:31	0°♊	
	2006 Jul 19 02:41	0°♋	
asc. node	2006 Aug 03 20:48	19°♋03'40	
	2006 Aug 12 20:21	0°♌	
	2006 Sep 06 06:15	0°♍	
morning set	2006 Sep 19 21:10	16°♍53'01	
	2006 Sep 30 10:02	0°♎	
	2006 Oct 24 09:58	0°♏	
max. Earth dist.	2006 Oct 25 04:00	0°♏56'31	1.71626 AU
superior conj	2006 Oct 27 17:50	4°♏10'16	0°58'03
minimum elong	2006 Oct 28 04:14	4°♏42'50	0°57'40
	2006 Nov 17 08:02	0°♐	
desc. node	2006 Nov 23 10:11	7°♐38'43	
evening rise	2006 Dec 07 02:24	24°♐48'50	
	2006 Dec 11 05:33	0°♑	
	2007 Jan 04 03:31	0°♒	
	2007 Jan 28 03:32	0°♓	
	2007 Feb 21 08:21	0°♈	
asc. node	2007 Mar 16 13:32	28°♈21'50	
	2007 Mar 17 22:00	0°♉	
	2007 Apr 12 02:15	0°♊	
	2007 May 08 07:28	0°♋	
	2007 Jun 05 17:59	0°♌	
evening max el	2007 Jun 09 02:45	3°♌15'54	45°23'27
desc. node	2007 Jul 06 02:52	25°♌23'30	
	2007 Jul 14 18:23	0°♍	
greatest brilliancy	2007 Jul 17 11:42	1°♍03'57	-4.7m
retrograde	2007 Jul 27 17:28	2°♍57'23	
	2007 Aug 09 01:10	30°℞♌	
evening set	2007 Aug 13 21:45	27°♌25'46	
inferior conj	2007 Aug 18 03:41	24°♌50'52	-7°58'54
minimum elong	2007 Aug 17 20:23	25°♌02'13	7°58'04
min. Earth dist.	2007 Aug 18 10:03	24°♌40'59	0.28816 AU
morning rise	2007 Aug 21 18:48	22°♌37'06	
direct	2007 Sep 08 16:14	16°♌35'27	
greatest brilliancy	2007 Sep 19 13:41	18°♌44'27	-4.8m
	2007 Oct 08 06:53	0°♍	
asc. node	2007 Oct 27 06:11	16°♍58'56	
morning max el	2007 Oct 28 15:05	18°♍20'38	46°27'59
	2007 Nov 08 21:05	0°♎	
	2007 Dec 05 13:29	0°♏	
	2007 Dec 30 18:02	0°♐	
	2008 Jan 24 08:06	0°♑	
desc. node	2008 Feb 15 19:44	27°♑42'12	
	2008 Feb 17 16:22	0°♒	
	2008 Mar 12 22:51	0°♓	
	2008 Apr 06 05:35	0°♈	
	2008 Apr 30 13:34	0°♉	
morning set	2008 May 03 01:17	3°♉03'50	
	2008 May 24 22:52	0°♊	
asc. node	2008 Jun 07 23:08	17°♊13'08	
superior conj	2008 Jun 09 04:20	18°♊42'50	0°02'56
minimum elong	2008 Jun 09 03:42	18°♊40'54	0°02'54
behind sun begin	2008 Jun 08 05:18	17°♊32'06	
behind sun end	2008 Jun 10 02:05	19°♊49'42	
max. Earth dist.	2008 Jun 09 04:51	18°♊44'27	1.73558 AU
	2008 Jun 18 08:49	0°♋	
	2008 Jul 12 18:39	0°♌	
evening rise	2008 Jul 15 06:49	3°♌04'56	
	2008 Aug 06 04:20	0°♍	
	2008 Aug 30 14:41	0°♎	
	2008 Sep 24 02:59	0°♏	
desc. node	2008 Sep 27 12:27	4°♏08'37	
	2008 Oct 18 18:31	0°♐	
	2008 Nov 12 15:25	0°♑	
	2008 Dec 07 23:37	0°♒	
	2009 Jan 03 12:35	0°♓	
evening max el	2009 Jan 14 21:24	11°♓58'34	47°07'21
asc. node	2009 Jan 18 15:51	15°♓45'58	
	2009 Feb 03 03:41	0°♈	
greatest brilliancy	2009 Feb 24 06:17	13°♈22'42	-4.9m
retrograde	2009 Mar 06 17:17	15°♈27'27	
evening set	2009 Mar 24 09:45	9°♈22'31	
inferior conj	2009 Mar 27 19:24	7°♈15'33	8°09'51
minimum elong	2009 Mar 28 02:18	7°♈04'41	8°09'05
min. Earth dist.	2009 Mar 27 12:19	7°♈26'41	0.28147 AU
morning rise	2009 Mar 31 19:05	4°♈47'57	
	2009 Apr 11 12:47	30°℞♓	
direct	2009 Apr 17 19:24	29°♓11'57	
	2009 Apr 24 07:18	0°♈	
greatest brilliancy	2009 Apr 27 06:31	0°♈51'19	-4.8m
desc. node	2009 May 10 05:00	7°♈22'48	
morning max el	2009 Jun 05 20:51	29°♈30'33	45°51'07
	2009 Jun 06 09:07	0°♉	
	2009 Jul 05 08:23	0°♊	
	2009 Aug 01 01:28	0°♋	
	2009 Aug 26 16:12	0°♌	
asc. node	2009 Aug 31 08:38	5°♌35'21	
	2009 Sep 20 13:32	0°♍	
	2009 Oct 14 22:46	0°♎	
	2009 Nov 08 00:23	0°♏	
greatest brilliancy	2009 Nov 25 18:32	22°♏16'30	-3.9m
morning set	2009 Dec 01 10:19	29°♏23'07	
	2009 Dec 01 22:04	0°♐	
desc. node	2009 Dec 20 22:01	23°♐54'09	
	2009 Dec 25 18:17	0°♑	
superior conj	2010 Jan 11 21:06	21°♑32'15	-0°49'27
minimum elong	2010 Jan 11 09:52	20°♑56'55	0°48'59
max. Earth dist.	2010 Jan 13 17:06	23°♑50'37	1.71129 AU
	2010 Jan 18 14:35	0°♒	
	2010 Feb 11 12:10	0°♓	
evening rise	2010 Feb 22 01:26	13°♓12'28	
	2010 Mar 07 12:33	0°♈	
	2010 Mar 31 17:35	0°♉	
asc. node	2010 Apr 13 01:27	15°♉09'13	
	2010 Apr 25 05:05	0°♊	
	2010 May 20 01:05	0°♋	
	2010 Jun 14 08:50	0°♌	
	2010 Jul 10 11:32	0°♍	
desc. node	2010 Aug 02 14:43	25°♍15'32	
	2010 Aug 07 03:47	0°♎	
evening max el	2010 Aug 20 03:48	12°♎59'17	45°57'59

	2010 Sep	08	15:44	0°♏				2013 Feb	02	02:47	0°♒			
greatest brilliancy	2010 Sep	29	03:59	11°♏42'49	-4.8m		morning set	2013 Feb	16	14:36	18°♒08'55			
retrograde	2010 Oct	08	07:05	13°♏13'58				2013 Feb	26	02:03	0°♓			
evening set	2010 Oct	24	09:12	8°♏16'58				2013 Mar	22	03:15	0°♈			
inferior conj	2010 Oct	29	01:10	5°♏30'25	-5°58'48									
minimum elong	2010 Oct	29	11:39	5°♏14'25	5°56'22		superior conj	2013 Mar	28	17:05	8°♈10'36	-1°19'53		
min. Earth dist.	2010 Oct	29	21:39	4°♏59'11	0.27150 AU		minimum elong	2013 Mar	29	00:31	8°♈33'43	1°19'44		
morning rise	2010 Nov	03	13:38	2°♏14'42			max. Earth dist.	2013 Apr	01	17:14	13°♈09'10	1.72406 AU		
	2010 Nov	08	03:06	30°℞♎				2013 Apr	15	07:25	0°♉			
direct	2010 Nov	18	21:18	27°♎39'26			evening rise	2013 May	06	08:47	25°♉59'11			
asc. node	2010 Nov	23	17:59	28°♎07'29				2013 May	09	15:03	0°♊			
greatest brilliancy	2010 Nov	29	20:43	29°♎56'10	-4.9m		asc. node	2013 May	10	13:22	1°♊08'36			
	2010 Nov	30	00:33	0°♏				2013 Jun	03	02:13	0°♋			
	2011 Jan	07	12:30	0°♐				2013 Jun	27	17:03	0°♌			
morning max el	2011 Jan	08	16:02	1°♐09'49	46°57'24			2013 Jul	22	12:41	0°♍			
	2011 Feb	04	05:58	0°♑				2013 Aug	16	15:37	0°♎			
	2011 Mar	02	02:39	0°♒			desc. node	2013 Aug	30	02:30	15°♎50'53			
desc. node	2011 Mar	15	07:30	15°♒40'14				2013 Sep	11	06:16	0°♏			
	2011 Mar	27	06:53	0°♓				2013 Oct	07	17:54	0°♐			
	2011 Apr	21	04:06	0°♈			evening max el	2013 Nov	01	07:59	26°♐01'29	47°04'26		
	2011 May	15	22:12	0°♉				2013 Nov	05	08:43	0°♑			
	2011 Jun	09	14:23	0°♊			greatest brilliancy	2013 Dec	11	21:27	27°♑04'00	-4.9m		
	2011 Jul	04	04:17	0°♋			asc. node	2013 Dec	21	06:00	28°♑58'24			
asc. node	2011 Jul	06	11:01	2°♋47'30			retrograde	2013 Dec	21	21:53	28°♑58'57			
morning set	2011 Jul	11	03:13	8°♋31'05			evening set	2014 Jan	05	18:49	24°♑35'46			
	2011 Jul	28	14:59	0°♌			min. Earth dist.	2014 Jan	10	19:54	21°♑37'22	0.26612 AU		
max. Earth dist.	2011 Aug	13	09:24	19°♌26'53	1.73085 AU		inferior conj	2014 Jan	11	12:24	21°♑11'59	5°11'17		
							minimum elong	2014 Jan	11	02:32	21°♑27'09	5°08'40		
superior conj	2011 Aug	16	12:08	23°♌17'47	1°17'33		morning rise	2014 Jan	16	10:32	18°♑15'43			
minimum elong	2011 Aug	16	05:29	22°♌57'15	1°17'25		direct	2014 Jan	31	20:49	13°♑33'23			
	2011 Aug	21	22:11	0°♍			greatest brilliancy	2014 Feb	10	06:14	15°♑13'17	-4.9m		
	2011 Sep	15	02:40	0°♎				2014 Mar	05	21:03	0°♒			
evening rise	2011 Sep	22	02:08	8°♎40'10			morning max el	2014 Mar	22	19:31	15°♒33'55	46°33'26		
	2011 Oct	09	05:50	0°♏				2014 Apr	05	20:31	0°♓			
desc. node	2011 Oct	26	00:22	20°♏51'20			desc. node	2014 Apr	11	19:23	6°♓22'53			
	2011 Nov	02	08:51	0°♐				2014 May	03	01:21	0°♈			
	2011 Nov	26	12:36	0°♑				2014 May	29	01:45	0°♉			
	2011 Dec	20	18:26	0°♒				2014 Jun	23	12:33	0°♊			
	2012 Jan	14	05:47	0°♓				2014 Jul	18	14:06	0°♋			
	2012 Feb	08	06:01	0°♈			asc. node	2014 Aug	02	22:48	18°♋35'53			
asc. node	2012 Feb	16	03:35	9°♈14'32				2014 Aug	12	07:24	0°♌			
	2012 Mar	05	10:25	0°♉				2014 Sep	05	17:07	0°♍			
evening max el	2012 Mar	27	07:44	23°♉00'19	46°02'27		morning set	2014 Sep	17	13:24	14°♍40'36			
	2012 Apr	03	15:18	0°♊				2014 Sep	29	20:52	0°♎			
greatest brilliancy	2012 May	04	15:22	21°♊48'35	-4.8m		max. Earth dist.	2014 Oct	22	18:18	28°♎36'47	1.71673 AU		
retrograde	2012 May	15	14:33	23°♊59'32				2014 Oct	23	20:52	0°♏			
evening set	2012 May	30	17:21	19°♊33'39										
inferior conj	2012 Jun	06	01:09	15°♊44'46	0°09'21		superior conj	2014 Oct	25	07:31	1°♏48'31	1°00'39		
minimum elong	2012 Jun	06	01:30	15°♊44'14	0°09'14		minimum elong	2014 Oct	25	17:53	2°♏21'00	1°00'17		
transit middle	2012 Jun	06	01:30	15°♊44'14	0°09'14			2014 Nov	16	19:03	0°♐			
transit begin	2012 Jun	05	22:10	15°♊49'29			desc. node	2014 Nov	22	12:20	7°♐10'47			
transit end	2012 Jun	06	04:50	15°♊38'59			evening rise	2014 Dec	04	13:19	22°♐17'36			
min. Earth dist.	2012 Jun	05	23:53	15°♊46'46	0.28870 AU			2014 Dec	10	16:42	0°♑			
desc. node	2012 Jun	06	16:56	15°♊19'56				2015 Jan	03	14:48	0°♒			
morning rise	2012 Jun	12	09:53	11°♊55'01				2015 Jan	27	15:00	0°♓			
direct	2012 Jun	27	15:07	7°♊29'16				2015 Feb	20	20:05	0°♈			
greatest brilliancy	2012 Jul	07	20:07	9°♊21'30	-4.7m		asc. node	2015 Mar	15	15:31	27°♈50'58			
	2012 Aug	07	13:43	0°♋				2015 Mar	17	10:15	0°♉			
morning max el	2012 Aug	15	09:07	7°♋13'45	45°48'10			2015 Apr	11	15:28	0°♊			
	2012 Sep	06	14:48	0°♌				2015 May	07	22:52	0°♋			
asc. node	2012 Sep	27	20:28	23°♌42'56				2015 Jun	05	15:33	0°♌			
	2012 Oct	03	06:59	0°♍			evening max el	2015 Jun	06	18:29	1°♌04'50	45°23'40		
	2012 Oct	28	13:04	0°♎			desc. node	2015 Jul	05	04:59	24°♌05'29			
	2012 Nov	22	01:20	0°♏			greatest brilliancy	2015 Jul	15	01:02	28°♌50'48	-4.7m		
	2012 Dec	16	04:38	0°♐				2015 Jul	18	22:38	0°♍			
	2013 Jan	09	04:11	0°♑			retrograde	2015 Jul	25	09:29	0°♍46'23			
desc. node	2013 Jan	17	09:55	10°♑19'30				2015 Jul	31	15:27	30°℞♌			

evening set	2015 Aug 11 10:06	25°♌18'53	
inferior conj	2015 Aug 15 19:22	22°♌39'06	-7°50'26
minimum elong	2015 Aug 15 11:34	22°♌51'12	7°49'28
min. Earth dist.	2015 Aug 16 00:36	22°♌30'58	0.28844 AU
morning rise	2015 Aug 19 12:50	20°♌21'57	
direct	2015 Sep 06 08:29	14°♌23'18	
greatest brilliancy	2015 Sep 17 04:49	16°♌31'34	-4.8m
	2015 Oct 08 17:29	0°♍	
asc. node	2015 Oct 26 08:17	16°♍09'08	
morning max el	2015 Oct 26 07:11	16°♍06'25	46°26'29
	2015 Nov 08 15:31	0°♎	
	2015 Dec 05 04:15	0°♏	
	2015 Dec 30 07:16	0°♐	
	2016 Jan 23 20:32	0°♑	
desc. node	2016 Feb 14 21:40	27°♑11'17	
	2016 Feb 17 04:17	0°♒	
	2016 Mar 12 10:24	0°♓	
	2016 Apr 05 16:50	0°♈	
	2016 Apr 30 00:36	0°♉	
morning set	2016 Apr 30 17:26	0°♉51'51	
	2016 May 24 09:45	0°♊	
superior conj	2016 Jun 06 21:49	16°♊35'44	-0°00'21
minimum elong	2016 Jun 06 21:54	16°♊35'59	0°00'20
behind sun begin	2016 Jun 05 23:15	15°♊26'26	
behind sun end	2016 Jun 07 20:32	17°♊45'33	
max. Earth dist.	2016 Jun 07 03:29	16°♊53'12	1.73547 AU
asc. node	2016 Jun 07 01:14	16°♊46'16	
	2016 Jun 17 19:39	0°♋	
	2016 Jul 12 05:34	0°♌	
evening rise	2016 Jul 13 01:40	1°♌01'47	
	2016 Aug 05 15:27	0°♍	
	2016 Aug 30 02:07	0°♎	
	2016 Sep 23 14:51	0°♏	
desc. node	2016 Sep 26 14:31	3°♏38'31	
	2016 Oct 18 07:01	0°♐	
	2016 Nov 12 04:54	0°♑	
	2016 Dec 07 14:51	0°♒	
	2017 Jan 03 07:47	0°♓	
evening max el	2017 Jan 12 13:18	9°♓40'27	47°08'46
asc. node	2017 Jan 17 17:46	14°♓51'40	
	2017 Feb 03 15:51	0°♈	
greatest brilliancy	2017 Feb 21 21:18	11°♈03'40	-4.9m
retrograde	2017 Mar 04 09:09	13°♈08'50	
evening set	2017 Mar 22 02:59	7°♈00'44	
inferior conj	2017 Mar 25 10:17	4°♈57'13	8°17'38
minimum elong	2017 Mar 25 16:36	4°♈47'18	8°17'01
min. Earth dist.	2017 Mar 25 01:59	5°♈10'17	0.28105 AU
morning rise	2017 Mar 29 06:29	2°♈34'58	
	2017 Apr 03 00:25	30°℞♓	
direct	2017 Apr 15 10:18	26°♓54'34	
greatest brilliancy	2017 Apr 24 19:08	28°♓32'27	-4.8m
	2017 Apr 28 13:13	0°♈	
desc. node	2017 May 09 07:08	6°♈05'22	
morning max el	2017 Jun 03 12:30	27°♈17'53	45°51'59
	2017 Jun 06 07:27	0°♉	
	2017 Jul 05 00:11	0°♊	
	2017 Jul 31 14:54	0°♋	
	2017 Aug 26 04:30	0°♌	
asc. node	2017 Aug 30 10:36	5°♌04'50	
	2017 Sep 20 01:15	0°♍	
	2017 Oct 14 10:11	0°♎	
	2017 Nov 07 11:38	0°♏	
greatest brilliancy	2017 Nov 25 03:07	22°♏08'19	-3.9m
morning set	2017 Nov 28 22:13	26°♏54'32	
	2017 Dec 01 09:14	0°♐	
desc. node	2017 Dec 20 00:06	23°♐25'36	
	2017 Dec 25 05:26	0°♑	
superior conj	2018 Jan 09 07:02	18°♑57'28	-0°46'06
minimum elong	2018 Jan 08 20:15	18°♑23'35	0°45'40
max. Earth dist.	2018 Jan 11 01:45	21°♑11'49	1.71112 AU
	2018 Jan 18 01:44	0°♒	
	2018 Feb 10 23:20	0°♓	
evening rise	2018 Feb 19 12:30	10°♓42'04	
	2018 Mar 06 23:45	0°♈	
	2018 Mar 31 04:54	0°♉	
asc. node	2018 Apr 12 03:32	14°♉40'34	
	2018 Apr 24 16:40	0°♊	
	2018 May 19 13:11	0°♋	
	2018 Jun 13 21:54	0°♌	
	2018 Jul 10 02:32	0°♍	
desc. node	2018 Aug 01 16:39	24°♍32'10	
	2018 Aug 06 23:27	0°♎	
evening max el	2018 Aug 17 17:31	10°♎40'09	45°55'40
	2018 Sep 09 09:25	0°♏	
greatest brilliancy	2018 Sep 26 17:13	9°♏20'19	-4.8m
retrograde	2018 Oct 05 19:04	10°♏50'22	
evening set	2018 Oct 22 01:22	5°♏48'55	
inferior conj	2018 Oct 26 14:16	3°♏06'30	-6°15'23
minimum elong	2018 Oct 27 00:48	2°♏50'22	6°13'01
min. Earth dist.	2018 Oct 27 11:31	2°♏33'59	0.27212 AU
morning rise	2018 Oct 31 23:44	29°♎54'23	
	2018 Oct 31 19:42	30°℞♎	
direct	2018 Nov 16 10:51	25°♎14'32	
asc. node	2018 Nov 22 20:05	26°♎02'09	
greatest brilliancy	2018 Nov 27 11:14	27°♎31'34	-4.9m
	2018 Dec 02 17:02	0°♏	
morning max el	2019 Jan 06 04:54	28°♏42'12	46°57'22
	2019 Jan 07 11:18	0°♐	
	2019 Feb 03 22:29	0°♑	
	2019 Mar 01 16:45	0°♒	
desc. node	2019 Mar 14 09:37	15°♒06'41	
	2019 Mar 26 19:43	0°♓	
	2019 Apr 20 16:11	0°♈	
	2019 May 15 09:46	0°♉	
	2019 Jun 09 01:37	0°♊	
	2019 Jul 03 15:18	0°♋	
asc. node	2019 Jul 05 13:00	2°♋19'53	
morning set	2019 Jul 08 21:14	6°♋25'38	
	2019 Jul 28 01:54	0°♌	
max. Earth dist.	2019 Aug 11 03:11	17°♌19'55	1.73127 AU
superior conj	2019 Aug 14 06:07	21°♌11'22	1°16'12
minimum elong	2019 Aug 13 23:03	20°♌49'32	1°16'03
	2019 Aug 21 09:06	0°♍	
	2019 Sep 14 13:43	0°♎	
evening rise	2019 Sep 19 18:02	6°♎25'58	
	2019 Oct 08 17:06	0°♏	
desc. node	2019 Oct 25 02:30	20°♏22'21	
	2019 Nov 01 20:25	0°♐	
	2019 Nov 26 00:28	0°♑	
	2019 Dec 20 06:42	0°♒	
	2020 Jan 13 18:39	0°♓	
	2020 Feb 07 20:02	0°♈	
asc. node	2020 Feb 15 05:37	8°♈38'09	
	2020 Mar 05 03:07	0°♉	
evening max el	2020 Mar 24 22:14	20°♉43'48	46°04'39
	2020 Apr 03 17:11	0°♊	
greatest brilliancy	2020 May 02 08:51	19°♊40'01	-4.8m
retrograde	2020 May 13 06:45	21°♊50'25	
evening set	2020 May 28 10:49	17°♊23'05	
inferior conj	2020 Jun 03 17:44	13°♊35'40	0°29'12
minimum elong	2020 Jun 03 18:48	13°♊33'59	0°28'52

min. Earth dist.	2020 Jun 03 17:05	13°♊36'41	0.28858 AU
desc. node	2020 Jun 05 19:02	12°♊18'24	
morning rise	2020 Jun 10 02:56	9°♊44'59	
direct	2020 Jun 25 06:48	5°♊20'12	
greatest brilliancy	2020 Jul 05 12:43	7°♊12'47	-4.7m
	2020 Aug 07 15:21	0°♋	
morning max el	2020 Aug 13 00:14	5°♋01'18	45°47'28
	2020 Sep 06 07:22	0°♌	
asc. node	2020 Sep 26 22:39	23°♌08'22	
	2020 Oct 02 20:48	0°♍	
	2020 Oct 28 01:41	0°♎	
	2020 Nov 21 13:22	0°♏	
	2020 Dec 15 16:21	0°♐	
	2021 Jan 08 15:41	0°♑	
desc. node	2021 Jan 16 11:50	9°♑49'42	
	2021 Feb 01 14:05	0°♒	
morning set	2021 Feb 14 01:14	15°♒36'53	
	2021 Feb 25 13:11	0°♓	
	2021 Mar 21 14:16	0°♈	
superior conj	2021 Mar 26 06:58	5°♈50'28	-1°21'09
minimum elong	2021 Mar 26 13:47	6°♈11'40	1°21'03
max. Earth dist.	2021 Mar 30 06:51	10°♈48'20	1.72346 AU
	2021 Apr 14 18:22	0°♉	
evening rise	2021 May 04 01:01	23°♉47'44	
	2021 May 09 02:01	0°♊	
asc. node	2021 May 09 15:27	0°♊41'18	
	2021 Jun 02 13:19	0°♋	
	2021 Jun 27 04:27	0°♌	
	2021 Jul 22 00:37	0°♍	
	2021 Aug 16 04:27	0°♎	
desc. node	2021 Aug 29 04:36	15°♎17'28	
	2021 Sep 10 20:39	0°♏	
	2021 Oct 07 11:21	0°♐	
evening max el	2021 Oct 29 20:52	23°♐35'03	47°02'42
	2021 Nov 05 10:44	0°♑	
greatest brilliancy	2021 Dec 09 10:49	24°♑34'54	-4.9m
retrograde	2021 Dec 19 10:36	26°♑29'25	
asc. node	2021 Dec 20 07:58	26°♑28'27	
evening set	2022 Jan 03 04:45	22°♑09'38	
min. Earth dist.	2022 Jan 08 09:19	19°♑06'51	0.26579 AU
inferior conj	2022 Jan 09 00:48	18°♑43'08	4°51'07
minimum elong	2022 Jan 08 15:16	18°♑57'44	4°48'32
morning rise	2022 Jan 14 02:03	15°♑42'54	
direct	2022 Jan 29 08:46	11°♑04'37	
greatest brilliancy	2022 Feb 07 20:00	12°♑46'23	-4.9m
	2022 Mar 06 06:30	0°♒	
morning max el	2022 Mar 20 09:25	13°♒11'39	46°35'11
	2022 Apr 05 15:18	0°♓	
desc. node	2022 Apr 10 21:30	5°♓40'44	
	2022 May 02 16:10	0°♈	
	2022 May 28 14:46	0°♉	
	2022 Jun 23 00:34	0°♊	
	2022 Jul 18 01:32	0°♋	
asc. node	2022 Aug 02 00:48	18°♋07'51	
	2022 Aug 11 18:30	0°♌	
	2022 Sep 05 04:05	0°♍	
morning set	2022 Sep 15 05:45	12°♍28'22	
	2022 Sep 29 07:49	0°♎	
max. Earth dist.	2022 Oct 20 08:15	26°♎15'47	1.71718 AU
superior conj	2022 Oct 22 21:17	29°♎26'53	1°03'07
minimum elong	2022 Oct 23 07:33	29°♎59'00	1°02'46
	2022 Oct 23 07:52	0°♏	
	2022 Nov 16 06:09	0°♐	
desc. node	2022 Nov 21 14:21	6°♐42'11	
evening rise	2022 Dec 02 00:16	19°♐46'20	
	2022 Dec 10 03:54	0°♑	
	2023 Jan 03 02:10	0°♒	
	2023 Jan 27 02:33	0°♓	
	2023 Feb 20 07:56	0°♈	
asc. node	2023 Mar 14 17:41	27°♈20'23	
	2023 Mar 16 22:34	0°♉	
	2023 Apr 11 04:47	0°♊	
	2023 May 07 14:25	0°♋	
evening max el	2023 Jun 04 11:01	28°♋56'08	45°23'57
	2023 Jun 05 13:46	0°♌	
desc. node	2023 Jul 04 06:53	22°♌45'22	
greatest brilliancy	2023 Jul 12 14:43	26°♌38'53	-4.7m
retrograde	2023 Jul 23 01:33	28°♌36'12	
evening set	2023 Aug 08 22:41	23°♌13'05	
inferior conj	2023 Aug 13 11:16	20°♌28'14	-7°41'18
minimum elong	2023 Aug 13 03:01	20°♌41'02	7°40'13
min. Earth dist.	2023 Aug 13 15:17	20°♌21'59	0.28871 AU
morning rise	2023 Aug 17 07:12	18°♌07'25	
direct	2023 Sep 04 01:20	12°♌12'14	
greatest brilliancy	2023 Sep 14 19:47	14°♌19'04	-4.8m
	2023 Oct 09 01:11	0°♍	
morning max el	2023 Oct 23 23:14	13°♍52'22	46°24'47
asc. node	2023 Oct 25 10:20	15°♍20'10	
	2023 Nov 08 09:31	0°♎	
	2023 Dec 04 18:51	0°♏	
	2023 Dec 29 20:24	0°♐	
	2024 Jan 23 08:50	0°♑	
desc. node	2024 Feb 13 23:46	26°♑41'10	
	2024 Feb 16 16:05	0°♒	
	2024 Mar 11 21:50	0°♓	
	2024 Apr 05 04:00	0°♈	
morning set	2024 Apr 28 09:39	28°♈40'19	
	2024 Apr 29 11:31	0°♉	
	2024 May 23 20:30	0°♊	
superior conj	2024 Jun 04 15:34	14°♊29'51	-0°03'34
minimum elong	2024 Jun 04 16:18	14°♊32'07	0°03'32
behind sun begin	2024 Jun 03 17:58	13°♊23'28	
behind sun end	2024 Jun 05 14:38	15°♊40'45	
max. Earth dist.	2024 Jun 05 03:00	15°♊05'01	1.73528 AU
asc. node	2024 Jun 06 03:13	16°♊19'23	
	2024 Jun 17 06:20	0°♋	
evening rise	2024 Jul 10 20:50	29°♋00'10	
	2024 Jul 11 16:19	0°♌	
	2024 Aug 05 02:23	0°♍	
	2024 Aug 29 13:23	0°♎	
	2024 Sep 23 02:36	0°♏	
desc. node	2024 Sep 25 16:39	3°♏08'57	
	2024 Oct 17 19:28	0°♐	
	2024 Nov 11 18:26	0°♑	
	2024 Dec 07 06:13	0°♒	
	2025 Jan 03 03:24	0°♓	
evening max el	2025 Jan 10 05:02	7°♓21'57	47°10'07
asc. node	2025 Jan 16 19:50	13°♓57'01	
	2025 Feb 04 07:57	0°♈	
greatest brilliancy	2025 Feb 19 12:47	8°♈45'24	-4.9m
retrograde	2025 Mar 02 00:36	10°♈50'09	
evening set	2025 Mar 19 19:58	4°♈39'32	
min. Earth dist.	2025 Mar 22 15:48	2°♈53'47	0.28060 AU
inferior conj	2025 Mar 23 01:08	2°♈39'06	8°24'41
minimum elong	2025 Mar 23 06:46	2°♈30'13	8°24'12
morning rise	2025 Mar 26 17:51	0°♈21'57	
	2025 Mar 27 08:41	30°℞♓	
direct	2025 Apr 13 01:02	24°♓37'30	
greatest brilliancy	2025 Apr 22 07:56	26°♓13'53	-4.8m
	2025 Apr 30 17:16	0°♈	
desc. node	2025 May 08 09:10	4°♈50'31	

morning max el	2025 Jun 01 03:29	25°♈04'00	45°52'59
	2025 Jun 06 04:43	0°♉	
	2025 Jul 04 15:31	0°♊	
	2025 Jul 31 03:57	0°♋	
	2025 Aug 25 16:27	0°♌	
asc. node	2025 Aug 29 12:49	4°♌36'03	
	2025 Sep 19 12:39	0°♍	
	2025 Oct 13 21:19	0°♎	
	2025 Nov 06 22:40	0°♏	
greatest brilliancy	2025 Nov 24 06:03	21°♏42'58	-3.9m
morning set	2025 Nov 26 10:00	24°♏26'10	
	2025 Nov 30 20:14	0°♐	
desc. node	2025 Dec 19 02:06	22°♐57'14	
	2025 Dec 24 16:26	0°♑	
superior conj	2026 Jan 06 16:36	16°♑22'03	-0°42'39
minimum elong	2026 Jan 06 06:24	15°♑49'58	0°42'12
max. Earth dist.	2026 Jan 08 06:38	18°♑21'39	1.71096 AU
	2026 Jan 17 12:43	0°♒	
	2026 Feb 10 10:19	0°♓	
evening rise	2026 Feb 16 23:02	8°♓10'33	
	2026 Mar 06 10:46	0°♈	
	2026 Mar 30 16:01	0°♉	
asc. node	2026 Apr 11 05:37	14°♉12'35	
	2026 Apr 24 04:03	0°♊	
	2026 May 19 01:05	0°♋	
	2026 Jun 13 10:47	0°♌	
	2026 Jul 09 17:22	0°♍	
desc. node	2026 Jul 31 18:49	23°♍50'05	
	2026 Aug 06 19:13	0°♎	
evening max el	2026 Aug 15 06:32	8°♎20'48	45°53'32
	2026 Sep 10 08:07	0°♏	
greatest brilliancy	2026 Sep 24 06:42	7°♏00'12	-4.8m
retrograde	2026 Oct 03 07:16	8°♏29'28	
evening set	2026 Oct 19 17:48	3°♏23'11	
inferior conj	2026 Oct 24 03:44	0°♏45'03	-6°30'50
minimum elong	2026 Oct 24 14:14	0°♏28'57	6°28'36
min. Earth dist.	2026 Oct 25 01:48	0°♏11'15	0.27280 AU
	2026 Oct 25 09:10	30℞♎	
morning rise	2026 Oct 29 10:06	27°♎36'49	
direct	2026 Nov 14 00:27	22°♎51'49	
asc. node	2026 Nov 21 22:05	24°♎03'38	
greatest brilliancy	2026 Nov 25 02:39	25°♎09'58	-4.9m
	2026 Dec 04 08:13	0°♏	
morning max el	2027 Jan 03 17:58	26°♏15'57	46°57'01
	2027 Jan 07 08:53	0°♐	
	2027 Feb 03 14:31	0°♑	
	2027 Mar 01 06:32	0°♒	
desc. node	2027 Mar 13 11:45	14°♒33'57	
	2027 Mar 26 08:17	0°♓	
	2027 Apr 20 03:57	0°♈	
	2027 May 14 21:02	0°♉	
	2027 Jun 08 12:33	0°♊	
	2027 Jul 03 02:02	0°♋	
asc. node	2027 Jul 04 15:03	1°♋53'22	
morning set	2027 Jul 06 15:14	4°♋20'58	
	2027 Jul 27 12:31	0°♌	
max. Earth dist.	2027 Aug 08 22:02	15°♌17'14	1.73164 AU
superior conj	2027 Aug 12 00:21	19°♌06'40	1°14'45
minimum elong	2027 Aug 11 16:55	18°♌43'42	1°14'35
	2027 Aug 20 19:43	0°♍	
	2027 Sep 14 00:25	0°♎	
evening rise	2027 Sep 17 10:27	4°♎14'36	
	2027 Oct 08 03:59	0°♏	
desc. node	2027 Oct 24 04:31	19°♏54'18	
	2027 Nov 01 07:35	0°♐	
	2027 Nov 25 11:59	0°♑	
	2027 Dec 19 18:40	0°♒	
	2028 Jan 13 07:20	0°♓	
	2028 Feb 07 10:01	0°♈	
asc. node	2028 Feb 14 07:46	8°♈02'22	
	2028 Mar 04 20:01	0°♉	
evening max el	2028 Mar 22 12:27	18°♉26'54	46°07'00
	2028 Apr 03 20:28	0°♊	
greatest brilliancy	2028 Apr 30 01:32	17°♊30'33	-4.8m
retrograde	2028 May 10 23:03	19°♊41'12	
evening set	2028 May 26 04:09	15°♊11'59	
inferior conj	2028 Jun 01 10:00	11°♊26'19	0°49'06
minimum elong	2028 Jun 01 11:48	11°♊23'30	0°48'34
min. Earth dist.	2028 Jun 01 09:49	11°♊26'38	0.28843 AU
desc. node	2028 Jun 04 20:59	9°♊17'28	
morning rise	2028 Jun 07 19:34	7°♊35'09	
direct	2028 Jun 22 22:13	3°♊10'47	
greatest brilliancy	2028 Jul 03 05:03	5°♊04'04	-4.7m
	2028 Aug 07 15:26	0°♋	
morning max el	2028 Aug 10 16:03	2°♋51'20	45°46'57
	2028 Sep 05 23:18	0°♌	
asc. node	2028 Sep 26 00:36	22°♌34'19	
	2028 Oct 02 10:08	0°♍	
	2028 Oct 27 13:52	0°♎	
	2028 Nov 21 00:58	0°♏	
	2028 Dec 15 03:39	0°♐	
	2029 Jan 08 02:47	0°♑	
desc. node	2029 Jan 15 13:58	9°♑21'44	
	2029 Feb 01 01:03	0°♒	
morning set	2029 Feb 11 11:32	13°♒04'38	
	2029 Feb 25 00:03	0°♓	
	2029 Mar 21 01:04	0°♈	
superior conj	2029 Mar 23 20:12	3°♈28'53	-1°22'19
minimum elong	2029 Mar 24 02:20	3°♈47'58	1°22'14
max. Earth dist.	2029 Mar 27 17:43	8°♈19'37	1.72292 AU
	2029 Apr 14 05:06	0°♉	
evening rise	2029 May 01 16:35	21°♉34'50	
asc. node	2029 May 08 17:24	0°♊14'15	
	2029 May 08 12:46	0°♊	
	2029 Jun 02 00:11	0°♋	
	2029 Jun 26 15:37	0°♌	
	2029 Jul 21 12:21	0°♍	
	2029 Aug 15 17:06	0°♎	
desc. node	2029 Aug 28 06:42	14°♎44'44	
	2029 Sep 10 10:54	0°♏	
	2029 Oct 07 04:47	0°♐	
evening max el	2029 Oct 27 10:52	21°♐12'55	47°01'08
	2029 Nov 05 13:39	0°♑	
greatest brilliancy	2029 Dec 06 23:38	22°♑06'57	-4.9m
retrograde	2029 Dec 16 23:48	24°♑01'42	
asc. node	2029 Dec 19 09:59	23°♑54'25	
evening set	2029 Dec 31 15:07	19°♑44'57	
min. Earth dist.	2030 Jan 05 22:29	16°♑38'33	0.26550 AU
inferior conj	2030 Jan 06 13:18	16°♑15'55	4°30'31
minimum elong	2030 Jan 06 04:12	16°♑29'48	4°27'57
morning rise	2030 Jan 11 17:36	13°♑11'57	
direct	2030 Jan 26 21:33	8°♑37'41	
greatest brilliancy	2030 Feb 05 09:21	10°♑20'34	-4.9m
	2030 Mar 06 12:51	0°♒	
morning max el	2030 Mar 17 23:55	10°♒51'53	46°36'30
	2030 Apr 05 09:19	0°♓	
desc. node	2030 Apr 09 23:29	4°♓59'31	
	2030 May 02 06:37	0°♈	
	2030 May 28 03:33	0°♉	
	2030 Jun 22 12:23	0°♊	
	2030 Jul 17 12:46	0°♋	

asc. node	2030 Aug 01 02:58	17°♋40'57	
	2030 Aug 11 05:24	0°♌	
	2030 Sep 04 14:50	0°♍	
morning set	2030 Sep 12 21:57	10°♍16'27	
	2030 Sep 28 18:34	0°♎	
max. Earth dist.	2030 Oct 17 20:00	23°♎48'36	1.71760 AU
superior conj	2030 Oct 20 11:12	27°♎06'24	1°05'28
minimum elong	2030 Oct 20 21:17	27°♎37'57	1°05'10
	2030 Oct 22 18:40	0°♏	
	2030 Nov 15 17:01	0°♐	
desc. node	2030 Nov 20 16:21	6°♐14'17	
evening rise	2030 Nov 29 11:26	17°♐16'28	
	2030 Dec 09 14:52	0°♑	
	2031 Jan 02 13:14	0°♒	
	2031 Jan 26 13:49	0°♓	
	2031 Feb 19 19:30	0°♈	
asc. node	2031 Mar 13 19:41	26°♈50'03	
	2031 Mar 16 10:42	0°♉	
	2031 Apr 10 18:01	0°♊	
	2031 May 07 06:06	0°♋	
evening max el	2031 Jun 02 03:34	26°♋47'28	45°24'11
	2031 Jun 05 12:57	0°♌	
desc. node	2031 Jul 03 09:03	21°♌22'49	
greatest brilliancy	2031 Jul 10 04:57	24°♌27'26	-4.7m
retrograde	2031 Jul 20 17:08	26°♌25'37	
evening set	2031 Aug 06 11:10	21°♌07'13	
inferior conj	2031 Aug 11 03:01	18°♌17'13	-7°31'36
minimum elong	2031 Aug 10 18:22	18°♌30'41	7°30'21
min. Earth dist.	2031 Aug 11 06:01	18°♌12'32	0.28893 AU
morning rise	2031 Aug 15 01:26	15°♌52'32	
direct	2031 Sep 01 17:57	10°♌01'11	
greatest brilliancy	2031 Sep 12 10:29	12°♌06'14	-4.8m
	2031 Oct 09 06:33	0°♍	
morning max el	2031 Oct 21 14:12	11°♍35'59	46°23'07
asc. node	2031 Oct 24 12:22	14°♍32'11	
	2031 Nov 08 02:59	0°♎	
	2031 Dec 04 09:09	0°♏	
	2031 Dec 29 09:17	0°♐	
	2032 Jan 22 20:56	0°♑	
desc. node	2032 Feb 13 01:53	26°♑11'40	
	2032 Feb 16 03:41	0°♒	
	2032 Mar 11 09:04	0°♓	
	2032 Apr 04 14:58	0°♈	
morning set	2032 Apr 26 01:56	26°♈29'20	
	2032 Apr 28 22:18	0°♉	
	2032 May 23 07:10	0°♊	
superior conj	2032 Jun 02 09:07	12°♊23'32	-0°06'47
minimum elong	2032 Jun 02 10:33	12°♊27'56	0°06'43
behind sun begin	2032 Jun 01 13:40	11°♊23'45	
behind sun end	2032 Jun 03 07:26	13°♊32'06	
max. Earth dist.	2032 Jun 03 01:28	13°♊13'45	1.73513 AU
asc. node	2032 Jun 05 05:19	15°♊53'03	
	2032 Jun 16 17:00	0°♋	
evening rise	2032 Jul 08 15:38	26°♋57'28	
	2032 Jul 11 03:04	0°♌	
	2032 Aug 04 13:20	0°♍	
	2032 Aug 29 00:40	0°♎	
	2032 Sep 22 14:23	0°♏	
desc. node	2032 Sep 24 18:36	2°♏38'50	
	2032 Oct 17 08:00	0°♐	
	2032 Nov 11 08:04	0°♑	
	2032 Dec 06 21:48	0°♒	
	2033 Jan 02 23:35	0°♓	
evening max el	2033 Jan 07 20:06	5°♓01'47	47°11'27
asc. node	2033 Jan 15 22:02	13°♓01'42	
	2033 Feb 05 05:27	0°♈	
greatest brilliancy	2033 Feb 17 04:53	6°♈28'07	-4.9m
retrograde	2033 Feb 27 15:41	8°♈31'52	
evening set	2033 Mar 17 12:49	2°♈19'17	
inferior conj	2033 Mar 20 16:05	0°♈21'38	8°30'58
minimum elong	2033 Mar 20 21:01	0°♈13'51	8°30'36
min. Earth dist.	2033 Mar 20 06:02	0°♈37'30	0.28011 AU
	2033 Mar 21 05:49	30°℞♓	
morning rise	2033 Mar 24 05:29	28°♓09'17	
direct	2033 Apr 10 15:27	22°♓21'03	
greatest brilliancy	2033 Apr 19 21:18	23°♓56'23	-4.8m
	2033 May 02 03:13	0°♈	
desc. node	2033 May 07 11:11	3°♈38'19	
morning max el	2033 May 29 17:32	22°♈47'59	45°53'53
	2033 Jun 06 01:09	0°♉	
	2033 Jul 04 06:37	0°♊	
	2033 Jul 30 17:00	0°♋	
	2033 Aug 25 04:29	0°♌	
asc. node	2033 Aug 28 14:47	4°♌06'15	
	2033 Sep 19 00:09	0°♍	
	2033 Oct 13 08:32	0°♎	
	2033 Nov 06 09:45	0°♏	
greatest brilliancy	2033 Nov 22 18:54	20°♏33'07	-3.9m
morning set	2033 Nov 23 21:41	21°♏57'15	
	2033 Nov 30 07:17	0°♐	
desc. node	2033 Dec 18 04:11	22°♐28'58	
	2033 Dec 24 03:31	0°♑	
superior conj	2034 Jan 04 02:10	13°♑46'23	-0°39'06
minimum elong	2034 Jan 03 16:36	13°♑16'17	0°38'39
max. Earth dist.	2034 Jan 05 08:27	15°♑21'36	1.71083 AU
	2034 Jan 16 23:49	0°♒	
	2034 Feb 09 21:23	0°♓	
evening rise	2034 Feb 14 09:36	5°♓38'45	
	2034 Mar 05 21:51	0°♈	
	2034 Mar 30 03:12	0°♉	
asc. node	2034 Apr 10 07:36	13°♉44'05	
	2034 Apr 23 15:30	0°♊	
	2034 May 18 13:05	0°♋	
	2034 Jun 12 23:49	0°♌	
	2034 Jul 09 08:34	0°♍	
desc. node	2034 Jul 30 20:52	23°♍06'28	
	2034 Aug 06 15:55	0°♎	
evening max el	2034 Aug 12 19:00	5°♎59'32	45°51'21
	2034 Sep 11 16:18	0°♏	
greatest brilliancy	2034 Sep 21 19:46	4°♏38'37	-4.8m
retrograde	2034 Sep 30 19:37	6°♏07'43	
evening set	2034 Oct 17 10:05	0°♏56'15	
	2034 Oct 19 00:40	30°℞♎	
inferior conj	2034 Oct 21 17:04	28°♎22'30	-6°45'34
minimum elong	2034 Oct 22 03:27	28°♎06'36	6°43'29
min. Earth dist.	2034 Oct 22 15:50	27°♎47'40	0.27350 AU
morning rise	2034 Oct 26 20:15	25°♎18'41	
direct	2034 Nov 11 14:02	20°♎27'53	
asc. node	2034 Nov 21 00:09	22°♎08'45	
greatest brilliancy	2034 Nov 22 18:05	22°♎47'37	-4.9m
	2034 Dec 05 12:04	0°♏	
morning max el	2035 Jan 01 07:27	23°♏50'05	46°56'45
	2035 Jan 07 06:00	0°♐	
	2035 Feb 03 06:29	0°♑	
	2035 Feb 28 20:23	0°♒	
desc. node	2035 Mar 12 13:40	14°♒00'07	
	2035 Mar 25 20:56	0°♓	
	2035 Apr 19 15:52	0°♈	
	2035 May 14 08:26	0°♉	
	2035 Jun 07 23:37	0°♊	
	2035 Jul 02 12:53	0°♋	

asc. node	2035 Jul 03	17:11	1°♋26'39	
morning set	2035 Jul 04	09:30	2°♋16'36	
	2035 Jul 26	23:18	0°♌	
max. Earth dist.	2035 Aug 06	19:10	13°♌20'56	1.73207 AU
superior conj	2035 Aug 09	18:40	17°♌01'39	1°13'13
minimum elong	2035 Aug 09	10:54	16°♌37'41	1°13'01
	2035 Aug 20	06:33	0°♍	
	2035 Sep 13	11:24	0°♎	
evening rise	2035 Sep 15	02:55	2°♎02'36	
	2035 Oct 07	15:13	0°♏	
desc. node	2035 Oct 23	06:31	19°♏25'06	
	2035 Oct 31	19:06	0°♐	
	2035 Nov 24	23:51	0°♑	
	2035 Dec 19	07:00	0°♒	
	2036 Jan 12	20:24	0°♓	
	2036 Feb 07	00:26	0°♈	
asc. node	2036 Feb 13	09:44	7°♈24'53	
	2036 Mar 04	13:34	0°♉	
evening max el	2036 Mar 20	03:25	16°♉11'03	46°09'29
	2036 Apr 04	01:54	0°♊	
greatest brilliancy	2036 Apr 27	17:57	15°♊20'15	-4.8m
retrograde	2036 May 08	15:58	17°♊31'42	
evening set	2036 May 23	21:47	13°♊00'22	
inferior conj	2036 May 30	02:25	9°♊16'35	1°08'57
minimum elong	2036 May 30	04:56	9°♊12'38	1°08'13
min. Earth dist.	2036 May 30	02:19	9°♊16'44	0.28826 AU
desc. node	2036 Jun 03	23:07	6°♊17'53	
morning rise	2036 Jun 05	12:13	5°♊25'22	
direct	2036 Jun 20	14:12	1°♊01'07	
greatest brilliancy	2036 Jun 30	21:02	2°♊54'47	-4.7m
	2036 Aug 07	14:37	0°♋	
morning max el	2036 Aug 08	08:37	0°♋42'50	45°46'23
	2036 Sep 05	15:12	0°♌	
asc. node	2036 Sep 25	02:39	21°♌59'56	
	2036 Oct 01	23:39	0°♍	
	2036 Oct 27	02:21	0°♎	
	2036 Nov 20	12:57	0°♏	
	2036 Dec 14	15:21	0°♐	
	2037 Jan 07	14:16	0°♑	
desc. node	2037 Jan 14	16:04	8°♑52'25	
	2037 Jan 31	12:23	0°♒	
morning set	2037 Feb 08	21:37	10°♒30'32	
	2037 Feb 24	11:15	0°♓	
	2037 Mar 20	12:10	0°♈	
superior conj	2037 Mar 21	09:16	1°♈05'39	-1°23'20
minimum elong	2037 Mar 21	14:38	1°♈22'21	1°23'16
max. Earth dist.	2037 Mar 25	06:07	5°♈54'30	1.72238 AU
	2037 Apr 13	16:10	0°♉	
evening rise	2037 Apr 29	08:12	19°♉21'03	
asc. node	2037 May 07	19:32	29°♉46'45	
	2037 May 07	23:51	0°♊	
	2037 Jun 01	11:23	0°♋	
	2037 Jun 26	03:06	0°♌	
	2037 Jul 21	00:23	0°♍	
	2037 Aug 15	06:06	0°♎	
desc. node	2037 Aug 27	08:39	14°♎10'37	
	2037 Sep 10	01:38	0°♏	
	2037 Oct 06	23:03	0°♐	
evening max el	2037 Oct 25	01:24	18°♐50'50	46°59'07
	2037 Nov 05	18:58	0°♑	
greatest brilliancy	2037 Dec 04	12:07	19°♑36'35	-4.9m
retrograde	2037 Dec 14	12:47	21°♑31'16	
asc. node	2037 Dec 18	12:10	21°♑11'37	
evening set	2037 Dec 29	01:26	17°♑17'39	
min. Earth dist.	2038 Jan 03	11:23	14°♑07'33	0.26523 AU
inferior conj	2038 Jan 04	01:27	13°♑46'05	4°08'59
minimum elong	2038 Jan 03	16:54	13°♑59'09	4°06'30
morning rise	2038 Jan 09	08:43	10°♑38'26	
direct	2038 Jan 24	10:20	6°♑08'23	
greatest brilliancy	2038 Feb 02	22:12	7°♑51'50	-4.9m
	2038 Mar 06	17:53	0°♒	
morning max el	2038 Mar 15	13:50	8°♒29'03	46°37'56
	2038 Apr 05	03:23	0°♓	
desc. node	2038 Apr 09	01:35	4°♓17'45	
	2038 May 01	21:17	0°♈	
	2038 May 27	16:34	0°♉	
	2038 Jun 22	00:29	0°♊	
	2038 Jul 17	00:17	0°♋	
asc. node	2038 Jul 31	04:57	17°♋12'35	
	2038 Aug 10	16:34	0°♌	
	2038 Sep 04	01:51	0°♍	
morning set	2038 Sep 10	14:41	8°♍05'31	
	2038 Sep 28	05:33	0°♎	
max. Earth dist.	2038 Oct 15	07:23	21°♎19'35	1.71809 AU
superior conj	2038 Oct 18	01:41	24°♎46'56	1°07'41
minimum elong	2038 Oct 18	11:31	25°♎17'42	1°07'23
	2038 Oct 22	05:43	0°♏	
	2038 Nov 15	04:12	0°♐	
desc. node	2038 Nov 19	18:31	5°♐45'52	
evening rise	2038 Nov 26	22:43	14°♐45'54	
	2038 Dec 09	02:12	0°♑	
	2039 Jan 02	00:46	0°♒	
	2039 Jan 26	01:32	0°♓	
	2039 Feb 19	07:32	0°♈	
asc. node	2039 Mar 12	21:41	26°♈18'25	
	2039 Mar 15	23:17	0°♉	
	2039 Apr 10	07:45	0°♊	
	2039 May 06	22:26	0°♋	
evening max el	2039 May 30	19:33	24°♋36'33	45°24'34
	2039 Jun 05	13:35	0°♌	
desc. node	2039 Jul 02	11:08	19°♌56'55	
greatest brilliancy	2039 Jul 07	20:09	22°♌16'41	-4.7m
retrograde	2039 Jul 18	08:36	24°♌15'04	
evening set	2039 Aug 03	23:58	19°♌01'24	
inferior conj	2039 Aug 08	19:02	16°♌06'26	-7°21'20
minimum elong	2039 Aug 08	10:03	16°♌20'27	7°19'57
min. Earth dist.	2039 Aug 08	21:24	16°♌02'45	0.28909 AU
morning rise	2039 Aug 12	20:00	13°♌37'41	
direct	2039 Aug 30	10:14	7°♌50'23	
greatest brilliancy	2039 Sep 10	01:44	9°♌53'59	-4.8m
	2039 Oct 09	10:10	0°♍	
morning max el	2039 Oct 19	04:21	9°♍17'23	46°21'31
asc. node	2039 Oct 23	14:27	13°♍44'49	
	2039 Nov 07	20:13	0°♎	
	2039 Dec 03	23:27	0°♏	
	2039 Dec 28	22:19	0°♐	
	2040 Jan 22	09:17	0°♑	
desc. node	2040 Feb 12	03:49	25°♑40'38	
	2040 Feb 15	15:35	0°♒	
	2040 Mar 10	20:39	0°♓	
	2040 Apr 04	02:16	0°♈	
morning set	2040 Apr 23	17:40	24°♈15'43	
	2040 Apr 28	09:22	0°♉	
	2040 May 22	18:06	0°♊	
superior conj	2040 May 31	02:25	10°♊15'40	-0°10'01
minimum elong	2040 May 31	04:31	10°♊22'09	0°09'54
behind sun begin	2040 May 30	10:27	9°♊26'36	
behind sun end	2040 May 31	22:36	11°♊17'41	
max. Earth dist.	2040 May 31	22:44	11°♊18'08	1.73490 AU
asc. node	2040 Jun 04	07:23	15°♊25'55	

	2040 Jun 16	03:53	0°♋		
evening rise	2040 Jul 06	10:23	24°♋53'57		
	2040 Jul 10	14:02	0°♌		
	2040 Aug 04	00:30	0°♍		
	2040 Aug 28	12:09	0°♎		
	2040 Sep 22	02:21	0°♏		
desc. node	2040 Sep 23	20:42	2°♏08'42		
	2040 Oct 16	20:40	0°♐		
	2040 Nov 10	21:53	0°♑		
	2040 Dec 06	13:43	0°♒		
	2041 Jan 02	20:37	0°♓		
evening max el	2041 Jan 05	09:58	2°♓37'50	47°12'23	
asc. node	2041 Jan 14	23:55	12°♓03'44		
	2041 Feb 06	11:59	0°♈		
greatest brilliancy	2041 Feb 14	20:54	4°♈09'09	-4.9m	
retrograde	2041 Feb 25	06:07	6°♈11'48		
evening set	2041 Mar 15	05:05	29°♓57'36		
	2041 Mar 15	03:31	30°℞♓		
inferior conj	2041 Mar 18	06:47	28°♓02'22	8°36'21	
minimum elong	2041 Mar 18	10:58	27°♓55'46	8°36'05	
min. Earth dist.	2041 Mar 17	20:17	28°♓18'56	0.27967 AU	
morning rise	2041 Mar 21	17:04	25°♓54'33		
direct	2041 Apr 08	05:08	20°♓02'36		
greatest brilliancy	2041 Apr 17	11:04	21°♓37'40	-4.8m	
	2041 May 03	04:08	0°♈		
desc. node	2041 May 06	13:18	2°♈27'05		
morning max el	2041 May 27	07:03	20°♈29'32	45°55'01	
	2041 Jun 05	21:16	0°♉		
	2041 Jul 03	21:43	0°♊		
	2041 Jul 30	06:04	0°♋		
	2041 Aug 24	16:33	0°♌		
asc. node	2041 Aug 27	16:46	3°♌36'17		
	2041 Sep 18	11:41	0°♍		
	2041 Oct 12	19:46	0°♎		
	2041 Nov 05	20:51	0°♏		
morning set	2041 Nov 21	10:02	19°♏30'30		
	2041 Nov 29	18:20	0°♐		
desc. node	2041 Dec 17	06:16	22°♐00'45		
	2041 Dec 23	14:33	0°♑		
superior conj	2042 Jan 01	12:17	11°♑12'30	-0°35'29	
minimum elong	2042 Jan 01	03:25	10°♑44'37	0°35'05	
max. Earth dist.	2042 Jan 02	11:37	12°♑25'56	1.71077 AU	
	2042 Jan 16	10:51	0°♒		
	2042 Feb 09	08:27	0°♓		
evening rise	2042 Feb 11	20:25	3°♓07'43		
	2042 Mar 05	08:59	0°♈		
	2042 Mar 29	14:29	0°♉		
asc. node	2042 Apr 09	09:42	13°♉15'43		
	2042 Apr 23	03:05	0°♊		
	2042 May 18	01:14	0°♋		
	2042 Jun 12	13:03	0°♌		
	2042 Jul 09	00:03	0°♍		
desc. node	2042 Jul 29	22:49	22°♍21'55		
	2042 Aug 06	13:20	0°♎		
evening max el	2042 Aug 10	07:51	3°♎39'25	45°49'25	
	2042 Sep 13	15:31	0°♏		
greatest brilliancy	2042 Sep 19	08:16	2°♏17'05	-4.8m	
retrograde	2042 Sep 28	08:41	3°♏46'49		
	2042 Oct 12	08:15	30°℞♎		
evening set	2042 Oct 15	02:28	28°♎29'55		
inferior conj	2042 Oct 19	06:29	26°♎00'32	-6°59'35	
minimum elong	2042 Oct 19	16:43	25°♎44'54	6°57'37	
min. Earth dist.	2042 Oct 20	05:33	25°♎25'18	0.27419 AU	
morning rise	2042 Oct 24	06:25	23°♎01'30		
direct	2042 Nov 09	04:04	18°♎04'37		
asc. node	2042 Nov 20	02:15	20°♎18'49		
greatest brilliancy	2042 Nov 20	09:05	20°♎25'33	-4.9m	
	2042 Dec 06	08:11	0°♏		
morning max el	2042 Dec 29	22:02	21°♏27'39	46°56'34	
	2043 Jan 07	02:12	0°♐		
	2043 Feb 02	22:00	0°♑		
	2043 Feb 28	09:54	0°♒		
desc. node	2043 Mar 11	15:47	13°♒27'36		
	2043 Mar 25	09:22	0°♓		
	2043 Apr 19	03:37	0°♈		
	2043 May 13	19:45	0°♉		
	2043 Jun 07	10:38	0°♊		
	2043 Jul 01	23:42	0°♋		
morning set	2043 Jul 02	03:25	0°♋11'22		
asc. node	2043 Jul 02	19:10	0°♋59'37		
	2043 Jul 26	10:00	0°♌		
max. Earth dist.	2043 Aug 04	17:08	11°♌27'34	1.73242 AU	
superior conj	2043 Aug 07	12:40	14°♌55'59	1°11'33	
minimum elong	2043 Aug 07	04:36	14°♌31'05	1°11'20	
	2043 Aug 19	17:16	0°♍		
evening rise	2043 Sep 12	19:20	29°♍50'56		
	2043 Sep 12	22:15	0°♎		
	2043 Oct 07	02:18	0°♏		
desc. node	2043 Oct 22	08:40	18°♏56'51		
	2043 Oct 31	06:28	0°♐		
	2043 Nov 24	11:34	0°♑		
	2043 Dec 18	19:09	0°♒		
	2044 Jan 12	09:16	0°♓		
	2044 Feb 06	14:41	0°♈		
asc. node	2044 Feb 12	11:47	6°♈48'22		
	2044 Mar 04	07:08	0°♉		
evening max el	2044 Mar 17	19:06	13°♉57'55	46°11'51	
	2044 Apr 04	09:09	0°♊		
greatest brilliancy	2044 Apr 25	10:00	13°♊10'11	-4.8m	
retrograde	2044 May 06	09:01	15°♊22'27		
evening set	2044 May 21	15:29	10°♊48'58		
inferior conj	2044 May 27	18:42	7°♊06'59	1°28'50	
minimum elong	2044 May 27	21:56	7°♊01'55	1°27'53	
min. Earth dist.	2044 May 27	18:26	7°♊07'24	0.28814 AU	
morning rise	2044 Jun 03	04:37	3°♊16'00		
desc. node	2044 Jun 03	01:09	3°♊20'46		
	2044 Jun 10	17:15	30°℞♉		
direct	2044 Jun 18	06:37	28°♉51'44		
	2044 Jun 26	03:21	0°♊		
greatest brilliancy	2044 Jun 28	12:28	0°♊45'08	-4.7m	
morning max el	2044 Aug 06	01:26	28°♊35'24	45°45'47	
	2044 Aug 07	12:42	0°♋		
	2044 Sep 05	06:40	0°♌		
asc. node	2044 Sep 24	04:49	21°♌26'40		
	2044 Oct 01	12:51	0°♍		
	2044 Oct 26	14:31	0°♎		
	2044 Nov 20	00:36	0°♏		
	2044 Dec 14	02:42	0°♐		
	2045 Jan 07	01:26	0°♑		
desc. node	2045 Jan 13	17:59	8°♑23'33		
	2045 Jan 30	23:23	0°♒		
morning set	2045 Feb 06	07:51	7°♒57'51		
	2045 Feb 23	22:07	0°♓		
superior conj	2045 Mar 18	22:23	28°♓43'35	-1°24'11	
minimum elong	2045 Mar 19	02:57	28°♓57'46	1°24'09	
	2045 Mar 19	22:56	0°♈		
max. Earth dist.	2045 Mar 22	21:02	3°♈38'12	1.72183 AU	
	2045 Apr 13	02:52	0°♉		
evening rise	2045 Apr 26	23:51	17°♉08'27		
asc. node	2045 May 06	21:36	29°♉20'09		
	2045 May 07	10:34	0°♊		

	2045 May 31 22:15	0°♋	
	2045 Jun 25 14:20	0°♌	
	2045 Jul 20 12:13	0°♍	
	2045 Aug 14 18:57	0°♎	
desc. node	2045 Aug 26 10:45	13°♎37'27	
	2045 Sep 09 16:15	0°♏	
	2045 Oct 06 17:25	0°♐	
evening max el	2045 Oct 22 15:56	16°♐29'49	46°57'09
	2045 Nov 06 01:57	0°♑	
greatest brilliancy	2045 Dec 02 00:59	17°♑07'57	-4.9m
retrograde	2045 Dec 12 01:29	19°♑01'46	
asc. node	2045 Dec 17 14:06	18°♑23'51	
evening set	2045 Dec 26 12:01	14°♑51'16	
min. Earth dist.	2046 Jan 01 00:31	11°♑37'23	0.26496 AU
inferior conj	2046 Jan 01 13:36	11°♑17'24	3°46'54
minimum elong	2046 Jan 01 05:38	11°♑29'34	3°44'33
morning rise	2046 Jan 06 23:38	8°♑06'01	
direct	2046 Jan 21 22:57	3°♑40'18	
greatest brilliancy	2046 Jan 31 11:15	5°♑24'11	-4.9m
	2046 Mar 06 20:42	0°♒	
morning max el	2046 Mar 13 02:52	6°♒05'04	46°39'23
	2046 Apr 04 20:37	0°♓	
desc. node	2046 Apr 08 03:39	3°♓37'37	
	2046 May 01 11:21	0°♈	
	2046 May 27 05:04	0°♉	
	2046 Jun 21 12:05	0°♊	
	2046 Jul 16 11:22	0°♋	
asc. node	2046 Jul 30 06:58	16°♋45'27	
	2046 Aug 10 03:24	0°♌	
	2046 Sep 03 12:34	0°♍	
morning set	2046 Sep 08 07:10	5°♍54'42	
	2046 Sep 27 16:16	0°♎	
max. Earth dist.	2046 Oct 12 17:11	18°♎46'39	1.71857 AU
superior conj	2046 Oct 15 16:02	22°♎28'08	1°09'47
minimum elong	2046 Oct 16 01:32	22°♎57'52	1°09'30
	2046 Oct 21 16:29	0°♏	
	2046 Nov 14 15:03	0°♐	
desc. node	2046 Nov 18 20:30	5°♐18'01	
evening rise	2046 Nov 24 09:51	12°♐16'02	
	2046 Dec 08 13:11	0°♑	
	2047 Jan 01 11:55	0°♒	
	2047 Jan 25 12:54	0°♓	
	2047 Feb 18 19:12	0°♈	
asc. node	2047 Mar 11 23:49	25°♈48'12	
	2047 Mar 15 11:32	0°♉	
	2047 Apr 09 21:10	0°♊	
	2047 May 06 14:34	0°♋	
evening max el	2047 May 28 10:37	22°♋24'40	45°25'00
	2047 Jun 05 14:56	0°♌	
desc. node	2047 Jul 01 13:02	18°♌29'06	
greatest brilliancy	2047 Jul 05 11:28	20°♌07'14	-4.7m
retrograde	2047 Jul 15 23:46	22°♌05'52	
evening set	2047 Aug 01 12:45	16°♌56'37	
inferior conj	2047 Aug 06 11:04	13°♌56'54	-7°10'19
minimum elong	2047 Aug 06 01:47	14°♌11'24	7°08'49
min. Earth dist.	2047 Aug 06 13:05	13°♌53'45	0.28930 AU
morning rise	2047 Aug 10 14:39	11°♌24'00	
direct	2047 Aug 28 02:07	5°♌40'33	
greatest brilliancy	2047 Sep 07 17:41	7°♌43'32	-4.8m
	2047 Oct 09 11:56	0°♍	
morning max el	2047 Oct 16 18:07	6°♍58'33	46°19'55
asc. node	2047 Oct 22 16:30	12°♍58'40	
	2047 Nov 07 12:53	0°♎	
	2047 Dec 03 13:23	0°♏	
	2047 Dec 28 10:59	0°♐	
	2048 Jan 21 21:15	0°♑	

desc. node	2048 Feb 11 05:58	25°♑11'22	
	2048 Feb 15 03:06	0°♒	
	2048 Mar 10 07:50	0°♓	
	2048 Apr 03 13:11	0°♈	
morning set	2048 Apr 21 09:21	22°♈02'48	
	2048 Apr 27 20:05	0°♉	
	2048 May 22 04:42	0°♊	
superior conj	2048 May 28 19:51	8°♊09'16	-0°13'13
minimum elong	2048 May 28 22:38	8°♊17'49	0°13'05
behind sun begin	2048 May 28 09:31	7°♊37'29	
behind sun end	2048 May 29 11:45	8°♊58'09	
max. Earth dist.	2048 May 29 18:19	9°♊18'17	1.73464 AU
asc. node	2048 Jun 03 09:22	14°♊59'31	
	2048 Jun 15 14:27	0°♋	
evening rise	2048 Jul 04 05:20	22°♋52'09	
	2048 Jul 10 00:41	0°♌	
	2048 Aug 03 11:21	0°♍	
	2048 Aug 27 23:21	0°♎	
	2048 Sep 21 14:07	0°♏	
desc. node	2048 Sep 22 22:48	1°♏39'13	
	2048 Oct 16 09:15	0°♐	
	2048 Nov 10 11:41	0°♑	
	2048 Dec 06 05:43	0°♒	
	2049 Jan 02 18:10	0°♓	
evening max el	2049 Jan 02 23:07	0°♓12'39	47°13'34
asc. node	2049 Jan 14 02:01	11°♓05'38	
	2049 Feb 08 08:10	0°♈	
greatest brilliancy	2049 Feb 12 12:43	1°♈50'34	-4.9m
retrograde	2049 Feb 22 20:43	3°♈52'43	
	2049 Mar 08 17:48	30°℞♓	
evening set	2049 Mar 12 21:01	27°♓37'06	
inferior conj	2049 Mar 15 21:30	25°♓43'55	8°40'51
minimum elong	2049 Mar 16 00:54	25°♓38'34	8°40'41
min. Earth dist.	2049 Mar 15 10:29	26°♓01'16	0.27920 AU
morning rise	2049 Mar 19 04:57	23°♓40'26	
direct	2049 Apr 05 18:37	17°♓44'46	
greatest brilliancy	2049 Apr 15 01:01	19°♓20'02	-4.8m
	2049 May 03 22:03	0°♈	
desc. node	2049 May 05 15:21	1°♈18'34	
morning max el	2049 May 24 21:11	18°♈13'17	45°56'14
	2049 Jun 05 16:28	0°♉	
	2049 Jul 03 12:20	0°♊	
	2049 Jul 29 18:47	0°♋	
	2049 Aug 24 04:19	0°♌	
asc. node	2049 Aug 26 18:58	3°♌07'50	
	2049 Sep 17 22:56	0°♍	
	2049 Oct 12 06:48	0°♎	
	2049 Nov 05 07:48	0°♏	
morning set	2049 Nov 18 22:17	17°♏03'46	
	2049 Nov 29 05:18	0°♐	
desc. node	2049 Dec 16 08:15	21°♐32'30	
	2049 Dec 23 01:32	0°♑	
superior conj	2049 Dec 29 21:53	8°♑37'14	-0°31'46
minimum elong	2049 Dec 29 13:49	8°♑11'49	0°31'24
max. Earth dist.	2049 Dec 30 15:31	9°♑32'43	1.71073 AU
	2050 Jan 15 21:49	0°♒	
	2050 Feb 08 19:24	0°♓	
evening rise	2050 Feb 09 06:47	0°♓35'38	
	2050 Mar 04 19:59	0°♈	
	2050 Mar 29 01:38	0°♉	
asc. node	2050 Apr 08 11:45	12°♉47'35	
	2050 Apr 22 14:33	0°♊	
	2050 May 17 13:16	0°♋	
	2050 Jun 12 02:12	0°♌	
	2050 Jul 08 15:34	0°♍	

desc. node	2050 Jul 29 01:00	21°♍37'54	
	2050 Aug 06 11:20	0°♎	
evening max el	2050 Aug 07 21:42	1°♎22'36	45°47'35
greatest brilliancy	2050 Sep 16 20:14	29°♎56'10	-4.8m
	2050 Sep 17 01:04	0°♏	
retrograde	2050 Sep 25 22:20	1°♏26'57	
	2050 Oct 04 11:00	30°℞♎	
evening set	2050 Oct 12 18:55	26°♎04'48	
inferior conj	2050 Oct 16 20:02	23°♎39'31	-7°12'33
minimum elong	2050 Oct 17 06:01	23°♎24'15	7°10'45
min. Earth dist.	2050 Oct 17 18:56	23°♎04'33	0.27492 AU
morning rise	2050 Oct 21 16:38	20°♎45'21	
direct	2050 Nov 06 18:44	15°♎42'27	
greatest brilliancy	2050 Nov 17 23:33	18°♎03'34	-4.9m
asc. node	2050 Nov 19 04:14	18°♎33'30	
	2050 Dec 06 23:02	0°♏	
morning max el	2050 Dec 27 13:23	19°♏07'17	46°56'03
	2051 Jan 06 21:51	0°♐	
	2051 Feb 02 13:23	0°♑	
	2051 Feb 27 23:24	0°♒	
desc. node	2051 Mar 10 17:54	12°♒54'56	
	2051 Mar 24 21:48	0°♓	
	2051 Apr 18 15:21	0°♈	
	2051 May 13 07:01	0°♉	
	2051 Jun 06 21:35	0°♊	
morning set	2051 Jun 29 21:29	28°♊06'46	
	2051 Jul 01 10:28	0°♋	
asc. node	2051 Jul 01 21:12	0°♋32'55	
	2051 Jul 25 20:41	0°♌	
max. Earth dist.	2051 Aug 02 14:54	9°♌33'41	1.73274 AU
superior conj	2051 Aug 05 06:57	12°♌51'16	1°09'48
minimum elong	2051 Aug 04 22:39	12°♌25'39	1°09'34
	2051 Aug 19 03:58	0°♍	
evening rise	2051 Sep 10 12:12	27°♍40'45	
	2051 Sep 12 09:06	0°♎	
	2051 Oct 06 13:22	0°♏	
desc. node	2051 Oct 21 10:40	18°♏28'14	
	2051 Oct 30 17:50	0°♐	
	2051 Nov 23 23:18	0°♑	
	2051 Dec 18 07:25	0°♒	
	2052 Jan 11 22:21	0°♓	
	2052 Feb 06 05:18	0°♈	
asc. node	2052 Feb 11 13:55	6°♈11'07	
	2052 Mar 04 01:22	0°♉	
evening max el	2052 Mar 15 11:26	11°♉45'36	46°14'21
	2052 Apr 04 19:29	0°♊	
greatest brilliancy	2052 Apr 23 02:36	11°♊00'15	-4.8m
retrograde	2052 May 04 02:07	13°♊12'30	
evening set	2052 May 19 09:24	8°♊37'06	
inferior conj	2052 May 25 11:00	4°♊56'56	1°48'31
minimum elong	2052 May 25 14:56	4°♊50'47	1°47'22
min. Earth dist.	2052 May 25 10:26	4°♊57'49	0.28794 AU
morning rise	2052 May 31 20:49	1°♊06'17	
desc. node	2052 Jun 02 03:08	0°♊26'02	
	2052 Jun 02 23:53	30°℞♉	
direct	2052 Jun 15 23:10	26°♉42'09	
greatest brilliancy	2052 Jun 26 03:16	28°♉34'24	-4.7m
	2052 Jun 29 16:38	0°♊	
morning max el	2052 Aug 03 17:58	26°♊27'03	45°45'12
	2052 Aug 07 10:03	0°♋	
	2052 Sep 04 21:59	0°♌	
asc. node	2052 Sep 23 06:45	20°♌52'42	
	2052 Oct 01 02:02	0°♍	
	2052 Oct 26 02:44	0°♎	
	2052 Nov 19 12:19	0°♏	
	2052 Dec 13 14:08	0°♐	
	2053 Jan 06 12:42	0°♑	
desc. node	2053 Jan 12 20:09	7°♑55'03	
	2053 Jan 30 10:32	0°♒	
morning set	2053 Feb 03 18:00	5°♒24'21	
	2053 Feb 23 09:12	0°♓	
superior conj	2053 Mar 16 11:05	26°♓19'17	-1°24'54
minimum elong	2053 Mar 16 14:47	26°♓30'49	1°24'53
	2053 Mar 19 09:56	0°♈	
max. Earth dist.	2053 Mar 20 12:10	1°♈21'40	1.72129 AU
	2053 Apr 12 13:50	0°♉	
evening rise	2053 Apr 24 14:58	14°♉53'15	
asc. node	2053 May 05 23:33	28°♉52'24	
	2053 May 06 21:33	0°♊	
	2053 May 31 09:23	0°♋	
	2053 Jun 25 01:48	0°♌	
	2053 Jul 20 00:18	0°♍	
	2053 Aug 14 08:06	0°♎	
desc. node	2053 Aug 25 12:51	13°♎03'27	
	2053 Sep 09 07:17	0°♏	
	2053 Oct 06 12:27	0°♐	
evening max el	2053 Oct 20 06:09	14°♐07'41	46°55'06
	2053 Nov 06 11:38	0°♑	
greatest brilliancy	2053 Nov 29 14:39	14°♑40'18	-4.9m
retrograde	2053 Dec 09 13:52	16°♑32'30	
asc. node	2053 Dec 16 16:09	15°♑30'20	
evening set	2053 Dec 23 23:07	12°♑24'51	
min. Earth dist.	2053 Dec 29 14:15	9°♑07'08	0.26472 AU
inferior conj	2053 Dec 30 02:00	8°♑49'09	3°24'35
minimum elong	2053 Dec 29 18:41	9°♑00'20	3°22'22
morning rise	2054 Jan 04 14:37	5°♑34'02	
direct	2054 Jan 19 11:20	1°♑12'29	
greatest brilliancy	2054 Jan 29 01:01	2°♑57'13	-4.9m
	2054 Mar 06 22:17	0°♒	
morning max el	2054 Mar 10 15:13	3°♒38'33	46°40'38
	2054 Apr 04 13:47	0°♓	
desc. node	2054 Apr 07 05:40	2°♓56'53	
	2054 May 01 01:36	0°♈	
	2054 May 26 17:51	0°♉	
	2054 Jun 21 00:00	0°♊	
	2054 Jul 15 22:46	0°♋	
asc. node	2054 Jul 29 09:08	16°♋17'54	
	2054 Aug 09 14:29	0°♌	
	2054 Sep 02 23:33	0°♍	
morning set	2054 Sep 05 23:46	3°♍43'30	
	2054 Sep 27 03:14	0°♎	
max. Earth dist.	2054 Oct 10 04:16	16°♎16'57	1.71908 AU
superior conj	2054 Oct 13 06:45	20°♎09'41	1°11'43
minimum elong	2054 Oct 13 15:53	20°♎38'14	1°11'29
	2054 Oct 21 03:31	0°♏	
	2054 Nov 14 02:12	0°♐	
desc. node	2054 Nov 17 22:32	4°♐49'20	
evening rise	2054 Nov 21 21:24	9°♐46'41	
	2054 Dec 08 00:28	0°♑	
	2054 Dec 31 23:21	0°♒	
	2055 Jan 25 00:32	0°♓	
	2055 Feb 18 07:10	0°♈	
asc. node	2055 Mar 11 01:49	25°♈16'42	
	2055 Mar 15 00:08	0°♉	
	2055 Apr 09 11:03	0°♊	
	2055 May 06 07:27	0°♋	
evening max el	2055 May 26 01:23	20°♋10'51	45°25'31
	2055 Jun 05 18:19	0°♌	
desc. node	2055 Jun 30 15:14	16°♌57'30	
greatest brilliancy	2055 Jul 03 02:42	17°♌56'35	-4.7m
retrograde	2055 Jul 13 15:18	19°♌56'03	

evening set	2055 Jul 30	01:41	14°♌50'48	
inferior conj	2055 Aug 04	03:14	11°♌46'39	-6°58'45
minimum elong	2055 Aug 03	17:41	12°♌01'33	6°57'07
min. Earth dist.	2055 Aug 04	04:58	11°♌43'56	0.28947 AU
morning rise	2055 Aug 08	09:28	9°♌09'44	
direct	2055 Aug 25	17:51	3°♌29'56	
greatest brilliancy	2055 Sep 05	10:06	5°♌33'00	-4.8m
	2055 Oct 09	12:44	0°♍	
morning max el	2055 Oct 14	08:27	4°♍40'28	46°18'21
asc. node	2055 Oct 21	18:33	12°♍12'22	
	2055 Nov 07	05:31	0°♎	
	2055 Dec 03	03:28	0°♏	
	2055 Dec 27	23:53	0°♐	
	2056 Jan 21	09:29	0°♑	
desc. node	2056 Feb 10	08:02	24°♑41'03	
	2056 Feb 14	14:54	0°♒	
	2056 Mar 09	19:17	0°♓	
	2056 Apr 03	00:22	0°♈	
morning set	2056 Apr 19	01:05	19°♈49'04	
	2056 Apr 27	07:05	0°♉	
	2056 May 21	15:36	0°♊	
superior conj	2056 May 26	13:19	6°♊01'55	-0°16'24
minimum elong	2056 May 26	16:46	6°♊12'31	0°16'15
max. Earth dist.	2056 May 27	12:49	7°♊14'10	1.73443 AU
asc. node	2056 Jun 02	11:29	14°♊32'34	
	2056 Jun 15	01:22	0°♋	
evening rise	2056 Jul 02	00:14	20°♋49'12	
	2056 Jul 09	11:41	0°♌	
	2056 Aug 02	22:33	0°♍	
	2056 Aug 27	10:55	0°♎	
	2056 Sep 21	02:13	0°♏	
desc. node	2056 Sep 22	00:46	1°♏08'22	
	2056 Oct 15	22:11	0°♐	
	2056 Nov 10	01:55	0°♑	
	2056 Dec 05	22:19	0°♒	
evening max el	2056 Dec 31	12:51	27°♒47'58	47°14'38
	2057 Jan 02	16:57	0°♓	
asc. node	2057 Jan 13	04:11	10°♓05'19	
greatest brilliancy	2057 Feb 10	04:04	29°♓30'14	-4.9m
	2057 Feb 11	13:31	0°♈	
retrograde	2057 Feb 20	11:44	1°♈32'39	
	2057 Mar 01	02:52	30°℞♓	
evening set	2057 Mar 10	12:31	25°♓15'58	
min. Earth dist.	2057 Mar 13	00:24	23°♓42'48	0.27872 AU
inferior conj	2057 Mar 13	12:10	23°♓24'19	8°44'30
minimum elong	2057 Mar 13	14:44	23°♓20'16	8°44'24
morning rise	2057 Mar 16	17:08	21°♓24'51	
direct	2057 Apr 03	08:13	15°♓25'47	
greatest brilliancy	2057 Apr 12	14:35	17°♓01'11	-4.8m
	2057 May 04	11:46	0°♈	
desc. node	2057 May 04	17:21	0°♈11'04	
morning max el	2057 May 22	12:06	15°♈58'09	45°57'29
	2057 Jun 05	11:25	0°♉	
	2057 Jul 03	03:05	0°♊	
	2057 Jul 29	07:45	0°♋	
	2057 Aug 23	16:22	0°♌	
asc. node	2057 Aug 25	20:55	2°♌37'42	
	2057 Sep 17	10:30	0°♍	
	2057 Oct 11	18:05	0°♎	
	2057 Nov 04	19:00	0°♏	
morning set	2057 Nov 16	10:45	14°♏37'07	
	2057 Nov 28	16:29	0°♐	
desc. node	2057 Dec 15	10:23	21°♐04'00	
	2057 Dec 22	12:44	0°♑	
superior conj	2057 Dec 27	07:32	6°♑01'13	-0°27'59
minimum elong	2057 Dec 27	00:19	5°♑38'31	0°27'38
max. Earth dist.	2057 Dec 27	23:08	6°♑50'21	1.71074 AU
	2058 Jan 15	09:03	0°♒	
evening rise	2058 Feb 06	17:11	28°♒02'40	
	2058 Feb 08	06:39	0°♓	
	2058 Mar 04	07:17	0°♈	
	2058 Mar 28	13:04	0°♉	
asc. node	2058 Apr 07	13:45	12°♉18'31	
	2058 Apr 22	02:16	0°♊	
	2058 May 17	01:35	0°♋	
	2058 Jun 11	15:42	0°♌	
	2058 Jul 08	07:37	0°♍	
desc. node	2058 Jul 28	03:02	20°♍52'00	
evening max el	2058 Aug 05	12:33	29°♍07'30	45°45'40
	2058 Aug 06	10:36	0°♎	
greatest brilliancy	2058 Sep 14	08:16	27°♎34'48	-4.8m
retrograde	2058 Sep 23	11:59	29°♎06'21	
evening set	2058 Oct 10	11:25	23°♎39'27	
inferior conj	2058 Oct 14	09:40	21°♎18'02	-7°24'42
minimum elong	2058 Oct 14	19:19	21°♎03'16	7°23'06
min. Earth dist.	2058 Oct 15	08:10	20°♎43'39	0.27561 AU
morning rise	2058 Oct 19	02:49	18°♎28'46	
direct	2058 Nov 04	09:43	13°♎20'08	
greatest brilliancy	2058 Nov 15	13:31	15°♎40'34	-4.9m
asc. node	2058 Nov 18	06:19	16°♎51'38	
	2058 Dec 07	10:21	0°♏	
morning max el	2058 Dec 25	04:33	16°♏46'06	46°55'24
	2059 Jan 06	17:06	0°♐	
	2059 Feb 02	04:42	0°♑	
	2059 Feb 27	12:57	0°♒	
desc. node	2059 Mar 09	19:50	12°♒21'22	
	2059 Mar 24	10:20	0°♓	
	2059 Apr 18	03:14	0°♈	
	2059 May 12	18:27	0°♉	
	2059 Jun 06	08:41	0°♊	
morning set	2059 Jun 27	15:46	26°♊02'25	
asc. node	2059 Jun 30	23:22	0°♋06'10	
	2059 Jun 30	21:21	0°♋	
	2059 Jul 25	07:30	0°♌	
max. Earth dist.	2059 Jul 31	12:09	7°♌37'49	1.73306 AU
superior conj	2059 Aug 03	01:22	10°♌46'34	1°07'58
minimum elong	2059 Aug 02	16:54	10°♌20'25	1°07'43
	2059 Aug 18	14:51	0°♍	
evening rise	2059 Sep 08	05:07	25°♍30'16	
	2059 Sep 11	20:08	0°♎	
	2059 Oct 06	00:38	0°♏	
desc. node	2059 Oct 20	12:42	17°♏59'09	
	2059 Oct 30	05:23	0°♐	
	2059 Nov 23	11:14	0°♑	
	2059 Dec 17	19:51	0°♒	
	2060 Jan 11	11:38	0°♓	
	2060 Feb 05	20:12	0°♈	
asc. node	2060 Feb 10	15:52	5°♈32'41	
	2060 Mar 03	20:14	0°♉	
evening max el	2060 Mar 13	03:36	9°♉32'15	46°16'42
	2060 Apr 05	09:42	0°♊	
greatest brilliancy	2060 Apr 20	19:49	8°♊50'20	-4.8m
retrograde	2060 May 01	18:43	11°♊01'40	
evening set	2060 May 17	03:22	6°♊24'26	
inferior conj	2060 May 23	03:13	2°♊46'17	2°08'09
minimum elong	2060 May 23	07:48	2°♊39'04	2°06'50
min. Earth dist.	2060 May 23	02:38	2°♊47'12	0.28772 AU
	2060 May 27	15:30	30°℞♉	
morning rise	2060 May 29	12:40	28°♉55'58	
desc. node	2060 Jun 01	05:17	27°♉33'28	
direct	2060 Jun 13	15:26	24°♉32'04	

greatest brilliancy	2060 Jun 23 17:58	26°♉23'00	-4.7m
	2060 Jul 01 16:12	0°♊	
morning max el	2060 Aug 01 09:33	24°♊16'20	45°44'45
	2060 Aug 07 06:42	0°♋	
	2060 Sep 04 13:07	0°♌	
asc. node	2060 Sep 22 08:50	20°♌19'12	
	2060 Sep 30 15:10	0°♍	
	2060 Oct 25 14:58	0°♎	
	2060 Nov 19 00:05	0°♏	
	2060 Dec 13 01:38	0°♐	
	2061 Jan 06 00:00	0°♑	
desc. node	2061 Jan 11 22:14	7°♑26'12	
	2061 Jan 29 21:42	0°♒	
morning set	2061 Feb 01 03:53	2°♒49'54	
	2061 Feb 22 20:16	0°♓	
superior conj	2061 Mar 13 23:35	23°♓54'22	-1°25'28
minimum elong	2061 Mar 14 02:22	24°♓03'03	1°25'27
max. Earth dist.	2061 Mar 18 03:40	29°♓06'15	1.72074 AU
	2061 Mar 18 20:56	0°♈	
	2061 Apr 12 00:47	0°♉	
evening rise	2061 Apr 22 05:53	12°♉37'21	
asc. node	2061 May 05 01:43	28°♉25'18	
	2061 May 06 08:32	0°♊	
	2061 May 30 20:32	0°♋	
	2061 Jun 24 13:17	0°♌	
	2061 Jul 19 12:23	0°♍	
	2061 Aug 13 21:15	0°♎	
desc. node	2061 Aug 24 14:49	12°♎29'08	
	2061 Sep 08 22:24	0°♏	
	2061 Oct 06 07:58	0°♐	
evening max el	2061 Oct 17 19:13	11°♐42'48	46°52'48
	2061 Nov 07 00:39	0°♑	
greatest brilliancy	2061 Nov 27 04:36	12°♑12'27	-4.9m
retrograde	2061 Dec 07 01:33	14°♑02'35	
asc. node	2061 Dec 15 18:19	12°♑29'54	
evening set	2061 Dec 21 10:10	9°♑57'12	
min. Earth dist.	2061 Dec 27 04:14	6°♑35'32	0.26454 AU
inferior conj	2061 Dec 27 14:12	6°♑20'16	3°01'35
minimum elong	2061 Dec 27 07:36	6°♑30'22	2°59'33
morning rise	2062 Jan 02 05:16	3°♑01'33	
	2062 Jan 09 01:53	30°℞♐	
direct	2062 Jan 16 23:02	28°♐43'41	
	2062 Jan 25 02:25	0°♑	
greatest brilliancy	2062 Jan 26 15:18	0°♑30'15	-4.9m
	2062 Mar 06 22:38	0°♒	
morning max el	2062 Mar 08 03:03	1°♒10'31	46°42'01
	2062 Apr 04 06:32	0°♓	
desc. node	2062 Apr 06 07:47	2°♓17'04	
	2062 Apr 30 15:34	0°♈	
	2062 May 26 06:25	0°♉	
	2062 Jun 20 11:45	0°♊	
	2062 Jul 15 10:00	0°♋	
asc. node	2062 Jul 28 11:07	15°♋50'14	
	2062 Aug 09 01:26	0°♌	
	2062 Sep 02 10:21	0°♍	
morning set	2062 Sep 03 16:35	1°♍33'33	
	2062 Sep 26 14:01	0°♎	
max. Earth dist.	2062 Oct 07 18:27	13°♎57'34	1.71960 AU
superior conj	2062 Oct 10 21:45	17°♎52'50	1°13'31
minimum elong	2062 Oct 11 06:29	18°♎20'05	1°13'19
	2062 Oct 20 14:21	0°♏	
	2062 Nov 13 13:10	0°♐	
desc. node	2062 Nov 17 00:41	4°♐21'41	
evening rise	2062 Nov 19 09:10	7°♐18'38	
	2062 Dec 07 11:36	0°♑	
	2062 Dec 31 10:40	0°♒	
	2063 Jan 24 12:04	0°♓	
	2063 Feb 17 19:02	0°♈	
asc. node	2063 Mar 10 03:50	24°♈45'28	
	2063 Mar 14 12:38	0°♉	
	2063 Apr 09 00:54	0°♊	
	2063 May 06 00:29	0°♋	
evening max el	2063 May 23 16:04	17°♋57'25	45°26'13
	2063 Jun 05 23:15	0°♌	
desc. node	2063 Jun 29 17:16	15°♌22'57	
greatest brilliancy	2063 Jun 30 17:18	15°♌45'42	-4.7m
retrograde	2063 Jul 11 07:13	17°♌46'45	
evening set	2063 Jul 27 14:35	12°♌45'10	
inferior conj	2063 Aug 01 19:16	9°♌36'47	-6°46'35
minimum elong	2063 Aug 01 09:32	9°♌51'57	6°44'49
min. Earth dist.	2063 Aug 01 20:36	9°♌34'41	0.28962 AU
morning rise	2063 Aug 06 04:15	6°♌55'56	
direct	2063 Aug 23 09:30	1°♌19'39	
greatest brilliancy	2063 Sep 03 02:24	3°♌23'05	-4.8m
	2063 Oct 09 12:03	0°♍	
morning max el	2063 Oct 11 23:40	2°♍25'41	46°16'59
asc. node	2063 Oct 20 20:39	11°♍27'46	
	2063 Nov 06 21:31	0°♎	
	2063 Dec 02 17:05	0°♏	
	2063 Dec 27 12:25	0°♐	
	2064 Jan 20 21:25	0°♑	
desc. node	2064 Feb 09 09:59	24°♑11'09	
	2064 Feb 14 02:26	0°♒	
	2064 Mar 09 06:31	0°♓	
	2064 Apr 02 11:20	0°♈	
morning set	2064 Apr 16 16:15	17°♈34'10	
	2064 Apr 26 17:51	0°♉	
	2064 May 21 02:16	0°♊	
superior conj	2064 May 24 06:20	3°♊53'58	-0°19'37
minimum elong	2064 May 24 10:26	4°♊06'36	0°19'25
max. Earth dist.	2064 May 25 08:03	5°♊13'04	1.73420 AU
asc. node	2064 Jun 01 13:33	14°♊06'16	
	2064 Jun 14 12:00	0°♋	
evening rise	2064 Jun 29 18:57	18°♋46'34	
	2064 Jul 08 22:25	0°♌	
	2064 Aug 02 09:30	0°♍	
	2064 Aug 26 22:13	0°♎	
	2064 Sep 20 14:05	0°♏	
desc. node	2064 Sep 21 02:52	0°♏38'43	
	2064 Oct 15 10:52	0°♐	
	2064 Nov 09 15:53	0°♑	
	2064 Dec 05 14:45	0°♒	
evening max el	2064 Dec 29 03:28	25°♒26'45	47°15'31
	2065 Jan 02 16:13	0°♓	
asc. node	2065 Jan 12 06:05	9°♓04'00	
greatest brilliancy	2065 Feb 07 18:33	27°♓09'32	-4.9m
retrograde	2065 Feb 18 03:03	29°♓12'49	
evening set	2065 Mar 08 03:27	22°♓55'30	
min. Earth dist.	2065 Mar 10 13:50	21°♓24'52	0.27827 AU
inferior conj	2065 Mar 11 02:38	21°♓04'47	8°47'16
minimum elong	2065 Mar 11 04:23	21°♓02'02	8°47'13
morning rise	2065 Mar 14 05:29	19°♓08'48	
direct	2065 Mar 31 22:08	13°♓06'56	
greatest brilliancy	2065 Apr 10 03:34	14°♓41'59	-4.8m
desc. node	2065 May 03 19:30	29°♓06'07	
	2065 May 04 21:45	0°♈	
morning max el	2065 May 20 03:44	13°♈45'22	45°58'44
	2065 Jun 05 05:38	0°♉	
	2065 Jul 02 17:22	0°♊	
	2065 Jul 28 20:19	0°♋	
	2065 Aug 23 04:02	0°♌	

asc. node	2065 Aug 24 22:57	2°♌08'50	
	2065 Sep 16 21:42	0°♍	
	2065 Oct 11 05:04	0°♎	
	2065 Nov 04 05:52	0°♏	
morning set	2065 Nov 13 23:36	12°♏12'43	
	2065 Nov 28 03:20	0°♐	
desc. node	2065 Dec 14 12:26	20°♐36'24	
	2065 Dec 21 23:34	0°♑	
superior conj	2065 Dec 24 17:33	3°♑27'38	-0°24'11
minimum elong	2065 Dec 24 11:15	3°♑07'48	0°23'52
max. Earth dist.	2065 Dec 25 09:14	4°♑16'59	1.71071 AU
	2066 Jan 14 19:52	0°♒	
evening rise	2066 Feb 04 03:54	25°♒31'51	
	2066 Feb 07 17:30	0°♓	
	2066 Mar 03 18:13	0°♈	
	2066 Mar 28 00:10	0°♉	
asc. node	2066 Apr 06 15:53	11°♉50'46	
	2066 Apr 21 13:42	0°♊	
	2066 May 16 13:38	0°♋	
	2066 Jun 11 05:00	0°♌	
	2066 Jul 07 23:36	0°♍	
desc. node	2066 Jul 27 05:00	20°♍06'10	
evening max el	2066 Aug 03 03:36	26°♍53'49	45°43'49
	2066 Aug 06 10:34	0°♎	
greatest brilliancy	2066 Sep 11 20:37	25°♎15'02	-4.8m
retrograde	2066 Sep 21 01:11	26°♎46'50	
evening set	2066 Oct 08 03:55	21°♎15'27	
inferior conj	2066 Oct 11 23:20	18°♎57'47	-7°36'09
minimum elong	2066 Oct 12 08:35	18°♎43'35	7°34'42
min. Earth dist.	2066 Oct 12 21:30	18°♎23'49	0.27629 AU
morning rise	2066 Oct 16 12:53	16°♎13'20	
direct	2066 Nov 02 00:40	10°♎59'03	
greatest brilliancy	2066 Nov 13 03:27	13°♎18'27	-4.9m
asc. node	2066 Nov 17 08:26	15°♎14'18	
	2066 Dec 07 18:19	0°♏	
morning max el	2066 Dec 22 19:06	14°♏24'20	46°54'52
	2067 Jan 06 11:28	0°♐	
	2067 Feb 01 19:25	0°♑	
	2067 Feb 27 01:58	0°♒	
desc. node	2067 Mar 08 21:58	11°♒49'50	
	2067 Mar 23 22:23	0°♓	
	2067 Apr 17 14:42	0°♈	
	2067 May 12 05:30	0°♉	
	2067 Jun 05 19:28	0°♊	
morning set	2067 Jun 25 09:55	23°♊58'31	
asc. node	2067 Jun 30 01:19	29°♊39'40	
	2067 Jun 30 07:57	0°♋	
	2067 Jul 24 18:02	0°♌	
max. Earth dist.	2067 Jul 29 07:36	5°♌37'22	1.73335 AU
superior conj	2067 Jul 31 19:38	8°♌42'24	1°06'02
minimum elong	2067 Jul 31 11:01	8°♌15'49	1°05'46
	2067 Aug 18 01:26	0°♍	
evening rise	2067 Sep 05 21:59	23°♍20'34	
	2067 Sep 11 06:53	0°♎	
	2067 Oct 05 11:38	0°♏	
desc. node	2067 Oct 19 14:50	17°♏31'08	
	2067 Oct 29 16:42	0°♐	
	2067 Nov 22 22:57	0°♑	
	2067 Dec 17 08:06	0°♒	
	2068 Jan 11 00:44	0°♓	
	2068 Feb 05 10:55	0°♈	
asc. node	2068 Feb 09 17:59	4°♈55'26	
	2068 Mar 03 15:07	0°♉	
evening max el	2068 Mar 10 19:07	7°♉18'21	46°19'03
	2068 Apr 06 03:59	0°♊	
greatest brilliancy	2068 Apr 18 13:26	6°♊42'11	-4.8m
retrograde	2068 Apr 29 10:52	8°♊52'15	
evening set	2068 May 14 21:34	4°♊12'57	
inferior conj	2068 May 20 19:36	0°♊37'07	2°27'36
minimum elong	2068 May 21 00:50	0°♊28'53	2°26'05
min. Earth dist.	2068 May 20 19:17	0°♊37'37	0.28753 AU
	2068 May 21 19:11	30°℞♉	
morning rise	2068 May 27 04:29	26°♉47'10	
desc. node	2068 May 31 07:18	24°♉46'13	
direct	2068 Jun 11 07:33	22°♉23'19	
greatest brilliancy	2068 Jun 21 09:24	24°♉13'23	-4.7m
	2068 Jul 02 23:31	0°♊	
morning max el	2068 Jul 30 00:38	22°♊05'04	45°44'15
	2068 Aug 07 02:25	0°♋	
	2068 Sep 04 03:50	0°♌	
asc. node	2068 Sep 21 10:58	19°♌46'41	
	2068 Sep 30 04:01	0°♍	
	2068 Oct 25 02:56	0°♎	
	2068 Nov 18 11:36	0°♏	
	2068 Dec 12 12:55	0°♐	
	2069 Jan 05 11:08	0°♑	
desc. node	2069 Jan 11 00:09	6°♑57'23	
	2069 Jan 29 08:42	0°♒	
morning set	2069 Jan 29 13:43	0°♒15'43	
	2069 Feb 22 07:09	0°♓	
superior conj	2069 Mar 11 12:14	21°♓30'29	-1°25'52
minimum elong	2069 Mar 11 14:03	21°♓36'10	1°25'52
max. Earth dist.	2069 Mar 15 17:23	26°♓45'48	1.72012 AU
	2069 Mar 18 07:43	0°♈	
	2069 Apr 11 11:30	0°♉	
evening rise	2069 Apr 19 20:55	10°♉22'29	
asc. node	2069 May 04 03:46	27°♉58'36	
	2069 May 05 19:17	0°♊	
	2069 May 30 07:28	0°♋	
	2069 Jun 24 00:36	0°♌	
	2069 Jul 19 00:23	0°♍	
	2069 Aug 13 10:22	0°♎	
desc. node	2069 Aug 23 16:55	11°♎55'18	
	2069 Sep 08 13:37	0°♏	
	2069 Oct 06 03:57	0°♐	
evening max el	2069 Oct 15 07:33	9°♐16'36	46°50'35
	2069 Nov 07 17:47	0°♑	
greatest brilliancy	2069 Nov 24 18:28	9°♑44'49	-4.9m
retrograde	2069 Dec 04 13:11	11°♑33'16	
asc. node	2069 Dec 14 20:15	9°♑24'23	
evening set	2069 Dec 18 21:25	7°♑29'18	
inferior conj	2069 Dec 25 02:24	3°♑51'41	2°38'08
minimum elong	2069 Dec 24 20:34	4°♑00'35	2°36'19
min. Earth dist.	2069 Dec 24 18:18	4°♑04'04	0.26443 AU
morning rise	2069 Dec 30 19:47	0°♑29'43	
	2069 Dec 31 18:11	30°℞♐	
direct	2070 Jan 14 10:38	26°♐14'47	
greatest brilliancy	2070 Jan 24 05:58	28°♐03'50	-4.9m
	2070 Jan 28 19:29	0°♑	
morning max el	2070 Mar 05 15:34	28°♑44'04	46°43'30
	2070 Mar 06 21:53	0°♒	
	2070 Apr 03 22:56	0°♓	
desc. node	2070 Apr 05 09:50	1°♓37'38	
	2070 Apr 30 05:20	0°♈	
	2070 May 25 18:48	0°♉	
	2070 Jun 19 23:20	0°♊	
	2070 Jul 14 21:07	0°♋	
asc. node	2070 Jul 27 13:09	15°♋23'02	
	2070 Aug 08 12:19	0°♌	
morning set	2070 Sep 01 09:27	29°♌23'48	
	2070 Sep 01 21:09	0°♍	

	2070 Sep 26 00:49	0°♎	
max. Earth dist.	2070 Oct 05 09:55	11°♎42'06	1.72013 AU
superior conj	2070 Oct 08 12:45	15°♎35'50	1°15'13
minimum elong	2070 Oct 08 21:00	16°♎01'36	1°15'01
	2070 Oct 20 01:14	0°♏	
	2070 Nov 13 00:10	0°♐	
desc. node	2070 Nov 16 02:40	3°♐53'21	
evening rise	2070 Nov 16 20:56	4°♐50'34	
	2070 Dec 06 22:47	0°♑	
	2070 Dec 30 22:02	0°♒	
	2071 Jan 23 23:41	0°♓	
	2071 Feb 17 07:02	0°♈	
asc. node	2071 Mar 09 05:59	24°♈14'13	
	2071 Mar 14 01:19	0°♉	
	2071 Apr 08 14:59	0°♊	
	2071 May 05 17:55	0°♋	
evening max el	2071 May 21 07:38	15°♋46'16	45°27'10
	2071 Jun 06 06:16	0°♌	
greatest brilliancy	2071 Jun 28 07:33	13°♌34'59	-4.7m
desc. node	2071 Jun 28 19:12	13°♌45'28	
retrograde	2071 Jul 08 23:43	15°♌38'11	
evening set	2071 Jul 25 03:51	10°♌40'00	
inferior conj	2071 Jul 30 11:31	7°♌27'30	-6°33'52
minimum elong	2071 Jul 30 01:41	7°♌42'50	6°31'59
min. Earth dist.	2071 Jul 30 12:07	7°♌26'34	0.28978 AU
morning rise	2071 Aug 03 23:17	4°♌42'49	
	2071 Aug 14 14:45	30°℞♋	
direct	2071 Aug 21 01:57	29°♋10'01	
	2071 Aug 27 18:31	0°♌	
greatest brilliancy	2071 Aug 31 18:31	1°♌13'26	-4.8m
	2071 Oct 09 10:29	0°♍	
morning max el	2071 Oct 09 15:52	0°♍13'14	46°15'22
asc. node	2071 Oct 19 22:41	10°♍43'13	
	2071 Nov 06 13:26	0°♎	
	2071 Dec 02 06:48	0°♏	
	2071 Dec 27 01:05	0°♐	
	2072 Jan 20 09:30	0°♑	
desc. node	2072 Feb 08 12:09	23°♑41'25	
	2072 Feb 13 14:07	0°♒	
	2072 Mar 08 17:54	0°♓	
	2072 Apr 01 22:29	0°♈	
morning set	2072 Apr 14 07:18	15°♈18'08	
	2072 Apr 26 04:50	0°♉	
	2072 May 20 13:08	0°♊	
superior conj	2072 May 21 23:22	1°♊45'20	-0°22'48
minimum elong	2072 May 22 04:08	1°♊59'57	0°22'34
max. Earth dist.	2072 May 23 04:29	3°♊14'54	1.73391 AU
asc. node	2072 May 31 15:32	13°♊39'07	
	2072 Jun 13 22:51	0°♋	
evening rise	2072 Jun 27 13:52	16°♋44'01	
	2072 Jul 08 09:19	0°♌	
	2072 Aug 01 20:37	0°♍	
	2072 Aug 26 09:45	0°♎	
desc. node	2072 Sep 20 04:57	0°♏08'17	
	2072 Sep 20 02:13	0°♏	
	2072 Oct 14 23:55	0°♐	
	2072 Nov 09 06:21	0°♑	
	2072 Dec 05 07:55	0°♒	
evening max el	2072 Dec 26 18:54	23°♒06'22	47°16'20
	2073 Jan 02 17:07	0°♓	
asc. node	2073 Jan 11 08:12	8°♓00'22	
greatest brilliancy	2073 Feb 05 08:42	24°♓46'57	-4.9m
retrograde	2073 Feb 15 18:23	26°♓51'04	
evening set	2073 Mar 05 17:47	20°♓33'59	
min. Earth dist.	2073 Mar 08 02:52	19°♓05'27	0.27777 AU
inferior conj	2073 Mar 08 16:53	18°♓43'29	8°49'07
minimum elong	2073 Mar 08 17:48	18°♓42'03	8°49'06
morning rise	2073 Mar 11 18:01	16°♓50'20	
direct	2073 Mar 29 12:16	10°♓46'32	
greatest brilliancy	2073 Apr 07 15:57	12°♓20'38	-4.8m
desc. node	2073 May 02 21:31	28°♓01'27	
	2073 May 05 05:32	0°♈	
morning max el	2073 May 17 19:20	11°♈31'23	45°59'59
	2073 Jun 04 23:47	0°♉	
	2073 Jul 02 07:49	0°♊	
	2073 Jul 28 09:06	0°♋	
	2073 Aug 22 15:56	0°♌	
asc. node	2073 Aug 24 01:08	1°♌39'46	
	2073 Sep 16 09:07	0°♍	
	2073 Oct 10 16:16	0°♎	
	2073 Nov 03 17:02	0°♏	
morning set	2073 Nov 11 12:35	9°♏47'54	
	2073 Nov 27 14:31	0°♐	
desc. node	2073 Dec 13 14:27	20°♐07'31	
	2073 Dec 21 10:47	0°♑	
superior conj	2073 Dec 22 03:24	0°♑52'18	-0°20'17
minimum elong	2073 Dec 21 22:04	0°♑35'31	0°20'02
max. Earth dist.	2073 Dec 22 16:35	1°♑33'48	1.71073 AU
	2074 Jan 14 07:06	0°♒	
evening rise	2074 Feb 01 14:03	22°♒57'57	
	2074 Feb 07 04:46	0°♓	
	2074 Mar 03 05:33	0°♈	
	2074 Mar 27 11:41	0°♉	
asc. node	2074 Apr 05 17:54	11°♉21'26	
	2074 Apr 21 01:34	0°♊	
	2074 May 16 02:10	0°♋	
	2074 Jun 10 18:50	0°♌	
	2074 Jul 07 16:18	0°♍	
desc. node	2074 Jul 26 07:10	19°♍19'11	
evening max el	2074 Jul 31 18:13	24°♍38'15	45°42'07
	2074 Aug 06 12:07	0°♎	
greatest brilliancy	2074 Sep 09 09:40	22°♎55'57	-4.8m
retrograde	2074 Sep 18 14:11	24°♎27'30	
evening set	2074 Oct 05 20:34	18°♎51'58	
inferior conj	2074 Oct 09 13:18	16°♎37'52	-7°46'34
minimum elong	2074 Oct 09 22:06	16°♎24'21	7°45'17
min. Earth dist.	2074 Oct 10 11:18	16°♎04'05	0.27695 AU
morning rise	2074 Oct 13 23:18	13°♎58'08	
direct	2074 Oct 30 15:26	8°♎38'19	
greatest brilliancy	2074 Nov 10 18:00	10°♎56'57	-4.9m
asc. node	2074 Nov 16 10:23	13°♎39'57	
	2074 Dec 08 00:16	0°♏	
morning max el	2074 Dec 20 08:40	11°♏59'10	46°53'59
	2075 Jan 06 05:47	0°♐	
	2075 Feb 01 10:24	0°♑	
	2075 Feb 26 15:24	0°♒	
desc. node	2075 Mar 08 00:03	11°♒16'46	
	2075 Mar 23 10:54	0°♓	
	2075 Apr 17 02:37	0°♈	
	2075 May 11 16:59	0°♉	
	2075 Jun 05 06:38	0°♊	
morning set	2075 Jun 23 03:48	21°♊52'34	
asc. node	2075 Jun 29 03:23	29°♊12'19	
	2075 Jun 29 18:57	0°♋	
	2075 Jul 24 04:58	0°♌	
max. Earth dist.	2075 Jul 27 01:28	3°♌30'53	1.73362 AU
superior conj	2075 Jul 29 13:57	6°♌37'11	1°04'00
minimum elong	2075 Jul 29 05:13	6°♌10'18	1°03'44
	2075 Aug 17 12:24	0°♍	
evening rise	2075 Sep 03 15:07	21°♍10'40	

	2075 Sep 10 18:00	0°♎	
	2075 Oct 04 22:57	0°♏	
desc. node	2075 Oct 18 16:49	17°♏01'43	
	2075 Oct 29 04:20	0°♐	
	2075 Nov 22 10:58	0°♑	
	2075 Dec 16 20:44	0°♒	
	2076 Jan 10 14:18	0°♓	
	2076 Feb 05 02:18	0°♈	
asc. node	2076 Feb 08 20:04	4°♈16'19	
	2076 Mar 03 11:12	0°♉	
evening max el	2076 Mar 08 09:36	5°♉00'00	46°21'22
	2076 Apr 07 06:21	0°♊	
greatest brilliancy	2076 Apr 16 07:01	4°♊31'46	-4.8m
retrograde	2076 Apr 27 02:38	6°♊40'40	
evening set	2076 May 12 15:39	1°♊58'53	
	2076 May 15 23:39	30°℞♉	
inferior conj	2076 May 18 11:46	28°♉25'46	2°46'53
minimum elong	2076 May 18 17:36	28°♉16'33	2°45'14
min. Earth dist.	2076 May 18 11:56	28°♉25'30	0.28732 AU
morning rise	2076 May 24 19:53	24°♉36'28	
desc. node	2076 May 30 09:17	22°♉00'32	
direct	2076 Jun 08 22:55	20°♉12'16	
greatest brilliancy	2076 Jun 19 01:06	22°♉02'13	-4.7m
	2076 Jul 03 22:56	0°♊	
morning max el	2076 Jul 27 15:21	19°♊51'28	45°43'56
	2076 Aug 06 22:03	0°♋	
	2076 Sep 03 18:45	0°♌	
asc. node	2076 Sep 20 12:55	19°♌12'42	
	2076 Sep 29 17:07	0°♍	
	2076 Oct 24 15:09	0°♎	
	2076 Nov 17 23:22	0°♏	
	2076 Dec 12 00:24	0°♐	
	2077 Jan 04 22:27	0°♑	
desc. node	2077 Jan 10 02:20	6°♑28'47	
morning set	2077 Jan 26 23:38	27°♑41'00	
	2077 Jan 28 19:56	0°♒	
	2077 Feb 21 18:19	0°♓	
superior conj	2077 Mar 09 00:35	19°♓04'39	-1°26'06
minimum elong	2077 Mar 09 01:26	19°♓07'19	1°26'07
max. Earth dist.	2077 Mar 13 03:49	24°♓14'09	1.71958 AU
	2077 Mar 17 18:49	0°♈	
	2077 Apr 10 22:35	0°♉	
evening rise	2077 Apr 17 11:21	8°♉04'35	
asc. node	2077 May 03 05:43	27°♉30'25	
	2077 May 05 06:25	0°♊	
	2077 May 29 18:46	0°♋	
	2077 Jun 23 12:18	0°♌	
	2077 Jul 18 12:46	0°♍	
	2077 Aug 12 23:56	0°♎	
desc. node	2077 Aug 22 18:59	11°♎20'10	
	2077 Sep 08 05:24	0°♏	
	2077 Oct 06 00:53	0°♐	
evening max el	2077 Oct 12 20:04	6°♐50'28	46°48'32
	2077 Nov 08 17:03	0°♑	
greatest brilliancy	2077 Nov 22 07:55	7°♑16'36	-4.9m
retrograde	2077 Dec 02 01:21	9°♑04'16	
asc. node	2077 Dec 13 22:20	6°♑13'55	
evening set	2077 Dec 16 09:01	5°♑01'02	
inferior conj	2077 Dec 22 14:41	1°♑23'09	2°14'27
minimum elong	2077 Dec 22 09:40	1°♑30'49	2°12'52
min. Earth dist.	2077 Dec 22 08:10	1°♑33'06	0.26433 AU
	2077 Dec 24 21:33	30°℞♐	
morning rise	2077 Dec 28 10:17	27°♐58'29	
direct	2078 Jan 11 22:37	23°♐45'57	
greatest brilliancy	2078 Jan 21 20:20	25°♐37'19	-4.9m
	2078 Jan 30 20:26	0°♑	
morning max el	2078 Mar 03 05:00	26°♑19'49	46°44'48
	2078 Mar 06 20:13	0°♒	
	2078 Apr 03 15:09	0°♓	
desc. node	2078 Apr 04 11:51	0°♓58'10	
	2078 Apr 29 19:09	0°♈	
	2078 May 25 07:22	0°♉	
	2078 Jun 19 11:08	0°♊	
	2078 Jul 14 08:27	0°♋	
asc. node	2078 Jul 26 15:18	14°♋55'35	
	2078 Aug 07 23:23	0°♌	
morning set	2078 Aug 30 02:07	27°♌13'06	
	2078 Sep 01 08:06	0°♍	
	2078 Sep 25 11:46	0°♎	
max. Earth dist.	2078 Oct 03 01:50	9°♎27'43	1.72064 AU
superior conj	2078 Oct 06 03:43	13°♎18'21	1°16'46
minimum elong	2078 Oct 06 11:26	13°♎42'26	1°16'37
	2078 Oct 19 12:15	0°♏	
	2078 Nov 12 11:19	0°♐	
evening rise	2078 Nov 14 08:51	2°♐22'35	
desc. node	2078 Nov 15 04:42	3°♐24'44	
	2078 Dec 06 10:04	0°♑	
	2078 Dec 30 09:28	0°♒	
	2079 Jan 23 11:18	0°♓	
	2079 Feb 16 19:01	0°♈	
asc. node	2079 Mar 08 07:57	23°♈42'28	
	2079 Mar 13 14:02	0°♉	
	2079 Apr 08 05:12	0°♊	
	2079 May 05 11:50	0°♋	
evening max el	2079 May 18 23:57	13°♋36'35	45°27'58
	2079 Jun 06 16:15	0°♌	
greatest brilliancy	2079 Jun 25 21:44	11°♌23'32	-4.7m
desc. node	2079 Jun 27 21:24	12°♌03'56	
retrograde	2079 Jul 06 16:13	13°♌28'34	
evening set	2079 Jul 22 17:04	8°♌34'01	
inferior conj	2079 Jul 28 03:35	5°♌17'18	-6°20'27
minimum elong	2079 Jul 27 17:40	5°♌32'44	6°18'30
min. Earth dist.	2079 Jul 28 03:14	5°♌17'51	0.28991 AU
morning rise	2079 Aug 01 18:09	2°♌28'44	
	2079 Aug 06 09:57	30°℞♋	
direct	2079 Aug 18 18:39	26°♋59'46	
greatest brilliancy	2079 Aug 29 09:49	29°♋02'22	-4.8m
	2079 Aug 31 19:23	0°♌	
morning max el	2079 Oct 07 08:01	28°♌00'44	46°13'45
	2079 Oct 09 08:09	0°♍	
asc. node	2079 Oct 19 00:44	9°♍59'09	
	2079 Nov 06 05:07	0°♎	
	2079 Dec 01 20:23	0°♏	
	2079 Dec 26 13:39	0°♐	
	2080 Jan 19 21:28	0°♑	
desc. node	2080 Feb 07 14:11	23°♑11'40	
	2080 Feb 13 01:40	0°♒	
	2080 Mar 08 05:06	0°♓	
	2080 Apr 01 09:26	0°♈	
morning set	2080 Apr 11 22:33	13°♈03'16	
	2080 Apr 25 15:38	0°♉	
superior conj	2080 May 19 16:25	29°♉37'08	-0°25'56
minimum elong	2080 May 19 21:48	29°♉53'41	0°25'41
	2080 May 19 23:51	0°♊	
max. Earth dist.	2080 May 21 02:41	1°♊22'34	1.73368 AU
asc. node	2080 May 30 17:39	13°♊12'44	
	2080 Jun 13 09:34	0°♋	
evening rise	2080 Jun 25 08:39	14°♋41'21	
	2080 Jul 07 20:09	0°♌	
	2080 Aug 01 07:41	0°♍	
	2080 Aug 25 21:13	0°♎	

desc. node	2080 Sep 19 06:54	29°♎37'35	
	2080 Sep 19 14:19	0°♏	
	2080 Oct 14 12:56	0°♐	
	2080 Nov 08 20:50	0°♑	
	2080 Dec 05 01:17	0°♒	
evening max el	2080 Dec 24 10:47	20°♒47'32	47°17'03
	2081 Jan 02 19:05	0°♓	
asc. node	2081 Jan 10 10:20	6°♓55'45	
greatest brilliancy	2081 Feb 02 23:16	22°♓25'32	-4.9m
retrograde	2081 Feb 13 09:35	24°♓29'52	
evening set	2081 Mar 03 07:48	18°♓14'03	
min. Earth dist.	2081 Mar 05 16:00	16°♓46'51	0.27720 AU
inferior conj	2081 Mar 06 07:12	16°♓23'02	8°50'08
minimum elong	2081 Mar 06 07:15	16°♓22'58	8°50'09
morning rise	2081 Mar 09 06:55	14°♓32'06	
direct	2081 Mar 27 02:36	8°♓27'19	
greatest brilliancy	2081 Apr 05 04:15	10°♓00'06	-4.8m
desc. node	2081 May 01 23:32	26°♓59'34	
	2081 May 05 10:33	0°♈	
morning max el	2081 May 15 10:06	9°♈16'29	46°01'13
	2081 Jun 04 17:06	0°♉	
	2081 Jul 01 21:46	0°♊	
	2081 Jul 27 21:31	0°♋	
	2081 Aug 22 03:34	0°♌	
asc. node	2081 Aug 23 03:03	1°♌10'39	
	2081 Sep 15 20:19	0°♍	
	2081 Oct 10 03:17	0°♎	
	2081 Nov 03 03:58	0°♏	
morning set	2081 Nov 09 01:30	7°♏23'39	
	2081 Nov 27 01:27	0°♐	
desc. node	2081 Dec 12 16:34	19°♐39'48	
superior conj	2081 Dec 19 13:16	28°♐17'55	-0°16'22
minimum elong	2081 Dec 19 08:57	28°♐04'19	0°16'10
behind sun begin	2081 Dec 19 05:05	27°♐52'09	
behind sun end	2081 Dec 19 12:49	28°♐16'30	
max. Earth dist.	2081 Dec 19 21:20	28°♐43'18	1.71076 AU
	2081 Dec 20 21:43	0°♑	
	2082 Jan 13 18:04	0°♒	
evening rise	2082 Jan 30 00:10	20°♒24'38	
	2082 Feb 06 15:46	0°♓	
	2082 Mar 02 16:37	0°♈	
	2082 Mar 26 22:53	0°♉	
asc. node	2082 Apr 04 19:54	10°♉53'03	
	2082 Apr 20 13:04	0°♊	
	2082 May 15 14:19	0°♋	
	2082 Jun 10 08:21	0°♌	
	2082 Jul 07 08:54	0°♍	
desc. node	2082 Jul 25 09:12	18°♍32'03	
evening max el	2082 Jul 29 07:54	22°♍21'29	45°40'12
	2082 Aug 06 14:42	0°♎	
greatest brilliancy	2082 Sep 06 23:03	20°♎37'58	-4.8m
retrograde	2082 Sep 16 02:54	22°♎09'08	
evening set	2082 Oct 03 12:59	16°♎29'31	
inferior conj	2082 Oct 07 03:17	14°♎18'52	-7°56'00
minimum elong	2082 Oct 07 11:33	14°♎06'10	7°54'55
min. Earth dist.	2082 Oct 08 01:22	13°♎44'54	0.27764 AU
morning rise	2082 Oct 11 09:45	11°♎43'53	
direct	2082 Oct 28 05:43	6°♎18'15	
greatest brilliancy	2082 Nov 08 09:08	8°♎37'00	-4.9m
asc. node	2082 Nov 15 12:29	12°♎09'40	
	2082 Dec 08 04:00	0°♏	
morning max el	2082 Dec 17 21:32	9°♏32'58	46°53'14
	2083 Jan 05 23:22	0°♐	
	2083 Feb 01 00:52	0°♑	
	2083 Feb 26 04:22	0°♒	
desc. node	2083 Mar 07 01:59	10°♒44'31	
	2083 Mar 22 23:00	0°♓	
	2083 Apr 16 14:06	0°♈	
	2083 May 11 04:03	0°♉	
	2083 Jun 04 17:23	0°♊	
morning set	2083 Jun 20 22:05	19°♊49'07	
asc. node	2083 Jun 28 05:31	28°♊46'29	
	2083 Jun 29 05:30	0°♋	
	2083 Jul 23 15:28	0°♌	
max. Earth dist.	2083 Jul 24 20:52	1°♌30'30	1.73392 AU
superior conj	2083 Jul 27 08:38	4°♌34'34	1°01'55
minimum elong	2083 Jul 26 23:52	4°♌07'34	1°01'38
	2083 Aug 16 22:59	0°♍	
evening rise	2083 Sep 01 08:38	19°♍03'14	
	2083 Sep 10 04:46	0°♎	
	2083 Oct 04 09:59	0°♏	
desc. node	2083 Oct 17 18:53	16°♏33'26	
	2083 Oct 28 15:41	0°♐	
	2083 Nov 21 22:46	0°♑	
	2083 Dec 16 09:07	0°♒	
	2084 Jan 10 03:38	0°♓	
	2084 Feb 04 17:32	0°♈	
asc. node	2084 Feb 07 22:02	3°♈37'35	
	2084 Mar 03 07:27	0°♉	
evening max el	2084 Mar 05 23:31	2°♉41'20	46°23'49
	2084 Apr 08 18:53	0°♊	
greatest brilliancy	2084 Apr 14 00:27	2°♊22'27	-4.8m
retrograde	2084 Apr 24 18:47	4°♊30'51	
evening set	2084 May 10 09:57	29°♉46'05	
	2084 May 10 00:00	30°℞♉	
inferior conj	2084 May 16 04:05	26°♉16'03	3°05'52
minimum elong	2084 May 16 10:30	26°♉05'56	3°04'05
min. Earth dist.	2084 May 16 04:42	26°♉15'05	0.28711 AU
morning rise	2084 May 22 11:17	22°♉27'50	
desc. node	2084 May 29 11:28	19°♉20'56	
direct	2084 Jun 06 14:12	18°♉02'43	
greatest brilliancy	2084 Jun 16 17:15	19°♉53'10	-4.7m
	2084 Jul 04 15:25	0°♊	
morning max el	2084 Jul 25 06:39	17°♊40'52	45°43'48
	2084 Aug 06 16:32	0°♋	
	2084 Sep 03 08:59	0°♌	
asc. node	2084 Sep 19 14:59	18°♌40'43	
	2084 Sep 29 05:42	0°♍	
	2084 Oct 24 02:58	0°♎	
	2084 Nov 17 10:47	0°♏	
	2084 Dec 11 11:36	0°♐	
	2085 Jan 04 09:31	0°♑	
desc. node	2085 Jan 09 04:23	6°♑00'35	
morning set	2085 Jan 24 09:10	25°♑05'46	
	2085 Jan 28 06:54	0°♒	
	2085 Feb 21 05:10	0°♓	
superior conj	2085 Mar 06 12:36	16°♓38'40	-1°26'11
minimum elong	2085 Mar 06 12:27	16°♓38'13	1°26'11
max. Earth dist.	2085 Mar 10 12:53	21°♓39'10	1.71903 AU
	2085 Mar 17 05:35	0°♈	
	2085 Apr 10 09:19	0°♉	
evening rise	2085 Apr 15 01:42	5°♉47'27	
asc. node	2085 May 02 07:53	27°♉03'55	
	2085 May 04 17:13	0°♊	
	2085 May 29 05:45	0°♋	
	2085 Jun 22 23:39	0°♌	
	2085 Jul 18 00:47	0°♍	
	2085 Aug 12 13:09	0°♎	
desc. node	2085 Aug 21 20:59	10°♎45'58	
	2085 Sep 07 20:56	0°♏	
	2085 Oct 05 22:06	0°♐	

evening max el	2085 Oct 10 09:05	4°♐26'52	46°46'12
	2085 Nov 10 00:42	0°♑	
greatest brilliancy	2085 Nov 19 20:33	4°♑47'58	-4.9m
retrograde	2085 Nov 29 13:45	6°♑35'26	
asc. node	2085 Dec 13 00:27	2°♑58'44	
evening set	2085 Dec 13 20:42	2°♑32'30	
	2085 Dec 18 07:29	30°℞♐	
inferior conj	2085 Dec 20 02:45	28°♐54'28	1°50'19
minimum elong	2085 Dec 19 22:35	29°♐00'48	1°48'59
min. Earth dist.	2085 Dec 19 21:35	29°♐02'20	0.26433 AU
morning rise	2085 Dec 26 00:27	25°♐27'26	
direct	2086 Jan 09 11:05	21°♐16'56	
greatest brilliancy	2086 Jan 19 10:13	23°♐10'10	-4.9m
	2086 Feb 01 05:15	0°♑	
morning max el	2086 Feb 28 19:06	23°♑57'23	46°46'07
	2086 Mar 06 17:36	0°♒	
	2086 Apr 03 06:55	0°♓	
desc. node	2086 Apr 03 13:57	0°♓19'51	
	2086 Apr 29 08:36	0°♈	
	2086 May 24 19:34	0°♉	
	2086 Jun 18 22:36	0°♊	
	2086 Jul 13 19:29	0°♋	
asc. node	2086 Jul 25 17:15	14°♋28'24	
	2086 Aug 07 10:09	0°♌	
morning set	2086 Aug 27 19:26	25°♌05'22	
	2086 Aug 31 18:45	0°♍	
	2086 Sep 24 22:24	0°♎	
max. Earth dist.	2086 Sep 30 18:09	7°♎15'36	1.72112 AU
superior conj	2086 Oct 03 19:23	11°♎04'06	1°18'10
minimum elong	2086 Oct 04 02:32	11°♎26'24	1°18'02
	2086 Oct 18 22:59	0°♏	
evening rise	2086 Nov 11 21:15	29°♏57'01	
	2086 Nov 11 22:13	0°♐	
desc. node	2086 Nov 14 06:52	2°♐57'25	
	2086 Dec 05 21:09	0°♑	
	2086 Dec 29 20:46	0°♒	
	2087 Jan 22 22:52	0°♓	
	2087 Feb 16 06:59	0°♈	
asc. node	2087 Mar 07 10:01	23°♈11'01	
	2087 Mar 13 02:46	0°♉	
	2087 Apr 07 19:30	0°♊	
	2087 May 05 06:04	0°♋	
evening max el	2087 May 16 16:37	11°♋28'09	45°28'58
	2087 Jun 07 05:22	0°♌	
greatest brilliancy	2087 Jun 23 12:44	9°♌13'48	-4.7m
desc. node	2087 Jun 26 23:25	10°♌19'26	
retrograde	2087 Jul 04 08:45	11°♌19'45	
evening set	2087 Jul 20 06:39	6°♌28'58	
inferior conj	2087 Jul 25 19:47	3°♌08'06	-6°06'43
minimum elong	2087 Jul 25 09:52	3°♌23'32	6°04'40
min. Earth dist.	2087 Jul 25 18:35	3°♌09'58	0.28996 AU
morning rise	2087 Jul 30 13:03	0°♌15'34	
	2087 Jul 30 23:51	30°℞♋	
direct	2087 Aug 16 11:36	24°♋50'42	
greatest brilliancy	2087 Aug 27 00:48	26°♋51'47	-4.8m
	2087 Sep 02 21:15	0°♌	
morning max el	2087 Oct 04 23:49	25°♌48'17	46°12'16
	2087 Oct 09 04:44	0°♍	
asc. node	2087 Oct 18 02:49	9°♍16'34	
	2087 Nov 05 20:18	0°♎	
	2087 Dec 01 09:38	0°♏	
	2087 Dec 26 02:00	0°♐	
	2088 Jan 19 09:18	0°♑	
desc. node	2088 Feb 06 16:10	22°♑41'57	
	2088 Feb 12 13:09	0°♒	
	2088 Mar 07 16:19	0°♓	
	2088 Mar 31 20:27	0°♈	
morning set	2088 Apr 09 13:15	10°♈46'24	
	2088 Apr 25 02:28	0°♉	
superior conj	2088 May 17 09:02	27°♉27'27	-0°29'05
minimum elong	2088 May 17 15:01	27°♉45'53	0°28'48
max. Earth dist.	2088 May 19 01:16	29°♉31'18	1.73335 AU
	2088 May 19 10:36	0°♊	
asc. node	2088 May 29 19:43	12°♊46'10	
	2088 Jun 12 20:18	0°♋	
evening rise	2088 Jun 23 03:14	12°♋38'04	
	2088 Jul 07 06:58	0°♌	
	2088 Jul 31 18:45	0°♍	
	2088 Aug 25 08:42	0°♎	
desc. node	2088 Sep 18 09:02	29°♎07'31	
	2088 Sep 19 02:25	0°♏	
	2088 Oct 14 01:56	0°♐	
	2088 Nov 08 11:21	0°♑	
	2088 Dec 04 18:51	0°♒	
evening max el	2088 Dec 22 01:58	18°♒27'08	47°17'25
	2089 Jan 02 22:26	0°♓	
asc. node	2089 Jan 09 12:14	5°♓49'07	
greatest brilliancy	2089 Jan 31 14:08	20°♓04'11	-4.9m
retrograde	2089 Feb 11 00:12	22°♓07'58	
evening set	2089 Feb 28 21:16	15°♓54'18	
min. Earth dist.	2089 Mar 03 05:23	14°♓27'08	0.27669 AU
inferior conj	2089 Mar 03 21:26	14°♓01'58	8°50'15
minimum elong	2089 Mar 03 20:37	14°♓03'16	8°50'14
morning rise	2089 Mar 06 20:11	12°♓12'25	
direct	2089 Mar 24 16:40	6°♓07'23	
greatest brilliancy	2089 Apr 02 17:05	7°♓39'07	-4.8m
desc. node	2089 May 01 01:41	25°♓58'40	
	2089 May 05 14:07	0°♈	
morning max el	2089 May 12 23:57	6°♈58'16	46°02'27
	2089 Jun 04 10:20	0°♉	
	2089 Jul 01 11:46	0°♊	
	2089 Jul 27 10:01	0°♋	
	2089 Aug 21 15:16	0°♌	
asc. node	2089 Aug 22 05:08	0°♌41'43	
	2089 Sep 15 07:36	0°♍	
	2089 Oct 09 14:23	0°♎	
	2089 Nov 02 15:00	0°♏	
morning set	2089 Nov 06 14:51	5°♏00'25	
	2089 Nov 26 12:27	0°♐	
desc. node	2089 Dec 11 18:37	19°♐11'39	
superior conj	2089 Dec 16 23:45	25°♐45'16	-0°12'29
minimum elong	2089 Dec 16 20:27	25°♐34'53	0°12'19
behind sun begin	2089 Dec 16 02:54	24°♐39'41	
behind sun end	2089 Dec 17 13:59	26°♐30'04	
max. Earth dist.	2089 Dec 17 00:40	25°♐48'10	1.71080 AU
	2089 Dec 20 08:43	0°♑	
	2090 Jan 13 05:06	0°♒	
evening rise	2090 Jan 27 10:38	17°♒52'14	
	2090 Feb 06 02:51	0°♓	
	2090 Mar 02 03:49	0°♈	
	2090 Mar 26 10:17	0°♉	
asc. node	2090 Apr 03 22:03	10°♉24'21	
	2090 Apr 20 00:51	0°♊	
	2090 May 15 02:51	0°♋	
	2090 Jun 09 22:20	0°♌	
	2090 Jul 07 02:10	0°♍	
desc. node	2090 Jul 24 11:11	17°♍43'20	
evening max el	2090 Jul 26 20:49	20°♍02'11	45°38'35
	2090 Aug 06 19:19	0°♎	
greatest brilliancy	2090 Sep 04 12:22	18°♎19'32	-4.8m
retrograde	2090 Sep 13 15:54	19°♎50'49	

evening set	2090 Oct 01	05:20	14°♎06'58		
inferior conj	2090 Oct 04	17:23	11°♎59'42	-8°04'40	
minimum elong	2090 Oct 05	01:02	11°♎47'55	8°03'45	
min. Earth dist.	2090 Oct 05	15:31	11°♎25'37	0.27832 AU	
morning rise	2090 Oct 08	20:22	9°♎29'36		
direct	2090 Oct 25	19:51	3°♎57'49		
greatest brilliancy	2090 Nov 06	00:40	6°♎17'20	-4.9m	
asc. node	2090 Nov 14	14:36	10°♎42'04		
	2090 Dec 08	06:22	0°♏		
morning max el	2090 Dec 15	11:04	7°♏07'58	46°52'37	
	2091 Jan 05	16:44	0°♐		
	2091 Jan 31	15:19	0°♑		
	2091 Feb 25	17:23	0°♒		
desc. node	2091 Mar 06	04:09	10°♒12'41		
	2091 Mar 22	11:12	0°♓		
	2091 Apr 16	01:46	0°♈		
	2091 May 10	15:20	0°♉		
	2091 Jun 04	04:26	0°♊		
morning set	2091 Jun 18	16:00	17°♊43'27		
asc. node	2091 Jun 27	07:29	28°♊19'07		
	2091 Jun 28	16:24	0°♋		
max. Earth dist.	2091 Jul 22	16:57	29°♋31'08	1.73420 AU	
	2091 Jul 23	02:19	0°♌		
superior conj	2091 Jul 25	02:58	2°♌29'46	0°59'43	
minimum elong	2091 Jul 24	18:11	2°♌02'44	0°59'24	
	2091 Aug 16	09:54	0°♍		
evening rise	2091 Aug 30	01:58	16°♍54'23		
	2091 Sep 09	15:50	0°♎		
	2091 Oct 03	21:18	0°♏		
desc. node	2091 Oct 16	20:59	16°♏04'20		
	2091 Oct 28	03:21	0°♐		
	2091 Nov 21	10:52	0°♑		
	2091 Dec 15	21:50	0°♒		
	2092 Jan 09	17:21	0°♓		
	2092 Feb 04	09:13	0°♈		
asc. node	2092 Feb 07	00:09	2°♈58'16		
	2092 Mar 03	04:40	0°♉		
evening max el	2092 Mar 03	13:37	0°♉22'25	46°26'19	
	2092 Apr 11	05:25	0°♊		
greatest brilliancy	2092 Apr 11	17:05	0°♊11'18	-4.8m	
retrograde	2092 Apr 22	11:12	2°♊20'04		
	2092 May 03	05:51	30°℞♉		
evening set	2092 May 08	04:16	27°♉31'53		
inferior conj	2092 May 13	20:19	24°♉05'04	3°24'41	
minimum elong	2092 May 14	03:17	23°♉54'06	3°22'46	
min. Earth dist.	2092 May 13	21:04	24°♉03'52	0.28695 AU	
morning rise	2092 May 20	02:31	20°♉18'24		
desc. node	2092 May 28	13:28	16°♉44'56		
direct	2092 Jun 04	05:41	15°♉51'45		
greatest brilliancy	2092 Jun 14	09:10	17°♉42'43	-4.7m	
	2092 Jul 05	04:20	0°♊		
morning max el	2092 Jul 22	22:49	15°♊30'59	45°43'38	
	2092 Aug 06	11:05	0°♋		
	2092 Sep 02	23:32	0°♌		
asc. node	2092 Sep 18	17:09	18°♌07'51		
	2092 Sep 28	18:37	0°♍		
	2092 Oct 23	15:06	0°♎		
	2092 Nov 16	22:30	0°♏		
	2092 Dec 10	23:06	0°♐		
	2093 Jan 03	20:53	0°♑		
desc. node	2093 Jan 08	06:20	5°♑31'04		
morning set	2093 Jan 21	18:45	22°♑29'43		
	2093 Jan 27	18:10	0°♒		
	2093 Feb 20	16:21	0°♓		
superior conj	2093 Mar 04	00:38	14°♓11'37	-1°26'05	
minimum elong	2093 Mar 03	23:27	14°♓07'57	1°26'05	
max. Earth dist.	2093 Mar 07	21:56	19°♓03'01	1.71848 AU	
	2093 Mar 16	16:40	0°♈		
	2093 Apr 09	20:21	0°♉		
evening rise	2093 Apr 12	16:10	3°♉29'43		
asc. node	2093 May 01	09:55	26°♉36'04		
	2093 May 04	04:19	0°♊		
	2093 May 28	17:05	0°♋		
	2093 Jun 22	11:25	0°♌		
	2093 Jul 17	13:17	0°♍		
	2093 Aug 12	02:56	0°♎		
desc. node	2093 Aug 20	23:06	10°♎10'30		
	2093 Sep 07	13:13	0°♏		
	2093 Oct 05	20:38	0°♐		
evening max el	2093 Oct 07	23:00	2°♐04'32	46°44'02	
	2093 Nov 12	00:04	0°♑		
greatest brilliancy	2093 Nov 17	08:55	2°♑18'18	-4.9m	
retrograde	2093 Nov 27	02:29	4°♑05'38		
evening set	2093 Dec 11	08:42	0°♑02'58		
	2093 Dec 11	10:57	30°℞♐		
asc. node	2093 Dec 12	02:24	29°♐39'09		
inferior conj	2093 Dec 17	14:50	26°♐24'48	1°25'57	
minimum elong	2093 Dec 17	11:34	26°♐29'46	1°24'53	
min. Earth dist.	2093 Dec 17	10:44	26°♐31'01	0.26432 AU	
morning rise	2093 Dec 23	14:26	22°♐55'40		
direct	2094 Jan 06	23:58	18°♐47'14		
greatest brilliancy	2094 Jan 16	23:31	20°♐41'25	-4.9m	
	2094 Feb 02	05:16	0°♑		
morning max el	2094 Feb 26	09:22	21°♑34'29	46°47'17	
	2094 Mar 06	14:35	0°♒		
desc. node	2094 Apr 02	16:01	29°♒40'55		
	2094 Apr 02	22:45	0°♓		
	2094 Apr 28	22:15	0°♈		
	2094 May 24	08:01	0°♉		
	2094 Jun 18	10:21	0°♊		
	2094 Jul 13	06:49	0°♋		
asc. node	2094 Jul 24	19:21	14°♋00'42		
	2094 Aug 06	21:16	0°♌		
morning set	2094 Aug 25	12:36	22°♌56'08		
	2094 Aug 31	05:46	0°♍		
	2094 Sep 24	09:26	0°♎		
max. Earth dist.	2094 Sep 28	07:39	4°♎53'34	1.72162 AU	
superior conj	2094 Oct 01	10:52	8°♎48'06	1°19'27	
minimum elong	2094 Oct 01	17:25	9°♎08'30	1°19'20	
	2094 Oct 18	10:06	0°♏		
evening rise	2094 Nov 09	09:20	27°♏29'19		
	2094 Nov 11	09:28	0°♐		
desc. node	2094 Nov 13	08:50	2°♐28'16		
	2094 Dec 05	08:34	0°♑		
	2094 Dec 29	08:22	0°♒		
	2095 Jan 22	10:44	0°♓		
	2095 Feb 15	19:17	0°♈		
asc. node	2095 Mar 06	12:08	22°♈38'44		
	2095 Mar 12	15:53	0°♉		
	2095 Apr 07	10:16	0°♊		
	2095 May 05	01:04	0°♋		
evening max el	2095 May 14	09:10	9°♋18'36	45°29'59	
	2095 Jun 07	23:27	0°♌		
greatest brilliancy	2095 Jun 21	04:23	7°♌04'13	-4.7m	
desc. node	2095 Jun 26	01:23	8°♌30'32		
retrograde	2095 Jul 02	00:53	9°♌10'19		
evening set	2095 Jul 17	20:26	4°♌23'18		
inferior conj	2095 Jul 23	12:03	0°♌58'30	-5°52'28	
minimum elong	2095 Jul 23	02:13	1°♌13'51	5°50'21	
min. Earth dist.	2095 Jul 23	10:18	1°♌01'14	0.29002 AU	
	2095 Jul 25	01:35	30°℞♋		

morning rise	2095 Jul 28 07:59	28°♋01'51	
direct	2095 Aug 14 04:19	22°♋41'16	
greatest brilliancy	2095 Aug 24 15:58	24°♋40'43	-4.7m
	2095 Sep 04 06:40	0°♌	
morning max el	2095 Oct 02 14:42	23°♌32'41	46°10'35
	2095 Oct 09 01:03	0°♍	
asc. node	2095 Oct 17 04:53	8°♍33'25	
	2095 Nov 05 11:41	0°♎	
	2095 Nov 30 23:10	0°♏	
	2095 Dec 25 14:38	0°♐	
	2096 Jan 18 21:23	0°♑	
desc. node	2096 Feb 05 18:21	22°♑12'12	
	2096 Feb 12 00:50	0°♒	
	2096 Mar 07 03:43	0°♓	
	2096 Mar 31 07:37	0°♈	
morning set	2096 Apr 07 03:50	8°♈28'37	
	2096 Apr 24 13:30	0°♉	
superior conj	2096 May 15 01:42	25°♉17'19	-0°32'12
minimum elong	2096 May 15 08:15	25°♉37'30	0°31'53
max. Earth dist.	2096 May 16 22:45	27°♉36'02	1.73299 AU
	2096 May 18 21:32	0°♊	
asc. node	2096 May 28 21:42	12°♊18'45	
	2096 Jun 12 07:12	0°♋	
evening rise	2096 Jun 20 21:51	10°♋34'18	
	2096 Jul 06 17:58	0°♌	
	2096 Jul 31 06:00	0°♍	
	2096 Aug 24 20:23	0°♎	
desc. node	2096 Sep 17 11:07	28°♎36'35	
	2096 Sep 18 14:46	0°♏	
	2096 Oct 13 15:17	0°♐	
	2096 Nov 08 02:20	0°♑	
	2096 Dec 04 13:11	0°♒	
evening max el	2096 Dec 19 16:08	16°♒03'01	47°17'47
	2097 Jan 03 04:03	0°♓	
asc. node	2097 Jan 08 14:23	4°♓40'16	
greatest brilliancy	2097 Jan 29 05:31	17°♓42'16	-4.9m
retrograde	2097 Feb 08 14:20	19°♓44'56	
evening set	2097 Feb 26 10:11	13°♓34'14	
inferior conj	2097 Mar 01 11:33	11°♓39'59	8°49'25
minimum elong	2097 Mar 01 09:51	11°♓42'39	8°49'23
min. Earth dist.	2097 Feb 28 19:00	12°♓05'58	0.27612 AU
morning rise	2097 Mar 04 09:45	9°♓51'08	
direct	2097 Mar 22 05:56	3°♓46'29	
greatest brilliancy	2097 Mar 31 06:17	5°♓17'48	-4.8m
desc. node	2097 Apr 30 03:43	24°♓58'40	
	2097 May 05 16:16	0°♈	
morning max el	2097 May 10 12:58	4°♈37'35	46°03'48
	2097 Jun 04 03:17	0°♉	
	2097 Jul 01 01:42	0°♊	
	2097 Jul 26 22:30	0°♋	
asc. node	2097 Aug 21 07:17	0°♌13'00	
	2097 Aug 21 02:58	0°♌	
	2097 Sep 14 18:54	0°♍	
	2097 Oct 09 01:30	0°♎	
	2097 Nov 02 02:05	0°♏	
morning set	2097 Nov 04 04:12	2°♏37'03	
	2097 Nov 25 23:33	0°♐	
desc. node	2097 Dec 10 20:38	18°♐43'00	
superior conj	2097 Dec 14 09:54	23°♐11'15	-0°08'31
minimum elong	2097 Dec 14 07:39	23°♐04'08	0°08'25
behind sun begin	2097 Dec 13 08:51	21°♐52'25	
behind sun end	2097 Dec 15 06:27	24°♐15'53	
max. Earth dist.	2097 Dec 14 03:16	22°♐50'21	1.71094 AU
	2097 Dec 19 19:51	0°♑	
	2098 Jan 12 16:16	0°♒	
evening rise	2098 Jan 24 20:33	15°♒17'39	
	2098 Feb 05 14:04	0°♓	
	2098 Mar 01 15:06	0°♈	
	2098 Mar 25 21:44	0°♉	
asc. node	2098 Apr 03 00:04	9°♉55'12	
	2098 Apr 19 12:40	0°♊	
	2098 May 14 15:25	0°♋	
	2098 Jun 09 12:26	0°♌	
	2098 Jul 06 19:45	0°♍	
desc. node	2098 Jul 23 13:22	16°♍54'35	
evening max el	2098 Jul 24 10:03	17°♍44'08	45°37'10
	2098 Aug 07 01:47	0°♎	
greatest brilliancy	2098 Sep 02 01:19	16°♎01'40	-4.8m
retrograde	2098 Sep 11 05:35	17°♎33'49	
evening set	2098 Sep 28 21:39	11°♎45'48	
inferior conj	2098 Oct 02 07:40	9°♎41'40	-8°12'21
minimum elong	2098 Oct 02 14:42	9°♎30'51	8°11'35
min. Earth dist.	2098 Oct 03 05:36	9°♎07'56	0.27901 AU
morning rise	2098 Oct 06 07:24	7°♎16'26	
direct	2098 Oct 23 10:25	1°♎38'32	
greatest brilliancy	2098 Nov 03 16:11	3°♎58'51	-4.9m
asc. node	2098 Nov 13 16:33	9°♎17'58	
	2098 Dec 08 07:11	0°♏	
morning max el	2098 Dec 13 01:33	4°♏45'58	46°51'43
	2099 Jan 05 09:40	0°♐	
	2099 Jan 31 05:36	0°♑	
	2099 Feb 25 06:22	0°♒	
desc. node	2099 Mar 05 06:12	9°♒40'34	
	2099 Mar 21 23:21	0°♓	
	2099 Apr 15 13:22	0°♈	
	2099 May 10 02:31	0°♉	
	2099 Jun 03 15:18	0°♊	
morning set	2099 Jun 16 09:53	15°♊38'10	
asc. node	2099 Jun 26 09:35	27°♊52'39	
	2099 Jun 28 03:07	0°♋	
max. Earth dist.	2099 Jul 20 14:43	27°♋37'32	1.73446 AU
superior conj	2099 Jul 22 21:24	0°♌25'50	0°57'27
minimum elong	2099 Jul 22 12:38	29°♋58'52	0°57'08
	2099 Jul 22 13:00	0°♌	
	2099 Aug 15 20:39	0°♍	
evening rise	2099 Aug 27 19:40	14°♍47'18	
	2099 Sep 09 02:43	0°♎	
	2099 Oct 03 08:25	0°♏	
desc. node	2099 Oct 15 22:59	15°♏35'33	
	2099 Oct 27 14:48	0°♐	
	2099 Nov 20 22:47	0°♑	
	2099 Dec 15 10:25	0°♒	
	2100 Jan 09 07:00	0°♓	
	2100 Feb 04 01:02	0°♈	
asc. node	2100 Feb 06 02:14	2°♈18'45	
evening max el	2100 Mar 02 04:38	28°♈05'52	46°28'48
	2100 Mar 04 02:36	0°♉	
greatest brilliancy	2100 Apr 10 09:20	27°♉59'39	-4.8m
	2100 Apr 18 09:39	0°♊	
retrograde	2100 Apr 21 04:04	0°♊09'05	
	2100 Apr 23 21:36	30°℞♉	
evening set	2100 May 06 22:35	25°♉17'25	
inferior conj	2100 May 12 12:23	21°♉53'54	3°43'17
minimum elong	2100 May 12 19:52	21°♉42'07	3°41'16
min. Earth dist.	2100 May 12 12:58	21°♉52'58	0.28675 AU
morning rise	2100 May 18 17:25	18°♉09'14	
desc. node	2100 May 28 15:28	14°♉13'46	
direct	2100 Jun 02 21:22	13°♉40'50	
greatest brilliancy	2100 Jun 13 00:15	15°♉31'44	-4.7m
	2100 Jul 06 13:37	0°♊	
morning max el	2100 Jul 21 15:32	13°♊23'20	45°43'30

	2100 Aug 07 04:52	0°♋	
	2100 Sep 03 13:37	0°♌	
asc. node	2100 Sep 18 19:04	17°♌35'26	
	2100 Sep 29 07:10	0°♍	
	2100 Oct 24 02:52	0°♎	
	2100 Nov 17 09:52	0°♏	
	2100 Dec 11 10:14	0°♐	
	2101 Jan 04 07:54	0°♑	
desc. node	2101 Jan 08 08:31	5°♑03'28	
morning set	2101 Jan 20 04:41	19°♑55'50	
	2101 Jan 28 05:06	0°♒	
	2101 Feb 21 03:12	0°♓	
superior conj	2101 Mar 02 12:28	11°♓44'45	-1°25'49
minimum elong	2101 Mar 02 10:16	11°♓37'52	1°25'49
max. Earth dist.	2101 Mar 06 08:17	16°♓31'36	1.71801 AU
	2101 Mar 17 03:28	0°♈	
	2101 Apr 10 07:09	0°♉	
evening rise	2101 Apr 11 06:15	1°♉11'28	
asc. node	2101 May 01 11:54	26°♉08'48	
	2101 May 04 15:11	0°♊	
	2101 May 29 04:09	0°♋	
	2101 Jun 22 22:53	0°♌	
	2101 Jul 18 01:29	0°♍	
	2101 Aug 12 16:29	0°♎	
desc. node	2101 Aug 21 01:09	9°♎35'44	
	2101 Sep 08 05:24	0°♏	
evening max el	2101 Oct 06 13:40	29°♏45'20	46°41'47
	2101 Oct 06 19:39	0°♐	
greatest brilliancy	2101 Nov 15 21:41	29°♐50'49	-4.9m
	2101 Nov 16 08:25	0°♑	
retrograde	2101 Nov 25 15:16	1°♑37'25	
	2101 Dec 04 12:48	30°℞♐	
evening set	2101 Dec 09 21:08	27°♐35'06	
asc. node	2101 Dec 12 04:30	26°♐18'15	
inferior conj	2101 Dec 16 03:02	23°♐56'58	1°01'28
minimum elong	2101 Dec 16 00:41	24°♐00'33	1°00'42
min. Earth dist.	2101 Dec 16 00:07	24°♐01'24	0.26432 AU
morning rise	2101 Dec 22 04:17	20°♐25'47	
direct	2102 Jan 05 12:56	16°♐19'33	