superior conj	2000 Jan 16 01:19	25°♑12'16	-1°59'58
minimum elong	2000 Jan 15 21:09	24°♑55'01	1°59'47
	2000 Jan 18 22:20	0°♒	
evening rise	2000 Jan 28 13:52	16°♒34'14	
	2000 Feb 05 08:09	0°♓	
asc. node	2000 Feb 11 02:32	9°♓00'00	
evening max el	2000 Feb 15 01:15	13°♓46'50	18°08'55
retrograde	2000 Feb 21 12:46	17°♓10'42	
evening set	2000 Feb 24 08:26	16°♓31'03	
inferior conj	2000 Mar 01 15:11	11°♓20'33	3°41'46
minimum elong	2000 Mar 01 15:53	11°♓18'43	3°41'44
min. Earth dist.	2000 Mar 04 11:16	8°♓23'59	0.62420 AU
morning rise	2000 Mar 07 22:09	5°♓21'02	
direct	2000 Mar 14 20:39	2°♓46'44	
desc. node	2000 Mar 20 09:37	4°♓12'34	
morning max el	2000 Mar 28 21:13	10°♓42'02	27°49'30
	2000 Apr 13 00:17	0°♈	
	2000 Apr 30 03:53	0°♉	
morning set	2000 May 01 15:21	2°♉58'00	
max. Earth dist.	2000 May 07 05:42	14°♉40'49	1.32608 AU
superior conj	2000 May 09 03:50	18°♉49'54	0°00'54
minimum elong	2000 May 09 03:47	18°♉49'39	0°00'53
behind sun begin	2000 May 08 22:37	18°♉21'38	
behind sun end	2000 May 09 08:57	19°♉17'43	
asc. node	2000 May 09 01:49	18°♉39'00	
	2000 May 14 07:10	0°♊	
evening rise	2000 May 16 02:46	3°♊53'07	
	2000 May 30 04:27	0°♋	
evening max el	2000 Jun 09 13:32	13°♋01'28	24°02'57
desc. node	2000 Jun 16 08:52	18°♋07'07	
retrograde	2000 Jun 23 08:32	19°♋57'43	
evening set	2000 Jun 27 19:19	19°♋13'55	
min. Earth dist.	2000 Jul 04 00:16	16°♋13'13	0.56391 AU
inferior conj	2000 Jul 06 11:35	14°♋41'46	-4°39'54
minimum elong	2000 Jul 06 06:35	14°♋49'31	4°39'15
morning rise	2000 Jul 14 20:30	10°♋42'12	
direct	2000 Jul 17 13:20	10°♋23'11	
morning max el	2000 Jul 27 09:17	14°♋56'50	19°47'52
asc. node	2000 Aug 05 01:02	26°♋14'25	
	2000 Aug 07 05:42	0°♌	
morning set	2000 Aug 14 04:16	13°♌20'50	
superior conj	2000 Aug 22 01:05	29°♌14'55	1°45'38
minimum elong	2000 Aug 22 01:26	29°♌16'35	1°45'38
	2000 Aug 22 10:11	0°♍	
max. Earth dist.	2000 Aug 27 19:55	10°♍26'24	1.37241 AU
evening rise	2000 Aug 31 15:07	17°♍25'24	
	2000 Sep 07 22:22	0°♎	
desc. node	2000 Sep 12 08:11	7°♎05'13	
	2000 Sep 28 13:28	0°♏	
evening max el	2000 Oct 06 10:19	8°♏49'40	25°30'51
retrograde	2000 Oct 18 13:41	15°♏47'57	
evening set	2000 Oct 24 12:40	13°♏18'23	
min. Earth dist.	2000 Oct 28 22:06	8°♏27'42	0.67052 AU
inferior conj	2000 Oct 30 02:09	6°♏57'33	-0°39'41
minimum elong	2000 Oct 30 03:10	6°♏54'16	0°39'15
asc. node	2000 Nov 01 00:16	4°♏33'32	
morning rise	2000 Nov 04 17:55	1°♏01'25	
	2000 Nov 07 07:28	30°℞♎	
direct	2000 Nov 08 02:28	29°♎56'26	
	2000 Nov 08 21:42	0°♏	
morning max el	2000 Nov 15 05:22	3°♏56'43	19°20'25
greatest brilliancy	2000 Nov 29 02:12	22°♏42'41	-0.7m
	2000 Dec 03 20:26	0°♐	
morning set	2000 Dec 09 00:59	8°♐01'52	
desc. node	2000 Dec 09 07:27	8°♐26'59	
max. Earth dist.	2000 Dec 22 13:05	29°♐08'43	1.44674 AU
	2000 Dec 23 02:03	0°♑	
superior conj	2000 Dec 25 19:23	4°♑19'15	-1°36'44
minimum elong	2000 Dec 25 10:50	3°♑45'11	1°35'58
evening rise	2001 Jan 09 04:34	27°♑43'31	
	2001 Jan 10 13:26	0°♒	
asc. node	2001 Jan 27 23:35	26°♒31'20	
evening max el	2001 Jan 28 13:38	27°♒08'07	18°25'53
	2001 Feb 01 07:13	0°♓	
retrograde	2001 Feb 04 01:58	0°♓41'41	
	2001 Feb 06 19:57	30°℞♒	
evening set	2001 Feb 07 02:54	29°♒50'53	
inferior conj	2001 Feb 13 00:17	24°♒21'18	3°40'48
minimum elong	2001 Feb 12 23:16	24°♒24'13	3°40'43
min. Earth dist.	2001 Feb 15 05:10	21°♒48'18	0.64268 AU
morning rise	2001 Feb 18 19:04	18°♒14'04	
direct	2001 Feb 25 15:41	15°♒24'37	
desc. node	2001 Mar 07 06:39	19°♒40'35	
morning max el	2001 Mar 11 06:10	23°♒16'39	27°27'46
	2001 Mar 17 06:05	0°♓	
	2001 Apr 06 07:14	0°♈	
morning set	2001 Apr 15 09:24	16°♈50'58	
max. Earth dist.	2001 Apr 20 06:49	26°♈44'55	1.33421 AU
	2001 Apr 21 20:08	0°♉	
superior conj	2001 Apr 23 09:24	3°♉17'09	-0°26'41
minimum elong	2001 Apr 23 10:44	3°♉24'13	0°26'23
asc. node	2001 Apr 25 22:53	8°♉45'39	
evening rise	2001 Apr 30 14:10	18°♉39'05	
	2001 May 06 04:53	0°♊	
evening max el	2001 May 22 04:33	23°♊30'12	22°26'44
desc. node	2001 Jun 03 05:52	29°♊55'40	
retrograde	2001 Jun 04 05:22	29°♊57'51	
evening set	2001 Jun 07 06:06	29°♊37'36	
min. Earth dist.	2001 Jun 15 11:40	26°♊03'52	0.55212 AU
inferior conj	2001 Jun 16 13:26	25°♊27'22	-3°34'14
minimum elong	2001 Jun 16 05:30	25°♊38'37	3°32'06
morning rise	2001 Jun 25 07:00	21°♊35'42	
direct	2001 Jun 28 05:49	21°♊15'55	
morning max el	2001 Jul 09 17:04	26°♊35'57	21°07'53
	2001 Jul 12 22:47	0°♋	
asc. node	2001 Jul 22 22:06	15°♋08'36	
morning set	2001 Jul 29 12:03	28°♋04'44	
	2001 Jul 30 10:18	0°♌	
superior conj	2001 Aug 05 21:51	13°♌31'21	1°43'19
minimum elong	2001 Aug 05 20:44	13°♌25'33	1°43'17
max. Earth dist.	2001 Aug 10 05:44	22°♌17'52	1.35456 AU
evening rise	2001 Aug 14 10:48	0°♍27'07	
	2001 Aug 14 05:04	0°♍	
desc. node	2001 Aug 30 05:12	27°♍16'51	
	2001 Sep 01 00:37	0°♎	
evening max el	2001 Sep 18 22:24	22°♎28'02	26°32'00
retrograde	2001 Oct 01 19:23	29°♎41'10	
evening set	2001 Oct 08 07:55	27°♎00'38	
min. Earth dist.	2001 Oct 12 10:00	22°♎46'22	0.66152 AU
inferior conj	2001 Oct 14 01:43	20°♎46'52	-1°37'47
minimum elong	2001 Oct 14 04:19	20°♎39'01	1°36'44
asc. node	2001 Oct 18 21:18	15°♎47'09	
morning rise	2001 Oct 20 01:16	15°♎01'32	
direct	2001 Oct 23 00:23	14°♎12'07	
morning max el	2001 Oct 29 16:30	17°♎52'03	18°33'55

	2001 Nov 07 19:53	0°♏	
morning set	2001 Nov 19 00:22	17°♏40'42	
desc. node	2001 Nov 26 04:29	29°♏05'00	
	2001 Nov 26 18:23	0°♐	
superior conj	2001 Dec 04 21:36	12°♐48'22	-0°56'08
minimum elong	2001 Dec 04 14:34	12°♐20'47	0°55'16
max. Earth dist.	2001 Dec 05 07:22	13°♐26'42	1.45145 AU
	2001 Dec 15 19:55	0°♑	
evening rise	2001 Dec 20 19:54	7°♑55'19	
greatest brilliancy	2001 Dec 29 16:47	21°♑59'39	-0.8m
	2002 Jan 03 21:38	0°♒	
evening max el	2002 Jan 11 23:44	10°♒35'00	19°00'41
asc. node	2002 Jan 14 20:37	13°♒03'31	
retrograde	2002 Jan 18 20:50	14°♒29'05	
evening set	2002 Jan 22 03:55	13°♒26'09	
inferior conj	2002 Jan 27 18:55	7°♒39'49	3°24'31
minimum elong	2002 Jan 27 16:48	7°♒46'29	3°24'10
min. Earth dist.	2002 Jan 29 08:27	5°♒41'50	0.65744 AU
morning rise	2002 Feb 02 05:22	1°♒28'23	
	2002 Feb 04 04:18	30°♑℞	
direct	2002 Feb 08 17:28	28°♑37'49	
	2002 Feb 13 17:20	0°♒	
morning max el	2002 Feb 21 16:08	6°♒15'47	26°35'20
desc. node	2002 Feb 22 03:42	6°♒45'13	
	2002 Mar 11 23:34	0°♓	
morning set	2002 Mar 29 16:08	0°♈06'33	
	2002 Mar 29 14:44	0°♈	
max. Earth dist.	2002 Apr 02 21:05	8°♈15'39	1.34683 AU
superior conj	2002 Apr 07 08:55	17°♈21'45	-0°54'38
minimum elong	2002 Apr 07 11:40	17°♈36'00	0°54'06
asc. node	2002 Apr 12 19:56	28°♈45'31	
	2002 Apr 13 10:10	0°♉	
evening rise	2002 Apr 14 23:16	3°♉13'02	
	2002 Apr 30 07:15	0°♊	
evening max el	2002 May 04 03:42	4°♊19'13	20°58'15
retrograde	2002 May 15 18:50	9°♊59'11	
evening set	2002 May 17 23:06	9°♊47'59	
desc. node	2002 May 21 02:54	8°♊55'25	
inferior conj	2002 May 27 07:09	5°♊49'53	-1°47'10
minimum elong	2002 May 27 02:08	5°♊57'00	1°45'23
min. Earth dist.	2002 May 28 00:02	5°♊25'57	0.54919 AU
morning rise	2002 Jun 05 05:01	1°♊46'34	
direct	2002 Jun 08 15:11	1°♊21'16	
morning max el	2002 Jun 21 14:30	7°♊33'36	22°43'51
	2002 Jul 07 10:35	0°♋	
asc. node	2002 Jul 09 19:09	4°♋30'36	
morning set	2002 Jul 13 22:41	12°♋57'24	
superior conj	2002 Jul 21 01:47	28°♋09'08	1°34'38
minimum elong	2002 Jul 20 23:45	27°♋58'20	1°34'27
	2002 Jul 21 22:41	0°♌	
max. Earth dist.	2002 Jul 24 00:16	4°♌20'10	1.34036 AU
evening rise	2002 Jul 28 20:56	14°♌11'05	
	2002 Aug 06 09:51	0°♍	
desc. node	2002 Aug 17 02:13	17°♍04'05	
	2002 Aug 26 21:10	0°♎	
evening max el	2002 Sep 01 10:24	5°♎55'54	27°12'40
retrograde	2002 Sep 14 19:38	13°♎14'39	
evening set	2002 Sep 21 18:53	10°♎30'51	
min. Earth dist.	2002 Sep 25 14:24	6°♎52'33	0.64894 AU
inferior conj	2002 Sep 27 18:31	4°♎28'25	-2°36'08
minimum elong	2002 Sep 27 22:40	4°♎16'57	2°34'37
	2002 Oct 02 09:26	30°♏℞	
morning rise	2002 Oct 04 03:22	28°♍56'52	
asc. node	2002 Oct 05 18:20	28°♍25'02	
direct	2002 Oct 06 19:26	28°♍19'12	
	2002 Oct 11 05:56	0°♎	
morning max el	2002 Oct 13 07:35	1°♎48'03	18°04'06
morning set	2002 Oct 31 04:55	28°♎45'51	
	2002 Oct 31 22:43	0°♏	
desc. node	2002 Nov 13 01:30	19°♏49'14	
superior conj	2002 Nov 14 04:40	21°♏37'50	-0°07'38
minimum elong	2002 Nov 14 03:43	21°♏34'03	0°07'29
behind sun begin	2002 Nov 13 18:09	20°♏55'53	
behind sun end	2002 Nov 14 13:16	22°♏12'09	
max. Earth dist.	2002 Nov 18 02:03	27°♏48'19	1.44873 AU
	2002 Nov 19 11:29	0°♐	
evening rise	2002 Nov 30 14:10	17°♐18'12	
	2002 Dec 08 20:21	0°♑	
greatest brilliancy	2002 Dec 14 04:59	8°♑05'32	-0.7m
evening max el	2002 Dec 26 05:38	24°♑04'26	19°51'46
asc. node	2003 Jan 01 17:38	28°♑21'53	
retrograde	2003 Jan 02 18:19	28°♑27'45	
evening set	2003 Jan 06 09:03	27°♑11'23	
inferior conj	2003 Jan 11 20:02	21°♑10'56	2°56'45
minimum elong	2003 Jan 11 17:27	21°♑19'35	2°56'06
min. Earth dist.	2003 Jan 12 19:29	19°♑52'58	0.66815 AU
morning rise	2003 Jan 17 01:36	14°♑57'45	
direct	2003 Jan 23 01:08	12°♑17'44	
morning max el	2003 Feb 04 01:04	19°♑26'59	25°20'59
desc. node	2003 Feb 09 00:44	24°♑58'43	
	2003 Feb 13 01:00	0°♒	
	2003 Mar 05 02:04	0°♓	
morning set	2003 Mar 12 06:50	12°♓31'10	
max. Earth dist.	2003 Mar 15 23:36	19°♓20'00	1.36388 AU
superior conj	2003 Mar 21 23:34	0°♈56'03	-1°21'18
minimum elong	2003 Mar 22 03:30	1°♈15'32	1°20'43
	2003 Mar 21 12:16	0°♈	
evening rise	2003 Mar 30 03:56	17°♈28'34	
asc. node	2003 Mar 30 16:57	18°♈34'16	
	2003 Apr 05 14:37	0°♉	
evening max el	2003 Apr 16 14:39	15°♉46'45	19°46'00
retrograde	2003 Apr 26 11:59	20°♉33'12	
evening set	2003 Apr 28 12:35	20°♉22'05	
inferior conj	2003 May 07 07:21	16°♉20'19	0°12'00
minimum elong	2003 May 07 07:52	16°♉19'29	0°11'48
transit middle	2003 May 07 07:52	16°♉19'29	0°11'48
transit begin	2003 May 07 05:13	16°♉23'37	
transit end	2003 May 07 10:32	16°♉15'22	
desc. node	2003 May 07 23:56	15°♉54'31	
min. Earth dist.	2003 May 09 14:05	14°♉55'40	0.55597 AU
morning rise	2003 May 16 00:44	11°♉48'12	
direct	2003 May 20 07:33	11°♉07'24	
morning max el	2003 Jun 03 05:41	18°♉04'38	24°25'48
	2003 Jun 13 01:34	0°♊	
asc. node	2003 Jun 26 16:12	24°♊13'09	
morning set	2003 Jun 28 10:29	27°♊53'45	
	2003 Jun 29 10:17	0°♋	
superior conj	2003 Jul 05 10:21	13°♋00'13	1°20'44
minimum elong	2003 Jul 05 07:57	12°♋47'12	1°20'23
max. Earth dist.	2003 Jul 07 03:39	16°♋43'37	1.33029 AU
evening rise	2003 Jul 12 17:34	28°♋26'03	
	2003 Jul 13 12:10	0°♌	
	2003 Jul 30 14:05	0°♍	
desc. node	2003 Aug 03 23:14	6°♍16'33	
evening max el	2003 Aug 14 20:57	19°♍01'51	27°25'59
retrograde	2003 Aug 28 13:41	26°♍19'25	
evening set	2003 Sep 04 18:24	23°♍43'17	
min. Earth dist.	2003 Sep 08 09:22	20°♍37'05	0.63291 AU

inferior conj	2003 Sep 11	01:57	17°♍56'16	-3°31'39	
minimum elong	2003 Sep 11	07:09	17°♍43'16	3°30'06	
morning rise	2003 Sep 17	21:12	12°♍41'42		
direct	2003 Sep 20	08:52	12°♍12'14		
asc. node	2003 Sep 22	15:23	12°♍37'21		
morning max el	2003 Sep 26	23:44	15°♍38'03	17°51'48	
	2003 Oct 07	01:28	0°♎		
morning set	2003 Oct 13	10:29	11°♎03'13		
	2003 Oct 24	11:20	0°♏		
superior conj	2003 Oct 25	09:58	1°♏34'14	0°36'59	
minimum elong	2003 Oct 25	13:33	1°♏49'06	0°36'29	
desc. node	2003 Oct 30	22:31	10°♏36'23		
max. Earth dist.	2003 Oct 31	18:43	11°♏57'37	1.43905 AU	
evening rise	2003 Nov 09	22:29	26°♏21'38		
	2003 Nov 12	07:19	0°♐		
	2003 Dec 02	21:34	0°♑		
evening max el	2003 Dec 09	06:11	7°♑34'57	20°56'29	
retrograde	2003 Dec 17	16:01	12°♑33'45		
asc. node	2003 Dec 19	14:38	12°♑12'43		
evening set	2003 Dec 21	16:17	11°♑02'18		
inferior conj	2003 Dec 27	01:11	4°♑50'45	2°20'04	
minimum elong	2003 Dec 26	22:39	4°♑59'27	2°19'15	
min. Earth dist.	2003 Dec 27	12:01	4°♑13'33	0.67498 AU	
	2003 Dec 30	19:52	30°℞♐		
morning rise	2004 Jan 01	04:50	28°♐37'40		
direct	2004 Jan 06	13:44	26°♐16'11		
	2004 Jan 14	11:02	0°♑		
morning max el	2004 Jan 17	09:21	2°♑43'08	23°54'45	
desc. node	2004 Jan 26	21:45	14°♑00'46		
	2004 Feb 07	04:20	0°♒		
morning set	2004 Feb 21	23:27	23°♒46'56		
	2004 Feb 25	12:58	0°♓		
max. Earth dist.	2004 Feb 25	19:01	0°♓26'50	1.38438 AU	
superior conj	2004 Mar 04	01:43	13°♓49'22	-1°44'21	
minimum elong	2004 Mar 04	05:58	14°♓09'33	1°43'56	
	2004 Mar 12	09:44	0°♈		
evening rise	2004 Mar 13	01:32	1°♈17'25		
asc. node	2004 Mar 16	13:59	8°♈06'03		
evening max el	2004 Mar 29	12:27	27°♈52'31	18°53'09	
	2004 Apr 01	02:27	0°♉		
retrograde	2004 Apr 06	20:27	1°♉55'30		
evening set	2004 Apr 09	01:42	1°♉39'26		
	2004 Apr 13	01:23	30°℞♈		
inferior conj	2004 Apr 17	01:05	27°♈21'45	1°51'46	
minimum elong	2004 Apr 17	04:49	27°♈15'02	1°50'37	
min. Earth dist.	2004 Apr 20	06:12	25°♈04'21	0.57091 AU	
desc. node	2004 Apr 23	20:57	22°♈52'40		
morning rise	2004 Apr 25	04:49	22°♈15'36		
direct	2004 Apr 30	13:05	21°♈06'59		
morning max el	2004 May 14	20:36	28°♈33'58	25°59'31	
	2004 May 16	06:54	0°♉		
	2004 Jun 05	12:47	0°♊		
morning set	2004 Jun 11	21:50	12°♊47'55		
asc. node	2004 Jun 12	13:15	14°♊09'28		
superior conj	2004 Jun 18	21:24	27°♊56'59	1°02'31	
minimum elong	2004 Jun 18	19:08	27°♊44'32	1°02'06	
max. Earth dist.	2004 Jun 19	13:22	29°♊24'33	1.32416 AU	
	2004 Jun 19	19:49	0°♋		
evening rise	2004 Jun 25	21:27	13°♋01'26		
	2004 Jul 04	14:52	0°♌		
desc. node	2004 Jul 20	20:16	24°♌39'40		
	2004 Jul 25	13:58	0°♍		
evening max el	2004 Jul 27	03:29	1°♍32'27	27°07'11	
retrograde	2004 Aug 10	00:33	8°♍46'28		
evening set	2004 Aug 17	02:27	6°♍30'51		
min. Earth dist.	2004 Aug 20	17:45	3°♍47'32	0.61394 AU	
inferior conj	2004 Aug 23	20:51	1°♍02'33	-4°19'27	
minimum elong	2004 Aug 24	01:56	0°♍51'18	4°18'25	
	2004 Aug 25	01:33	30°℞♌		
morning rise	2004 Aug 31	03:04	26°♌08'24		
direct	2004 Sep 02	13:09	25°♌44'10		
asc. node	2004 Sep 08	12:25	28°♌16'55		
morning max el	2004 Sep 09	14:01	29°♌15'04	17°58'07	
	2004 Sep 10	07:38	0°♍		
morning set	2004 Sep 25	10:45	24°♍14'21		
	2004 Sep 28	14:13	0°♎		
superior conj	2004 Oct 05	18:29	12°♎50'54	1°10'48	
minimum elong	2004 Oct 05	23:01	13°♎10'41	1°10'15	
max. Earth dist.	2004 Oct 13	07:18	25°♎39'22	1.42357 AU	
	2004 Oct 15	22:57	0°♏		
desc. node	2004 Oct 16	19:33	1°♏23'21		
evening rise	2004 Oct 19	13:53	5°♏48'23		
	2004 Nov 04	14:40	0°♐		
evening max el	2004 Nov 21	01:16	21°♐07'05	22°11'10	
retrograde	2004 Nov 30	12:17	26°♐44'38		
evening set	2004 Dec 04	23:56	24°♐56'41		
asc. node	2004 Dec 05	11:39	24°♐31'35		
inferior conj	2004 Dec 10	08:22	18°♐37'17	1°36'18	
minimum elong	2004 Dec 10	06:21	18°♐44'15	1°35'32	
min. Earth dist.	2004 Dec 10	07:47	18°♐39'16	0.67810 AU	
morning rise	2004 Dec 15	12:38	12°♐26'12		
direct	2004 Dec 20	06:29	10°♐27'07		
morning max el	2004 Dec 29	20:06	16°♐05'58	22°26'39	
	2005 Jan 10	04:09	0°♑		
desc. node	2005 Jan 12	18:47	3°♑37'58		
	2005 Jan 30	05:37	0°♒		
morning set	2005 Feb 01	12:17	3°♒41'05		
max. Earth dist.	2005 Feb 06	15:41	12°♒13'49	1.40595 AU	
superior conj	2005 Feb 14	10:50	25°♒50'54	-2°00'19	
minimum elong	2005 Feb 14	13:43	26°♒03'54	2°00'12	
	2005 Feb 16	17:46	0°♓		
evening rise	2005 Feb 24	13:01	14°♓32'41		
asc. node	2005 Mar 03	11:01	27°♓15'15		
	2005 Mar 05	01:34	0°♈		
evening max el	2005 Mar 12	18:20	10°♈30'13	18°20'24	
retrograde	2005 Mar 20	00:14	14°♈06'03		
evening set	2005 Mar 22	11:24	13°♈42'06		
inferior conj	2005 Mar 29	16:11	9°♈03'52	2°58'19	
minimum elong	2005 Mar 29	19:49	8°♈56'13	2°57'33	
min. Earth dist.	2005 Apr 02	02:36	6°♈12'00	0.59084 AU	
morning rise	2005 Apr 06	01:37	3°♈29'21		
desc. node	2005 Apr 10	17:59	1°♈51'21		
direct	2005 Apr 12	07:46	1°♈44'44		
morning max el	2005 Apr 26	16:24	9°♈29'18	27°09'43	
	2005 May 12	09:14	0°♉		
morning set	2005 May 27	07:04	27°♉34'28		
	2005 May 28	10:44	0°♊		
asc. node	2005 May 30	10:18	4°♊14'38		
superior conj	2005 Jun 03	09:12	12°♊53'29	0°40'44	
minimum elong	2005 Jun 03	07:30	12°♊44'11	0°40'23	
max. Earth dist.	2005 Jun 03	01:42	12°♊12'14	1.32184 AU	
evening rise	2005 Jun 10	06:03	27°♊48'59		
	2005 Jun 11	07:03	0°♋		
	2005 Jun 28	04:01	0°♌		
desc. node	2005 Jul 07	17:17	11°♌52'56		
evening max el	2005 Jul 09	03:20	13°♌17'02	26°15'23	
retrograde	2005 Jul 23	03:00	20°♌28'11		
evening set	2005 Jul 29	14:18	18°♌45'14		

min. Earth dist.	2005 Aug 02	16:09	16°♌09'13	0.59336 AU
inferior conj	2005 Aug 05	23:36	13°♌37'26	-4°51'31
minimum elong	2005 Aug 06	02:27	13°♌31'56	4°51'16
morning rise	2005 Aug 13	16:44	9°♌06'12	
direct	2005 Aug 16	03:51	8°♌45'10	
morning max el	2005 Aug 23	23:18	12°♌30'42	18°24'13
asc. node	2005 Aug 26	09:29	15°♌09'11	
	2005 Sep 04	17:52	0°♍	
morning set	2005 Sep 09	00:18	8°♍03'28	
superior conj	2005 Sep 18	02:38	25°♍17'15	1°32'32
minimum elong	2005 Sep 18	05:55	25°♍32'21	1°32'16
	2005 Sep 20	16:40	0°♎	
max. Earth dist.	2005 Sep 25	14:20	8°♎38'43	1.40428 AU
evening rise	2005 Sep 30	01:20	16°♎10'40	
desc. node	2005 Oct 03	16:36	22°♎06'11	
	2005 Oct 08	17:15	0°♏	
	2005 Oct 30	09:02	0°♐	
evening max el	2005 Nov 03	15:51	4°♐40'58	23°30'52
retrograde	2005 Nov 14	05:42	10°♐56'13	
evening set	2005 Nov 19	06:22	8°♐51'10	
asc. node	2005 Nov 22	08:43	5°♐31'30	
min. Earth dist.	2005 Nov 24	04:28	3°♐06'12	0.67775 AU
inferior conj	2005 Nov 24	15:43	2°♐27'43	0°46'49
minimum elong	2005 Nov 24	14:38	2°♐31'26	0°46'22
	2005 Nov 26	11:53	30°℞♏	
morning rise	2005 Nov 29	22:52	26°♏20'29	
direct	2005 Dec 04	02:24	24°♏44'17	
morning max el	2005 Dec 12	12:42	29°♏38'02	21°04'41
	2005 Dec 12	21:19	0°♐	
desc. node	2005 Dec 30	15:49	23°♐39'57	
	2006 Jan 03	21:26	0°♑	
morning set	2006 Jan 11	21:22	12°♑18'27	
max. Earth dist.	2006 Jan 19	18:38	24°♑54'58	1.42559 AU
	2006 Jan 22	20:41	0°♒	
superior conj	2006 Jan 26	21:34	6°♒47'40	-2°04'42
minimum elong	2006 Jan 26	20:34	6°♒43'24	2°04'41
evening rise	2006 Feb 07	10:28	27°♒05'17	
	2006 Feb 09	01:22	0°♓	
asc. node	2006 Feb 18	08:03	15°♓54'17	
evening max el	2006 Feb 24	05:04	23°♓31'00	18°07'32
retrograde	2006 Mar 02	20:29	26°♓55'28	
evening set	2006 Mar 05	13:02	26°♓22'00	
inferior conj	2006 Mar 12	02:44	21°♓23'03	3°33'19
minimum elong	2006 Mar 12	04:35	21°♓18'32	3°33'07
min. Earth dist.	2006 Mar 15	06:10	18°♓21'06	0.61227 AU
morning rise	2006 Mar 18	18:25	15°♓29'58	
direct	2006 Mar 25	13:42	13°♓10'52	
desc. node	2006 Mar 28	15:01	13°♓36'53	
morning max el	2006 Apr 08	18:39	21°♓05'10	27°45'49
	2006 Apr 16	12:20	0°♈	
	2006 May 05	08:28	0°♉	
morning set	2006 May 11	12:21	12°♉07'05	
asc. node	2006 May 17	07:22	24°♉24'08	
max. Earth dist.	2006 May 17	12:45	24°♉53'24	1.32332 AU
superior conj	2006 May 18	20:02	27°♉44'04	0°16'05
minimum elong	2006 May 18	19:18	27°♉40'02	0°15'56
	2006 May 19	20:52	0°♊	
evening rise	2006 May 25	17:14	12°♊41'31	
	2006 Jun 03	11:21	0°♋	
evening max el	2006 Jun 20	20:11	24°♋16'53	24°56'16
desc. node	2006 Jun 24	14:19	27°♋28'19	
	2006 Jun 28	19:57	0°♌	
retrograde	2006 Jul 04	19:33	1°♌22'26	
evening set	2006 Jul 10	02:39	0°♌18'23	
	2006 Jul 10	20:18	30°℞♋	
min. Earth dist.	2006 Jul 15	07:37	27°♋31'00	0.57357 AU
inferior conj	2006 Jul 18	07:07	25°♋32'16	-4°55'46
minimum elong	2006 Jul 18	05:16	25°♋35'23	4°55'41
morning rise	2006 Jul 26	10:33	21°♋23'03	
direct	2006 Jul 29	00:39	21°♋03'47	
morning max el	2006 Aug 07	00:32	25°♋16'10	19°11'11
	2006 Aug 11	04:09	0°♌	
asc. node	2006 Aug 13	06:34	2°♌59'20	
morning set	2006 Aug 23	23:11	22°♌20'17	
	2006 Aug 27	19:31	0°♍	
superior conj	2006 Sep 01	04:49	8°♍37'45	1°43'29
minimum elong	2006 Sep 01	06:12	8°♍44'25	1°43'26
max. Earth dist.	2006 Sep 07	17:55	20°♍55'35	1.38375 AU
evening rise	2006 Sep 11	12:59	27°♍40'55	
	2006 Sep 12	21:08	0°♎	
desc. node	2006 Sep 20	13:38	12°♎41'11	
	2006 Oct 02	04:38	0°♏	
evening max el	2006 Oct 17	04:08	18°♏18'36	24°49'14
retrograde	2006 Oct 28	19:16	25°♏04'41	
evening set	2006 Nov 03	09:55	22°♏43'23	
min. Earth dist.	2006 Nov 07	23:42	17°♏32'16	0.67409 AU
inferior conj	2006 Nov 08	21:31	16°♏20'06	-0°07'07
minimum elong	2006 Nov 08	21:41	16°♏19'31	0°07'03
transit middle	2006 Nov 08	21:41	16°♏19'31	0°07'03
transit begin	2006 Nov 08	19:12	16°♏27'45	
transit end	2006 Nov 09	00:10	16°♏11'18	
asc. node	2006 Nov 09	05:46	15°♏52'48	
morning rise	2006 Nov 14	09:35	10°♏19'03	
direct	2006 Nov 18	00:25	9°♏03'38	
morning max el	2006 Nov 25	12:57	13°♏20'49	19°54'16
	2006 Dec 08	05:52	0°♐	
desc. node	2006 Dec 17	12:52	13°♐59'51	
morning set	2006 Dec 21	17:19	20°♐26'02	
	2006 Dec 27	20:55	0°♑	
max. Earth dist.	2007 Jan 02	04:50	8°♑25'14	1.44075 AU
superior conj	2007 Jan 07	06:05	16°♑32'46	-1°52'30
minimum elong	2007 Jan 06	23:38	16°♑06'34	1°52'05
	2007 Jan 15	09:25	0°♒	
evening rise	2007 Jan 20	13:33	8°♒46'44	
	2007 Feb 02	09:20	0°♓	
asc. node	2007 Feb 05	05:05	3°♓53'48	
evening max el	2007 Feb 07	17:40	6°♓47'02	18°13'55
retrograde	2007 Feb 14	04:38	10°♓13'45	
evening set	2007 Feb 17	02:22	9°♓29'37	
inferior conj	2007 Feb 23	04:46	4°♓11'01	3°43'32
minimum elong	2007 Feb 23	04:40	4°♓11'16	3°43'31
min. Earth dist.	2007 Feb 25	18:42	1°♓22'11	0.63242 AU
	2007 Feb 27	03:00	30°℞♒	
morning rise	2007 Mar 01	06:01	28°♒07'29	
direct	2007 Mar 08	04:44	25°♒24'37	
desc. node	2007 Mar 15	12:03	27°♒53'43	
	2007 Mar 18	09:35	0°♓	
morning max el	2007 Mar 22	01:47	3°♓20'37	27°44'26
	2007 Apr 10	23:07	0°♈	
morning set	2007 Apr 25	11:18	26°♈17'18	
	2007 Apr 27	07:16	0°♉	
max. Earth dist.	2007 Apr 30	18:24	7°♉13'31	1.32893 AU
superior conj	2007 May 03	04:05	12°♉21'56	-0°10'40
minimum elong	2007 May 03	04:37	12°♉24'43	0°10'33
behind sun begin	2007 May 03	00:38	12°♉03'19	
behind sun end	2007 May 03	08:35	12°♉46'08	
asc. node	2007 May 04	04:24	14°♉33'06	
evening rise	2007 May 10	05:04	27°♉31'44	

	2007 May 11	09:17	0°♊	
	2007 May 29	00:56	0°♋	
evening max el	2007 Jun 02	09:57	4°♋49'01	23°21'57
desc. node	2007 Jun 11	11:20	10°♋49'35	
retrograde	2007 Jun 15	23:40	11°♋35'55	
evening set	2007 Jun 19	18:44	11°♋04'21	
min. Earth dist.	2007 Jun 26	19:56	7°♋50'55	0.55793 AU
inferior conj	2007 Jun 28	18:40	6°♋41'52	-4°18'07
minimum elong	2007 Jun 28	11:49	6°♋52'02	4°16'47
morning rise	2007 Jul 07	07:28	2°♋47'19	
direct	2007 Jul 10	02:15	2°♋28'24	
morning max el	2007 Jul 20	15:00	7°♋21'04	20°19'28
asc. node	2007 Jul 31	03:38	21°♋33'18	
	2007 Aug 04	17:15	0°♌	
morning set	2007 Aug 08	04:22	6°♌55'57	
superior conj	2007 Aug 15	19:56	22°♌36'54	1°45'31
minimum elong	2007 Aug 15	19:36	22°♌35'10	1°45'30
	2007 Aug 19	13:01	0°♍	
max. Earth dist.	2007 Aug 20	23:43	2°♍48'16	1.36445 AU
evening rise	2007 Aug 24	22:18	10°♍12'46	
	2007 Sep 05	12:02	0°♎	
desc. node	2007 Sep 07	10:40	3°♎02'59	
	2007 Sep 27	17:18	0°♏	
evening max el	2007 Sep 29	16:09	1°♏58'35	25°58'58
retrograde	2007 Oct 12	04:00	9°♏04'49	
evening set	2007 Oct 18	08:47	6°♏30'08	
min. Earth dist.	2007 Oct 22	15:05	1°♏54'32	0.66708 AU
inferior conj	2007 Oct 23	23:55	0°♏11'35	-1°04'10
minimum elong	2007 Oct 24	01:36	0°♏06'18	1°03'28
	2007 Oct 24	03:36	30°℞♎	
asc. node	2007 Oct 27	02:49	26°♎32'06	
morning rise	2007 Oct 29	18:46	24°♎19'25	
direct	2007 Nov 01	22:59	23°♎21'31	
morning max el	2007 Nov 08	20:31	27°♎12'16	18°58'34
	2007 Nov 11	08:41	0°♏	
morning set	2007 Dec 01	01:32	29°♏17'40	
	2007 Dec 01	12:21	0°♐	
desc. node	2007 Dec 04	09:54	4°♐32'30	
max. Earth dist.	2007 Dec 15	20:55	22°♐30'51	1.44961 AU
superior conj	2007 Dec 17	15:27	25°♐18'19	-1°21'15
minimum elong	2007 Dec 17	06:40	24°♐43'42	1°20'19
	2007 Dec 20	14:43	0°♑	
evening rise	2008 Jan 01	18:22	19°♑31'10	
	2008 Jan 08	04:46	0°♒	
evening max el	2008 Jan 22	05:25	20°♒11'57	18°38'41
asc. node	2008 Jan 23	02:07	21°♒02'11	
retrograde	2008 Jan 28	20:31	23°♒52'45	
evening set	2008 Jan 31	23:57	22°♒56'56	
inferior conj	2008 Feb 06	18:19	17°♒20'14	3°35'28
minimum elong	2008 Feb 06	16:45	17°♒24'56	3°35'18
min. Earth dist.	2008 Feb 08	16:40	15°♒01'01	0.64944 AU
morning rise	2008 Feb 12	09:07	11°♒11'05	
direct	2008 Feb 19	02:57	8°♒19'15	
desc. node	2008 Mar 01	09:04	14°♒06'51	
morning max el	2008 Mar 03	11:13	16°♒06'45	27°08'45
	2008 Mar 14	22:46	0°♓	
	2008 Apr 02	17:45	0°♈	
morning set	2008 Apr 08	01:00	9°♈56'06	
max. Earth dist.	2008 Apr 12	15:00	19°♈03'06	1.33901 AU
superior conj	2008 Apr 16	07:24	26°♈41'03	-0°38'32
minimum elong	2008 Apr 16	09:21	26°♈51'16	0°38'08
	2008 Apr 17	21:07	0°♉	
asc. node	2008 Apr 20	01:27	4°♉37'45	
evening rise	2008 Apr 23	15:43	12°♉13'44	

	2008 May 02	20:00	0°♊	
evening max el	2008 May 14	03:51	15°♊23'59	21°47'34
retrograde	2008 May 26	15:48	21°♊32'20	
desc. node	2008 May 28	08:20	21°♊25'52	
evening set	2008 May 29	05:42	21°♊17'25	
inferior conj	2008 Jun 07	15:27	17°♊14'37	-2°52'35
minimum elong	2008 Jun 07	08:04	17°♊24'56	2°50'17
min. Earth dist.	2008 Jun 07	07:39	17°♊25'30	0.54978 AU
morning rise	2008 Jun 16	11:36	13°♊20'14	
direct	2008 Jun 19	14:31	12°♊58'46	
morning max el	2008 Jul 01	17:54	18°♊41'08	21°47'03
	2008 Jul 10	20:17	0°♋	
asc. node	2008 Jul 17	00:41	10°♋40'19	
morning set	2008 Jul 22	13:35	21°♋44'09	
	2008 Jul 26	11:48	0°♌	
superior conj	2008 Jul 29	20:04	7°♌03'11	1°40'20
minimum elong	2008 Jul 29	18:30	6°♌54'56	1°40'14
max. Earth dist.	2008 Aug 02	13:12	14°♌42'54	1.34813 AU
evening rise	2008 Aug 07	00:41	23°♌34'01	
	2008 Aug 10	10:51	0°♍	
desc. node	2008 Aug 24	07:41	23°♍05'12	
	2008 Aug 29	02:50	0°♎	
evening max el	2008 Sep 11	04:32	15°♎34'27	26°52'17
retrograde	2008 Sep 24	07:17	22°♎50'10	
evening set	2008 Oct 01	00:47	20°♎07'29	
min. Earth dist.	2008 Oct 05	00:05	16°♎08'31	0.65662 AU
inferior conj	2008 Oct 06	20:53	13°♎58'10	-2°02'41
minimum elong	2008 Oct 07	00:10	13°♎48'36	2°01'23
asc. node	2008 Oct 12	23:52	8°♎18'30	
morning rise	2008 Oct 13	00:12	8°♎18'04	
direct	2008 Oct 15	20:06	7°♎33'57	
morning max el	2008 Oct 22	09:34	11°♎07'59	18°19'05
	2008 Nov 04	16:00	0°♏	
morning set	2008 Nov 10	13:27	9°♏34'00	
desc. node	2008 Nov 20	06:55	25°♏13'26	
	2008 Nov 23	07:09	0°♐	
superior conj	2008 Nov 25	16:52	3°♐47'51	-0°35'45
minimum elong	2008 Nov 25	12:15	3°♐29'39	0°35'07
max. Earth dist.	2008 Nov 27	16:07	6°♐53'45	1.45122 AU
evening rise	2008 Dec 11	23:56	29°♐19'48	
	2008 Dec 12	10:13	0°♑	
greatest brilliancy	2008 Dec 23	02:34	16°♑38'15	-0.8m
	2009 Jan 01	09:51	0°♒	
evening max el	2009 Jan 04	13:58	3°♒40'12	19°20'36
asc. node	2009 Jan 08	23:09	7°♒04'47	
retrograde	2009 Jan 11	16:44	7°♒45'23	
evening set	2009 Jan 15	02:58	6°♒36'44	
inferior conj	2009 Jan 20	16:00	0°♒44'04	3°13'55
minimum elong	2009 Jan 20	13:36	0°♒51'47	3°13'27
	2009 Jan 21	05:36	30°℞♑	
min. Earth dist.	2009 Jan 21	23:17	29°♑03'03	0.66251 AU
morning rise	2009 Jan 25	24:00	24°♑31'55	
direct	2009 Feb 01	07:10	21°♑44'47	
morning max el	2009 Feb 13	20:43	29°♑11'28	26°05'52
	2009 Feb 14	15:39	0°♒	
desc. node	2009 Feb 16	06:05	1°♒43'16	
	2009 Mar 08	18:56	0°♓	
morning set	2009 Mar 22	01:29	22°♓51'11	
	2009 Mar 25	19:55	0°♈	
max. Earth dist.	2009 Mar 26	00:14	0°♈20'54	1.35363 AU
superior conj	2009 Mar 31	03:29	10°♈33'32	-1°06'12
minimum elong	2009 Mar 31	06:48	10°♈50'23	1°05'38
asc. node	2009 Apr 06	22:28	24°♈33'22	
evening rise	2009 Apr 07	23:12	26°♈40'34	

	2009 Apr 09 14:21	0°♉	
evening max el	2009 Apr 26 07:48	26°♉27'45	20°25'12
	2009 Apr 30 22:29	0°♊	
retrograde	2009 May 07 05:00	1°♊44'32	
evening set	2009 May 09 06:22	1°♊34'00	
	2009 May 13 23:53	30°℞♉	
desc. node	2009 May 15 05:19	29°♉23'29	
inferior conj	2009 May 18 10:02	27°♉36'01	-0°55'57
minimum elong	2009 May 18 07:24	27°♉39'52	0°54'59
min. Earth dist.	2009 May 19 20:15	26°♉46'12	0.55098 AU
morning rise	2009 May 27 07:18	23°♉22'30	
direct	2009 May 31 01:22	22°♉52'06	
morning max el	2009 Jun 13 11:52	29°♉24'14	23°27'17
	2009 Jun 14 02:47	0°♊	
asc. node	2009 Jul 03 21:43	0°♋12'02	
	2009 Jul 03 19:20	0°♋	
morning set	2009 Jul 07 00:57	6°♋39'25	
superior conj	2009 Jul 14 02:16	21°♋47'37	1°29'19
minimum elong	2009 Jul 14 00:00	21°♋35'32	1°29'03
max. Earth dist.	2009 Jul 16 12:00	26°♋55'29	1.33561 AU
	2009 Jul 17 23:08	0°♌	
evening rise	2009 Jul 21 15:43	7°♌32'33	
	2009 Aug 02 23:07	0°♍	
desc. node	2009 Aug 11 04:41	12°♍39'25	
evening max el	2009 Aug 24 16:15	28°♍55'07	27°21'57
	2009 Aug 25 20:18	0°♎	
retrograde	2009 Sep 07 04:45	6°♎13'14	
evening set	2009 Sep 14 07:19	3°♎31'08	
min. Earth dist.	2009 Sep 18 00:33	0°♎07'28	0.64257 AU
	2009 Sep 18 03:26	30°℞♍	
inferior conj	2009 Sep 20 10:05	27°♍35'08	-3°00'15
minimum elong	2009 Sep 20 14:46	27°♍22'42	2°58'40
morning rise	2009 Sep 26 23:15	22°♍10'31	
direct	2009 Sep 29 13:13	21°♍36'37	
asc. node	2009 Sep 29 20:54	21°♍37'09	
morning max el	2009 Oct 06 01:31	25°♍02'49	17°56'43
	2009 Oct 10 03:46	0°♎	
morning set	2009 Oct 23 05:29	21°♎12'55	
	2009 Oct 28 10:09	0°♏	
superior conj	2009 Nov 05 08:02	13°♏02'26	0°12'22
minimum elong	2009 Nov 05 09:27	13°♏08'09	0°12'10
behind sun begin	2009 Nov 05 02:39	12°♏40'38	
behind sun end	2009 Nov 05 16:15	13°♏35'38	
desc. node	2009 Nov 07 03:59	15°♏59'40	
max. Earth dist.	2009 Nov 10 10:53	21°♏14'42	1.44545 AU
	2009 Nov 16 00:28	0°♐	
evening rise	2009 Nov 21 12:15	8°♐30'26	
	2009 Dec 05 17:24	0°♑	
evening max el	2009 Dec 18 17:39	17°♑09'53	20°17'43
retrograde	2009 Dec 26 14:38	21°♑47'43	
asc. node	2009 Dec 26 20:09	21°♑47'25	
evening set	2009 Dec 30 09:14	20°♑24'56	
inferior conj	2010 Jan 04 19:06	14°♑19'07	2°42'08
minimum elong	2010 Jan 04 16:28	14°♑28'01	2°41'24
min. Earth dist.	2010 Jan 05 12:54	13°♑18'55	0.67154 AU
morning rise	2010 Jan 09 23:32	8°♑05'47	
direct	2010 Jan 15 16:52	5°♑33'16	
morning max el	2010 Jan 27 05:23	12°♑25'43	24°45'10
desc. node	2010 Feb 03 03:09	20°♑19'15	
	2010 Feb 10 09:06	0°♒	
	2010 Mar 01 13:28	0°♓	
morning set	2010 Mar 04 07:33	4°♓48'05	
max. Earth dist.	2010 Mar 07 23:13	11°♓22'52	1.37232 AU
superior conj	2010 Mar 14 13:16	23°♓50'59	-1°31'43
minimum elong	2010 Mar 14 17:29	24°♓11'31	1°31'10
	2010 Mar 17 16:12	0°♈	
evening rise	2010 Mar 23 01:12	10°♈45'26	
asc. node	2010 Mar 24 19:30	14°♈15'21	
	2010 Apr 02 13:06	0°♉	
evening max el	2010 Apr 08 23:30	8°♉11'10	19°21'01
retrograde	2010 Apr 18 04:06	12°♉37'54	
evening set	2010 Apr 20 06:01	12°♉25'14	
inferior conj	2010 Apr 28 16:44	8°♉17'21	0°57'59
minimum elong	2010 Apr 28 19:04	8°♉13'30	0°57'11
min. Earth dist.	2010 May 01 10:59	6°♉28'47	0.56142 AU
desc. node	2010 May 02 02:21	6°♉04'40	
morning rise	2010 May 07 05:13	3°♉30'29	
direct	2010 May 11 22:27	2°♉39'34	
morning max el	2010 May 26 02:23	9°♉51'24	25°07'48
	2010 Jun 10 05:41	0°♊	
asc. node	2010 Jun 20 18:46	20°♊01'09	
morning set	2010 Jun 21 12:45	21°♊35'42	
	2010 Jun 25 10:32	0°♋	
superior conj	2010 Jun 28 12:07	6°♋42'03	1°13'29
minimum elong	2010 Jun 28 09:43	6°♋28'57	1°13'07
max. Earth dist.	2010 Jun 29 18:26	9°♋27'16	1.32714 AU
evening rise	2010 Jul 05 15:45	21°♋57'05	
	2010 Jul 09 16:29	0°♌	
	2010 Jul 27 21:43	0°♍	
desc. node	2010 Jul 29 01:43	1°♍33'11	
evening max el	2010 Aug 07 01:10	11°♍46'46	27°22'00
retrograde	2010 Aug 20 19:59	19°♍03'32	
evening set	2010 Aug 28 00:51	16°♍34'05	
min. Earth dist.	2010 Aug 31 14:55	13°♍39'27	0.62514 AU
inferior conj	2010 Sep 03 12:35	10°♍54'42	-3°53'15
minimum elong	2010 Sep 03 17:57	10°♍41'59	3°51'52
morning rise	2010 Sep 10 12:31	5°♍48'49	
direct	2010 Sep 12 23:09	5°♍21'58	
asc. node	2010 Sep 16 17:57	6°♍28'10	
morning max el	2010 Sep 19 17:20	8°♍48'45	17°52'13
	2010 Oct 03 15:04	0°♎	
morning set	2010 Oct 05 19:44	3°♎55'04	
superior conj	2010 Oct 17 01:05	23°♎33'46	0°52'48
minimum elong	2010 Oct 17 05:27	23°♎52'17	0°52'13
	2010 Oct 20 21:19	0°♏	
max. Earth dist.	2010 Oct 24 01:46	5°♏13'10	1.43306 AU
desc. node	2010 Oct 25 01:02	6°♏47'13	
evening rise	2010 Oct 31 21:27	17°♏38'11	
	2010 Nov 08 23:43	0°♐	
	2010 Dec 01 00:10	0°♑	
evening max el	2010 Dec 01 15:42	0°♑40'24	21°27'14
retrograde	2010 Dec 10 12:04	5°♑56'09	
asc. node	2010 Dec 13 17:11	4°♑59'05	
evening set	2010 Dec 14 16:53	4°♑17'51	
	2010 Dec 18 14:53	30°℞♐	
inferior conj	2010 Dec 20 01:23	28°♐02'17	2°02'18
minimum elong	2010 Dec 19 23:01	28°♐10'27	2°01'28
min. Earth dist.	2010 Dec 20 07:14	27°♐42'03	0.67672 AU
morning rise	2010 Dec 25 05:00	21°♐49'36	
direct	2010 Dec 30 07:21	19°♐37'29	
morning max el	2011 Jan 09 14:26	25°♐44'52	23°16'55
	2011 Jan 13 11:25	0°♑	
desc. node	2011 Jan 21 00:13	9°♑37'47	
	2011 Feb 03 22:19	0°♒	
morning set	2011 Feb 13 12:59	15°♒30'48	
max. Earth dist.	2011 Feb 17 17:56	22°♒41'57	1.39353 AU
	2011 Feb 21 20:53	0°♓	
superior conj	2011 Feb 25 08:48	6°♓23'38	-1°52'15

minimum elong	2011 Feb 25 12:44	6°♓41'56	1°51'56
evening rise	2011 Mar 06 18:57	24°♓21'05	
	2011 Mar 09 17:47	0°♈	
asc. node	2011 Mar 11 16:31	3°♈38'25	
evening max el	2011 Mar 23 01:10	20°♈31'51	18°36'50
retrograde	2011 Mar 30 20:48	24°♈21'23	
evening set	2011 Apr 02 04:26	24°♈02'23	
inferior conj	2011 Apr 09 19:36	19°♈36'31	2°24'10
minimum elong	2011 Apr 09 23:37	19°♈28'47	2°23'05
min. Earth dist.	2011 Apr 13 05:01	17°♈01'20	0.57889 AU
morning rise	2011 Apr 17 15:43	14°♈16'51	
desc. node	2011 Apr 18 23:22	13°♈43'16	
direct	2011 Apr 23 10:04	12°♈53'11	
morning max el	2011 May 07 19:05	20°♈29'55	26°33'03
	2011 May 15 23:18	0°♉	
	2011 Jun 02 20:02	0°♊	
morning set	2011 Jun 05 23:26	6°♊27'40	
asc. node	2011 Jun 07 15:50	10°♊02'06	
superior conj	2011 Jun 12 23:44	21°♊39'57	0°53'41
minimum elong	2011 Jun 12 21:40	21°♊28'33	0°53'18
max. Earth dist.	2011 Jun 13 05:34	22°♊11'58	1.32264 AU
	2011 Jun 16 19:09	0°♋	
evening rise	2011 Jun 19 21:57	6°♋38'52	
	2011 Jul 02 05:38	0°♌	
desc. node	2011 Jul 15 22:43	19°♌29'43	
evening max el	2011 Jul 20 05:02	23°♌58'34	26°49'02
	2011 Jul 28 17:59	0°♍	
retrograde	2011 Aug 03 03:50	1°♍12'04	
	2011 Aug 08 09:46	30°℞♌	
evening set	2011 Aug 10 00:57	29°♌09'01	
min. Earth dist.	2011 Aug 13 19:02	26°♌30'51	0.60526 AU
inferior conj	2011 Aug 17 01:04	23°♌48'52	-4°35'36
minimum elong	2011 Aug 17 05:32	23°♌39'33	4°34'55
morning rise	2011 Aug 24 12:00	19°♌04'18	
direct	2011 Aug 26 22:03	18°♌41'48	
morning max el	2011 Sep 03 05:56	22°♌17'58	18°06'39
asc. node	2011 Sep 03 15:01	22°♌40'28	
	2011 Sep 09 05:58	0°♍	
morning set	2011 Sep 19 02:12	17°♍23'31	
	2011 Sep 25 21:09	0°♎	
superior conj	2011 Sep 28 20:16	5°♎21'32	1°21'26
minimum elong	2011 Sep 29 00:25	5°♎40'08	1°21'00
max. Earth dist.	2011 Oct 06 11:22	18°♎35'24	1.41571 AU
evening rise	2011 Oct 11 20:16	27°♎25'29	
desc. node	2011 Oct 11 22:04	27°♎32'44	
	2011 Oct 13 10:52	0°♏	
	2011 Nov 02 16:54	0°♐	
evening max el	2011 Nov 14 08:40	14°♐12'58	22°44'52
retrograde	2011 Nov 24 07:19	20°♐07'16	
evening set	2011 Nov 29 00:13	18°♐12'20	
asc. node	2011 Nov 30 14:14	16°♐41'02	
inferior conj	2011 Dec 04 08:52	11°♐50'44	1°15'58
minimum elong	2011 Dec 04 07:13	11°♐56'28	1°15'17
min. Earth dist.	2011 Dec 04 03:47	12°♐08'19	0.67835 AU
morning rise	2011 Dec 09 14:05	5°♐40'46	
direct	2011 Dec 14 01:43	3°♐51'20	
morning max el	2011 Dec 23 03:09	9°♐10'30	21°50'30
desc. node	2012 Jan 07 21:17	29°♐26'29	
	2012 Jan 08 06:34	0°♑	
morning set	2012 Jan 24 13:16	24°♑49'10	
	2012 Jan 27 18:12	0°♒	
max. Earth dist.	2012 Jan 30 16:23	4°♒49'19	1.41469 AU
superior conj	2012 Feb 07 09:02	17°♒59'02	-2°03'55
minimum elong	2012 Feb 07 10:36	18°♒05'54	2°03'53
	2012 Feb 14 01:38	0°♓	
evening rise	2012 Feb 18 00:57	7°♓18'46	
asc. node	2012 Feb 26 13:34	22°♓35'36	
	2012 Mar 02 11:41	0°♈	
evening max el	2012 Mar 05 09:35	3°♈20'36	18°12'35
retrograde	2012 Mar 12 07:49	6°♈49'21	
evening set	2012 Mar 14 21:27	6°♈21'28	
inferior conj	2012 Mar 21 19:21	1°♈34'38	3°16'38
minimum elong	2012 Mar 21 22:19	1°♈27'57	3°16'08
	2012 Mar 23 13:22	30°℞♓	
min. Earth dist.	2012 Mar 25 04:07	28°♓35'16	0.59999 AU
morning rise	2012 Mar 28 20:58	25°♓51'17	
direct	2012 Apr 04 10:11	23°♓50'54	
desc. node	2012 Apr 04 20:25	23°♓51'23	
	2012 Apr 16 22:42	0°♈	
morning max el	2012 Apr 18 17:23	1°♈40'26	27°29'33
	2012 May 09 05:14	0°♉	
morning set	2012 May 20 07:12	21°♉08'24	
	2012 May 24 11:12	0°♊	
asc. node	2012 May 24 12:53	0°♊09'10	
max. Earth dist.	2012 May 26 17:41	4°♊57'24	1.32199 AU
superior conj	2012 May 27 11:19	6°♊34'16	0°30'36
minimum elong	2012 May 27 10:00	6°♊26'58	0°30'19
evening rise	2012 Jun 03 07:52	21°♊29'01	
	2012 Jun 07 11:16	0°♋	
	2012 Jun 26 02:24	0°♌	
evening max el	2012 Jul 01 01:57	5°♌23'34	25°44'36
desc. node	2012 Jul 01 19:43	6°♌05'02	
retrograde	2012 Jul 15 02:16	12°♌32'33	
evening set	2012 Jul 21 02:56	11°♌06'24	
min. Earth dist.	2012 Jul 25 14:16	8°♌27'28	0.58467 AU
inferior conj	2012 Jul 28 19:57	6°♌07'41	-4°57'38
minimum elong	2012 Jul 28 21:04	6°♌05'40	4°57'35
morning rise	2012 Aug 05 17:30	1°♌45'47	
direct	2012 Aug 08 05:40	1°♌25'37	
morning max el	2012 Aug 16 12:04	5°♌21'19	18°41'31
asc. node	2012 Aug 20 12:06	9°♌58'48	
	2012 Sep 01 02:32	0°♍	
morning set	2012 Sep 01 20:10	1°♍25'37	
superior conj	2012 Sep 10 12:44	18°♍12'27	1°38'23
minimum elong	2012 Sep 10 15:13	18°♍24'10	1°38'14
	2012 Sep 16 23:22	0°♎	
max. Earth dist.	2012 Sep 17 16:38	1°♎16'20	1.39560 AU
evening rise	2012 Sep 21 18:04	8°♎16'53	
desc. node	2012 Sep 27 19:05	18°♎12'44	
	2012 Oct 05 10:35	0°♏	
evening max el	2012 Oct 26 22:12	27°♏49'13	24°04'52
	2012 Oct 29 06:18	0°♐	
retrograde	2012 Nov 06 23:04	4°♐18'03	
evening set	2012 Nov 12 05:36	2°♐06'04	
	2012 Nov 14 07:42	30°℞♏	
asc. node	2012 Nov 16 11:18	27°♏18'21	
min. Earth dist.	2012 Nov 17 00:08	26°♏35'18	0.67662 AU
inferior conj	2012 Nov 17 15:47	25°♏42'25	0°24'26
minimum elong	2012 Nov 17 15:12	25°♏44'25	0°24'10
morning rise	2012 Nov 23 00:46	19°♏37'29	
direct	2012 Nov 26 22:48	18°♏10'14	
morning max el	2012 Dec 04 22:48	22°♏46'49	20°33'03
	2012 Dec 11 01:40	0°♐	
desc. node	2012 Dec 24 18:20	19°♐37'01	
	2012 Dec 31 14:03	0°♑	
morning set	2013 Jan 02 13:59	3°♑05'20	
max. Earth dist.	2013 Jan 11 22:53	17°♑54'24	1.43278 AU
superior conj	2013 Jan 18 08:56	28°♑26'02	-2°01'48

minimum elong	2013 Jan 18	05:37	28°♑12'13	2°01'42
	2013 Jan 19	07:25	0°♒	
evening rise	2013 Jan 30	15:08	19°♒30'37	
	2013 Feb 05	14:55	0°♓	
asc. node	2013 Feb 12	10:37	10°♓59'02	
evening max el	2013 Feb 16	21:30	16°♓28'53	18°07'53
retrograde	2013 Feb 23	09:41	19°♓52'28	
evening set	2013 Feb 26	04:34	19°♓14'24	
inferior conj	2013 Mar 04	12:58	14°♓06'42	3°40'13
minimum elong	2013 Mar 04	13:58	14°♓04'08	3°40'09
min. Earth dist.	2013 Mar 07	11:03	11°♓08'11	0.62123 AU
morning rise	2013 Mar 10	22:06	8°♓08'39	
direct	2013 Mar 17	20:03	5°♓37'59	
desc. node	2013 Mar 22	17:29	6°♓44'56	
morning max el	2013 Mar 31	21:50	13°♓32'57	27°49'43
	2013 Apr 14	02:37	0°♈	
	2013 May 01	15:37	0°♉	
morning set	2013 May 04	10:03	5°♉31'40	
max. Earth dist.	2013 May 10	02:59	17°♉30'58	1.32526 AU
asc. node	2013 May 11	09:55	20°♉18'20	
superior conj	2013 May 11	21:10	21°♉19'26	0°04'58
minimum elong	2013 May 11	20:56	21°♉18'10	0°04'55
behind sun begin	2013 May 11	16:01	20°♉51'24	
behind sun end	2013 May 12	01:51	21°♉44'58	
	2013 May 15	20:41	0°♊	
evening rise	2013 May 18	19:33	6°♊20'56	
	2013 May 31	07:07	0°♋	
evening max el	2013 Jun 12	16:45	16°♋07'44	24°17'01
desc. node	2013 Jun 18	16:43	20°♋47'26	
retrograde	2013 Jun 26	13:08	23°♋06'51	
evening set	2013 Jul 01	05:25	22°♋18'06	
min. Earth dist.	2013 Jul 07	03:37	19°♋21'22	0.56622 AU
inferior conj	2013 Jul 09	18:41	17°♋42'25	-4°45'39
minimum elong	2013 Jul 09	14:28	17°♋49'05	4°45'11
morning rise	2013 Jul 18	02:13	13°♋40'47	
direct	2013 Jul 20	18:22	13°♋21'42	
morning max el	2013 Jul 30	08:48	17°♋49'18	19°37'45
asc. node	2013 Aug 07	09:10	28°♋08'29	
	2013 Aug 08	12:13	0°♌	
morning set	2013 Aug 16	22:02	15°♌51'10	
	2013 Aug 23	22:37	0°♍	
superior conj	2013 Aug 24	20:56	1°♍50'36	1°45'20
minimum elong	2013 Aug 24	21:32	1°♍53'33	1°45'19
max. Earth dist.	2013 Aug 30	20:51	13°♍21'32	1.37525 AU
evening rise	2013 Sep 03	15:23	20°♍14'00	
	2013 Sep 09	07:07	0°♎	
desc. node	2013 Sep 14	16:04	8°♎42'34	
	2013 Sep 29	11:38	0°♏	
evening max el	2013 Oct 09	10:11	11°♏28'12	25°20'24
retrograde	2013 Oct 21	10:29	18°♏23'39	
evening set	2013 Oct 27	07:22	15°♏56'01	
min. Earth dist.	2013 Oct 31	17:52	11°♏00'06	0.67157 AU
inferior conj	2013 Nov 01	20:19	9°♏34'24	-0°31'03
minimum elong	2013 Nov 01	21:07	9°♏31'50	0°30'42
asc. node	2013 Nov 03	08:21	7°♏39'49	
morning rise	2013 Nov 07	11:05	3°♏37'02	
direct	2013 Nov 10	21:12	2°♏29'30	
morning max el	2013 Nov 18	02:22	6°♏33'43	19°28'42
greatest brilliancy	2013 Dec 01	12:56	24°♏34'38	-0.7m
	2013 Dec 05	02:42	0°♐	
desc. node	2013 Dec 11	15:20	10°♐02'41	
morning set	2013 Dec 12	12:14	11°♐23'33	
	2013 Dec 24	10:12	0°♑	
max. Earth dist.	2013 Dec 25	12:24	1°♑43'31	1.44542 AU
superior conj	2013 Dec 29	06:27	7°♑41'42	-1°41'29
minimum elong	2013 Dec 28	22:16	7°♑08'59	1°40'48
	2014 Jan 11	21:35	0°♒	
evening rise	2014 Jan 12	09:05	0°♒48'06	
asc. node	2014 Jan 30	07:38	28°♒38'01	
evening max el	2014 Jan 31	09:58	29°♒48'41	18°22'12
	2014 Jan 31	14:29	0°♓	
retrograde	2014 Feb 06	21:43	3°♓20'15	
evening set	2014 Feb 09	21:47	2°♓31'13	
	2014 Feb 13	03:30	30°℞♒	
inferior conj	2014 Feb 15	20:22	27°♒04'21	3°41'59
minimum elong	2014 Feb 15	19:34	27°♒06'37	3°41'57
min. Earth dist.	2014 Feb 18	03:36	24°♒26'48	0.64011 AU
morning rise	2014 Feb 21	16:41	20°♒57'50	
direct	2014 Feb 28	14:00	18°♒09'42	
desc. node	2014 Mar 09	14:30	21°♒55'19	
morning max el	2014 Mar 14	06:30	26°♒03'18	27°33'10
	2014 Mar 17	22:24	0°♓	
	2014 Apr 07	15:35	0°♈	
morning set	2014 Apr 18	05:29	19°♈29'45	
max. Earth dist.	2014 Apr 23	05:29	29°♈40'12	1.33268 AU
	2014 Apr 23	09:16	0°♉	
superior conj	2014 Apr 26	03:27	5°♉49'52	-0°22'25
minimum elong	2014 Apr 26	04:34	5°♉55'49	0°22'11
asc. node	2014 Apr 28	06:57	10°♉25'49	
evening rise	2014 May 03	07:07	21°♉08'26	
	2014 May 07	14:57	0°♊	
evening max el	2014 May 25	07:10	26°♊36'29	22°40'52
	2014 May 29	09:12	0°♋	
desc. node	2014 Jun 05	13:44	3°♋01'35	
retrograde	2014 Jun 07	11:56	3°♋10'03	
evening set	2014 Jun 10	17:02	2°♋47'22	
	2014 Jun 17	10:04	30°℞♊	
min. Earth dist.	2014 Jun 18	15:11	29°♊19'17	0.55334 AU
inferior conj	2014 Jun 19	22:50	28°♊34'04	-3°47'16
minimum elong	2014 Jun 19	15:00	28°♊45'17	3°45'20
morning rise	2014 Jun 28	15:16	24°♊42'17	
direct	2014 Jul 01	12:50	24°♊22'53	
morning max el	2014 Jul 12	18:22	29°♊35'33	20°54'48
	2014 Jul 13	04:45	0°♋	
asc. node	2014 Jul 25	06:12	16°♋57'36	
	2014 Jul 31	22:46	0°♌	
morning set	2014 Aug 01	05:12	0°♌33'06	
superior conj	2014 Aug 08	16:21	16°♌03'01	1°44'07
minimum elong	2014 Aug 08	15:25	15°♌58'14	1°44'05
max. Earth dist.	2014 Aug 13	05:24	25°♌12'06	1.35699 AU
	2014 Aug 15	16:44	0°♍	
evening rise	2014 Aug 17	08:32	3°♍08'22	
desc. node	2014 Sep 01	13:05	28°♍57'00	
	2014 Sep 02	05:38	0°♎	
evening max el	2014 Sep 21	22:10	25°♎06'48	26°24'00
	2014 Sep 27	22:39	0°♏	
retrograde	2014 Oct 04	17:02	2°♏18'45	
	2014 Oct 10	17:27	30°℞♎	
evening set	2014 Oct 11	03:37	29°♎39'27	
min. Earth dist.	2014 Oct 15	06:44	25°♎19'39	0.66308 AU
inferior conj	2014 Oct 16	20:40	23°♎24'11	-1°28'57
minimum elong	2014 Oct 16	23:02	23°♎16'59	1°27'58
asc. node	2014 Oct 21	05:23	18°♎42'47	
morning rise	2014 Oct 22	18:58	17°♎37'01	
direct	2014 Oct 25	19:17	16°♎45'36	
morning max el	2014 Nov 01	12:39	20°♎28'08	18°39'45
	2014 Nov 08	23:09	0°♏	
morning set	2014 Nov 22	07:20	20°♏49'01	
	2014 Nov 28	02:26	0°♐	

desc. node	2014 Nov	28	12:22	0°♐39'13	
superior conj	2014 Dec	08	09:51	16°♐13'03	-1°03'05
minimum elong	2014 Dec	08	02:10	15°♐42'52	1°02'09
max. Earth dist.	2014 Dec	08	05:59	15°♐57'50	1.45121 AU
	2014 Dec	17	03:53	0°♑	
evening rise	2014 Dec	24	03:50	11°♑07'47	
greatest brilliancy	2015 Jan	01	02:55	23°♑50'56	-0.8m
	2015 Jan	05	01:08	0°♒	
evening max el	2015 Jan	14	20:31	13°♒14'49	18°54'30
asc. node	2015 Jan	17	04:39	15°♒19'57	
retrograde	2015 Jan	21	15:54	17°♒05'16	
evening set	2015 Jan	24	21:58	16°♒04'17	
inferior conj	2015 Jan	30	13:45	10°♒20'25	3°27'45
minimum elong	2015 Jan	30	11:46	10°♒26'36	3°27'28
min. Earth dist.	2015 Feb	01	05:34	8°♒16'36	0.65547 AU
morning rise	2015 Feb	05	01:13	4°♒09'25	
direct	2015 Feb	11	14:57	1°♒18'01	
desc. node	2015 Feb	24	11:32	8°♒47'07	
morning max el	2015 Feb	24	16:23	8°♒59'15	26°44'46
	2015 Mar	13	03:52	0°♓	
	2015 Mar	31	01:44	0°♈	
morning set	2015 Apr	01	14:07	2°♈51'40	
max. Earth dist.	2015 Apr	05	21:19	11°♈15'08	1.34462 AU
superior conj	2015 Apr	10	04:00	19°♈58'19	-0°50'24
minimum elong	2015 Apr	10	06:33	20°♈11'33	0°49'56
	2015 Apr	14	22:51	0°♉	
asc. node	2015 Apr	15	03:58	0°♉26'52	
evening rise	2015 Apr	17	16:40	5°♉44'27	
	2015 May	01	02:00	0°♊	
evening max el	2015 May	07	04:50	7°♊21'14	21°10'37
retrograde	2015 May	19	01:49	13°♊08'53	
evening set	2015 May	21	07:55	12°♊57'06	
desc. node	2015 May	23	10:45	12°♊25'55	
inferior conj	2015 May	30	16:56	8°♊58'21	-2°05'03
minimum elong	2015 May	30	11:09	9°♊06'29	2°03'04
min. Earth dist.	2015 May	31	03:30	8°♊43'27	0.54902 AU
morning rise	2015 Jun	08	14:34	4°♊57'50	
direct	2015 Jun	11	22:33	4°♊33'47	
morning max el	2015 Jun	24	17:08	10°♊38'41	22°28'47
	2015 Jul	08	18:52	0°♋	
asc. node	2015 Jul	12	03:14	6°♋15'40	
morning set	2015 Jul	16	15:31	15°♋24'31	
superior conj	2015 Jul	23	19:24	0°♌37'55	1°36'19
minimum elong	2015 Jul	23	17:28	0°♌27'42	1°36'08
	2015 Jul	23	12:14	0°♌	
max. Earth dist.	2015 Jul	26	22:29	7°♌11'15	1.34226 AU
evening rise	2015 Jul	31	16:48	16°♌46'43	
	2015 Aug	07	19:15	0°♍	
desc. node	2015 Aug	19	10:07	18°♍48'12	
	2015 Aug	27	15:44	0°♎	
evening max el	2015 Sep	04	10:19	8°♎36'57	27°08'12
retrograde	2015 Sep	17	18:09	15°♎55'16	
evening set	2015 Sep	24	15:59	13°♎11'33	
min. Earth dist.	2015 Sep	28	12:27	9°♎27'51	0.65102 AU
inferior conj	2015 Sep	30	14:38	7°♎07'06	-2°27'25
minimum elong	2015 Sep	30	18:34	6°♎56'04	2°25'57
morning rise	2015 Oct	06	22:00	1°♎33'10	
asc. node	2015 Oct	08	02:25	1°♎06'27	
direct	2015 Oct	09	14:57	0°♎53'58	
morning max el	2015 Oct	16	03:16	4°♎24'01	18°07'25
	2015 Nov	02	07:06	0°♏	
morning set	2015 Nov	03	07:45	1°♏42'04	
desc. node	2015 Nov	15	09:25	21°♏22'46	
superior conj	2015 Nov	17	14:53	24°♏55'55	-0°14'57
minimum elong	2015 Nov	17	13:00	24°♏48'24	0°14'41
behind sun begin	2015 Nov	17	08:21	24°♏29'58	
behind sun end	2015 Nov	17	17:38	25°♏06'50	
	2015 Nov	20	19:43	0°♐	
max. Earth dist.	2015 Nov	21	00:49	0°♐20'04	1.44960 AU
evening rise	2015 Dec	04	00:49	20°♐36'52	
	2015 Dec	10	02:34	0°♑	
greatest brilliancy	2015 Dec	17	02:01	10°♑37'54	-0.7m
evening max el	2015 Dec	29	03:12	26°♑44'21	19°43'14
	2016 Jan	02	02:20	0°♒	
asc. node	2016 Jan	04	01:41	0°♒50'36	
retrograde	2016 Jan	05	13:06	1°♒02'37	
	2016 Jan	08	19:36	30°℞♑	
evening set	2016 Jan	09	02:37	29°♑48'19	
inferior conj	2016 Jan	14	14:05	23°♑49'55	3°01'34
minimum elong	2016 Jan	14	11:31	23°♑58'22	3°00'57
min. Earth dist.	2016 Jan	15	15:33	22°♑25'50	0.66684 AU
morning rise	2016 Jan	19	20:11	17°♑36'57	
direct	2016 Jan	25	21:50	14°♑54'42	
morning max el	2016 Feb	07	01:24	22°♑08'49	25°33'02
desc. node	2016 Feb	11	08:35	26°♑51'37	
	2016 Feb	13	22:43	0°♒	
	2016 Mar	05	10:23	0°♓	
morning set	2016 Mar	14	07:32	15°♓24'26	
max. Earth dist.	2016 Mar	18	01:24	22°♓21'38	1.36112 AU
	2016 Mar	22	00:19	0°♈	
superior conj	2016 Mar	23	20:11	3°♈37'29	-1°17'26
minimum elong	2016 Mar	23	23:58	3°♈56'24	1°16'51
evening rise	2016 Mar	31	22:08	20°♈02'51	
asc. node	2016 Apr	01	01:00	20°♈17'24	
	2016 Apr	05	23:09	0°♉	
evening max el	2016 Apr	18	13:59	18°♉42'15	19°55'33
retrograde	2016 Apr	28	17:20	23°♉36'07	
evening set	2016 Apr	30	17:52	23°♉25'18	
desc. node	2016 May	09	07:46	19°♉36'20	
inferior conj	2016 May	09	15:12	19°♉25'01	-0°05'25
minimum elong	2016 May	09	14:57	19°♉25'23	0°05'19
transit middle	2016 May	09	14:57	19°♉25'23	0°05'19
transit begin	2016 May	09	11:12	19°♉31'06	
transit end	2016 May	09	18:42	19°♉19'40	
min. Earth dist.	2016 May	11	17:07	18°♉09'13	0.55443 AU
morning rise	2016 May	18	09:54	14°♉58'03	
direct	2016 May	22	13:20	14°♉20'16	
morning max el	2016 Jun	05	08:45	21°♉11'20	24°10'46
	2016 Jun	12	23:22	0°♊	
asc. node	2016 Jun	28	00:17	25°♊55'13	
	2016 Jun	29	23:24	0°♋	
morning set	2016 Jun	30	03:15	0°♋20'18	
superior conj	2016 Jul	07	03:24	15°♋27'03	1°23'07
minimum elong	2016 Jul	07	01:01	15°♋14'10	1°22'49
max. Earth dist.	2016 Jul	09	00:48	19°♋31'44	1.33157 AU
	2016 Jul	14	00:47	0°♌	
evening rise	2016 Jul	14	12:05	0°♌57'23	
	2016 Jul	30	18:18	0°♍	
desc. node	2016 Aug	05	07:08	8°♍06'24	
evening max el	2016 Aug	16	21:21	21°♍47'08	27°25'58
retrograde	2016 Aug	30	13:04	29°♍04'39	
evening set	2016 Sep	06	17:26	26°♍26'41	
min. Earth dist.	2016 Sep	10	08:56	23°♍16'07	0.63549 AU
inferior conj	2016 Sep	12	23:40	20°♍37'19	-3°23'37
minimum elong	2016 Sep	13	04:46	20°♍24'21	3°22'03
morning rise	2016 Sep	19	17:18	15°♍19'55	
direct	2016 Sep	22	05:31	14°♍49'21	
asc. node	2016 Sep	23	23:29	15°♍04'30	

morning max el	2016 Sep 28 19:27	18°♍15'02	17°52'31
	2016 Oct 07 07:56	0°♎	
morning set	2016 Oct 15 10:02	13°♎49'57	
	2016 Oct 24 20:46	0°♏	
superior conj	2016 Oct 27 16:16	4°♏40'28	0°30'51
minimum elong	2016 Oct 27 19:25	4°♏53'24	0°30'24
desc. node	2016 Nov 01 06:28	12°♏09'31	
max. Earth dist.	2016 Nov 02 18:18	14°♏33'25	1.44090 AU
evening rise	2016 Nov 12 09:40	29°♏40'45	
	2016 Nov 12 14:40	0°♐	
	2016 Dec 02 21:18	0°♑	
evening max el	2016 Dec 11 04:39	10°♑14'49	20°46'05
retrograde	2016 Dec 19 10:55	15°♑07'52	
asc. node	2016 Dec 20 22:44	14°♑55'26	
evening set	2016 Dec 23 09:41	13°♑38'38	
inferior conj	2016 Dec 28 18:48	7°♑28'30	2°26'08
minimum elong	2016 Dec 28 16:13	7°♑37'19	2°25'19
min. Earth dist.	2016 Dec 29 07:22	6°♑45'28	0.67423 AU
morning rise	2017 Jan 02 22:34	1°♑15'25	
	2017 Jan 04 14:17	30°℞♐	
direct	2017 Jan 08 09:43	28°♐50'56	
	2017 Jan 12 14:03	0°♑	
morning max el	2017 Jan 19 09:43	5°♑24'29	24°07'57
desc. node	2017 Jan 28 05:39	15°♑47'17	
	2017 Feb 07 09:35	0°♒	
morning set	2017 Feb 24 03:52	26°♒51'20	
	2017 Feb 25 23:07	0°♓	
max. Earth dist.	2017 Feb 27 21:38	3°♓26'30	1.38124 AU
superior conj	2017 Mar 07 00:29	16°♓37'27	-1°41'15
minimum elong	2017 Mar 07 04:46	16°♓57'58	1°40'45
	2017 Mar 13 21:07	0°♈	
evening rise	2017 Mar 15 21:00	3°♈56'08	
asc. node	2017 Mar 18 22:03	9°♈51'59	
	2017 Mar 31 17:31	0°♉	
evening max el	2017 Apr 01 10:18	0°♉42'12	18°59'41
retrograde	2017 Apr 09 23:14	4°♉50'51	
evening set	2017 Apr 12 03:36	4°♉35'44	
inferior conj	2017 Apr 20 05:54	0°♉20'38	1°38'42
minimum elong	2017 Apr 20 09:23	0°♉14'30	1°37'36
	2017 Apr 20 17:37	30°℞♈	
min. Earth dist.	2017 Apr 23 08:43	28°♈10'18	0.56827 AU
desc. node	2017 Apr 26 04:48	26°♈25'27	
morning rise	2017 Apr 28 12:07	25°♈19'27	
direct	2017 May 03 16:33	24°♈15'49	
	2017 May 16 04:07	0°♉	
morning max el	2017 May 17 23:24	1°♉39'02	25°46'51
	2017 Jun 06 22:15	0°♊	
morning set	2017 Jun 14 14:49	15°♊15'24	
asc. node	2017 Jun 14 21:21	15°♊49'55	
	2017 Jun 21 09:57	0°♋	
superior conj	2017 Jun 21 14:14	0°♋23'28	1°05'31
minimum elong	2017 Jun 21 11:55	0°♋10'46	1°05'08
max. Earth dist.	2017 Jun 22 09:54	2°♋11'12	1.32480 AU
evening rise	2017 Jun 28 15:05	15°♋30'23	
	2017 Jul 06 00:20	0°♌	
desc. node	2017 Jul 23 04:08	26°♌38'11	
	2017 Jul 25 23:41	0°♍	
evening max el	2017 Jul 30 04:39	4°♍23'52	27°12'07
retrograde	2017 Aug 13 01:00	11°♍38'24	
evening set	2017 Aug 20 04:09	9°♍18'43	
min. Earth dist.	2017 Aug 23 18:51	6°♍33'00	0.61692 AU
inferior conj	2017 Aug 26 20:42	3°♍47'36	-4°13'01
minimum elong	2017 Aug 27 01:56	3°♍35'50	4°11'53
	2017 Aug 31 15:28	30°℞♌	
morning rise	2017 Sep 03 01:18	28°♌50'20	
direct	2017 Sep 05 11:29	28°♌25'28	
	2017 Sep 10 02:52	0°♍	
asc. node	2017 Sep 10 20:34	0°♍32'04	
morning max el	2017 Sep 12 10:17	1°♍54'51	17°55'59
morning set	2017 Sep 28 07:55	26°♍54'12	
	2017 Sep 30 00:42	0°♎	
superior conj	2017 Oct 08 20:54	15°♎45'43	1°06'26
minimum elong	2017 Oct 09 01:28	16°♎05'30	1°05'53
max. Earth dist.	2017 Oct 16 07:41	28°♎20'29	1.42617 AU
	2017 Oct 17 07:59	0°♏	
desc. node	2017 Oct 19 03:30	2°♏56'37	
evening rise	2017 Oct 22 22:59	9°♏01'18	
	2017 Nov 05 19:19	0°♐	
evening max el	2017 Nov 24 00:27	23°♐46'13	21°59'32
retrograde	2017 Dec 03 07:34	29°♐18'10	
evening set	2017 Dec 07 17:25	27°♐32'39	
asc. node	2017 Dec 07 19:47	27°♐27'50	
inferior conj	2017 Dec 13 01:49	21°♐14'04	1°43'22
minimum elong	2017 Dec 12 23:42	21°♐21'23	1°42'34
min. Earth dist.	2017 Dec 13 02:51	21°♐10'29	0.67787 AU
morning rise	2017 Dec 18 05:51	15°♐02'32	
direct	2017 Dec 23 01:51	13°♐00'08	
morning max el	2018 Jan 01 19:58	18°♐46'18	22°39'32
	2018 Jan 11 05:09	0°♑	
desc. node	2018 Jan 15 02:43	5°♑19'45	
	2018 Jan 31 13:39	0°♒	
morning set	2018 Feb 04 21:08	6°♒58'07	
max. Earth dist.	2018 Feb 09 17:42	15°♒05'46	1.40279 AU
superior conj	2018 Feb 17 12:27	28°♒47'13	-1°58'33
minimum elong	2018 Feb 17 15:42	29°♒01'57	1°58'22
	2018 Feb 18 04:28	0°♓	
evening rise	2018 Feb 27 10:15	17°♓16'56	
asc. node	2018 Mar 05 19:05	29°♓04'59	
	2018 Mar 06 07:34	0°♈	
evening max el	2018 Mar 15 15:10	13°♈15'29	18°23'59
retrograde	2018 Mar 23 00:19	16°♈54'28	
evening set	2018 Mar 25 10:31	16°♈31'56	
inferior conj	2018 Apr 01 17:53	11°♈56'51	2°50'24
minimum elong	2018 Apr 01 21:41	11°♈49'02	2°49'32
min. Earth dist.	2018 Apr 05 04:28	9°♈08'29	0.58765 AU
morning rise	2018 Apr 09 06:05	6°♈25'45	
desc. node	2018 Apr 13 01:51	5°♈00'46	
direct	2018 Apr 15 09:21	4°♈46'39	
morning max el	2018 Apr 29 18:24	12°♈29'37	27°01'20
	2018 May 13 12:40	0°♉	
	2018 May 29 23:49	0°♊	
morning set	2018 May 30 00:29	0°♊03'31	
asc. node	2018 Jun 01 18:23	5°♊53'58	
superior conj	2018 Jun 06 02:02	15°♊20'27	0°44'15
minimum elong	2018 Jun 06 00:14	15°♊10'31	0°43'53
max. Earth dist.	2018 Jun 05 22:02	14°♊58'27	1.32188 AU
evening rise	2018 Jun 12 23:07	0°♋16'28	
	2018 Jun 12 20:00	0°♋	
	2018 Jun 29 05:16	0°♌	
desc. node	2018 Jul 10 01:09	14°♌03'38	
evening max el	2018 Jul 12 05:29	16°♌15'19	26°25'06
retrograde	2018 Jul 26 05:02	23°♌27'22	
evening set	2018 Aug 01 19:22	21°♌38'47	
min. Earth dist.	2018 Aug 05 18:35	19°♌02'55	0.59644 AU
inferior conj	2018 Aug 09 02:06	16°♌27'42	-4°48'11
minimum elong	2018 Aug 09 05:28	16°♌21'04	4°47'50
morning rise	2018 Aug 16 17:41	11°♌53'09	
direct	2018 Aug 19 04:25	11°♌31'48	

morning max el	2018 Aug 26	20:34	15°♌14'30	18°18'59
asc. node	2018 Aug 28	17:38	17°♌14'21	
	2018 Sep 06	02:39	0°♍	
morning set	2018 Sep 11	19:45	10°♍38'11	
superior conj	2018 Sep 21	01:52	28°♍02'36	1°29'58
minimum elong	2018 Sep 21	05:24	28°♍18'45	1°29'39
	2018 Sep 22	03:39	0°♎	
max. Earth dist.	2018 Sep 28	15:15	11°♎25'25	1.40730 AU
evening rise	2018 Oct 03	06:57	19°♎13'45	
desc. node	2018 Oct 06	00:30	23°♎40'02	
	2018 Oct 10	00:40	0°♏	
	2018 Oct 31	04:38	0°♐	
evening max el	2018 Nov 06	15:32	7°♐19'15	23°18'56
retrograde	2018 Nov 17	01:33	13°♐29'30	
evening set	2018 Nov 22	00:08	11°♐27'02	
asc. node	2018 Nov 24	16:50	8°♐37'28	
inferior conj	2018 Nov 27	09:15	5°♐03'49	0°54'39
minimum elong	2018 Nov 27	08:00	5°♐08'06	0°54'08
min. Earth dist.	2018 Nov 26	23:35	5°♐37'03	0.67799 AU
	2018 Dec 01	11:12	30°℞♏	
morning rise	2018 Dec 02	15:49	28°♏55'47	
direct	2018 Dec 06	21:22	27°♏16'14	
	2018 Dec 12	23:43	0°♐	
morning max el	2018 Dec 15	11:30	2°♐16'32	21°16'12
desc. node	2019 Jan 01	23:46	25°♐18'23	
	2019 Jan 05	03:40	0°♑	
morning set	2019 Jan 15	09:51	15°♑45'09	
max. Earth dist.	2019 Jan 22	19:19	27°♑37'51	1.42284 AU
	2019 Jan 24	05:49	0°♒	
superior conj	2019 Jan 30	02:52	9°♒54'26	-2°05'00
minimum elong	2019 Jan 30	02:37	9°♒53'22	2°05'01
evening rise	2019 Feb 10	10:05	29°♒56'32	
	2019 Feb 10	10:51	0°♓	
asc. node	2019 Feb 20	16:07	17°♓49'21	
evening max el	2019 Feb 27	01:25	26°♓13'48	18°08'14
retrograde	2019 Mar 05	18:19	29°♓38'58	
evening set	2019 Mar 08	10:05	29°♓07'01	
inferior conj	2019 Mar 15	01:48	24°♓11'19	3°29'42
minimum elong	2019 Mar 15	03:58	24°♓06'09	3°29'27
min. Earth dist.	2019 Mar 18	06:55	21°♓09'08	0.60909 AU
morning rise	2019 Mar 21	19:58	18°♓20'24	
direct	2019 Mar 28	13:59	16°♓05'45	
desc. node	2019 Mar 30	22:54	16°♓21'24	
morning max el	2019 Apr 11	19:42	23°♓59'22	27°42'46
	2019 Apr 17	06:01	0°♈	
	2019 May 06	18:25	0°♉	
morning set	2019 May 14	06:28	14°♉38'38	
asc. node	2019 May 19	15:25	26°♉02'59	
max. Earth dist.	2019 May 20	09:25	27°♉40'58	1.32284 AU
	2019 May 21	10:52	0°♊	
superior conj	2019 May 21	13:07	0°♊12'20	0°20'00
minimum elong	2019 May 21	12:13	0°♊07'24	0°19'49
evening rise	2019 May 28	10:02	15°♊08'39	
	2019 Jun 04	20:05	0°♋	
evening max el	2019 Jun 23	23:16	27°♋21'01	25°09'23
desc. node	2019 Jun 26	22:08	29°♋55'42	
	2019 Jun 27	00:19	0°♌	
retrograde	2019 Jul 07	23:14	4°♌27'54	
evening set	2019 Jul 13	11:10	3°♌18'14	
min. Earth dist.	2019 Jul 18	10:59	0°♌33'28	0.57635 AU
	2019 Jul 19	07:06	30°℞♋	
inferior conj	2019 Jul 21	12:34	28°♋28'41	-4°57'36
minimum elong	2019 Jul 21	11:32	28°♋30'27	4°57'34
morning rise	2019 Jul 29	14:30	24°♋16'16	

direct	2019 Aug 01	03:58	23°♋56'51	
morning max el	2019 Aug 09	23:08	28°♋04'37	19°02'47
	2019 Aug 11	19:46	0°♌	
asc. node	2019 Aug 15	14:41	4°♌56'19	
morning set	2019 Aug 26	17:25	24°♌51'01	
	2019 Aug 29	07:48	0°♍	
superior conj	2019 Sep 04	01:40	11°♍15'31	1°42'26
minimum elong	2019 Sep 04	03:20	11°♍23'31	1°42'21
max. Earth dist.	2019 Sep 10	18:53	23°♍47'00	1.38681 AU
	2019 Sep 14	07:14	0°♎	
evening rise	2019 Sep 14	15:02	0°♎33'47	
desc. node	2019 Sep 22	21:29	14°♎16'05	
	2019 Oct 03	08:14	0°♏	
evening max el	2019 Oct 20	04:02	20°♏56'13	24°38'00
retrograde	2019 Oct 31	15:41	27°♏38'16	
evening set	2019 Nov 06	04:11	25°♏19'25	
min. Earth dist.	2019 Nov 10	19:12	20°♏03'02	0.67483 AU
inferior conj	2019 Nov 11	15:22	18°♏55'51	0°01'16
minimum elong	2019 Nov 11	15:20	18°♏55'58	0°01'16
transit middle	2019 Nov 11	15:20	18°♏55'58	0°01'16
transit begin	2019 Nov 11	12:35	19°♏05'06	
transit end	2019 Nov 11	18:04	18°♏46'50	
asc. node	2019 Nov 11	13:53	19°♏00'45	
morning rise	2019 Nov 17	02:34	12°♏53'36	
direct	2019 Nov 20	19:12	11°♏35'11	
morning max el	2019 Nov 28	10:29	15°♏57'11	20°03'49
	2019 Dec 09	09:42	0°♐	
desc. node	2019 Dec 19	20:47	15°♐35'41	
morning set	2019 Dec 25	06:07	23°♐51'52	
	2019 Dec 29	04:55	0°♑	
max. Earth dist.	2020 Jan 05	04:21	11°♑00'56	1.43884 AU
superior conj	2020 Jan 10	15:19	19°♑49'57	-1°55'35
minimum elong	2020 Jan 10	09:38	19°♑26'43	1°55'16
	2020 Jan 16	18:31	0°♒	
evening rise	2020 Jan 23	16:06	11°♒45'35	
	2020 Feb 03	11:37	0°♓	
asc. node	2020 Feb 07	13:10	5°♓55'26	
evening max el	2020 Feb 10	13:56	9°♓27'59	18°11'48
retrograde	2020 Feb 17	00:54	12°♓53'23	
evening set	2020 Feb 19	21:54	12°♓10'51	
inferior conj	2020 Feb 26	01:45	6°♓55'08	3°43'13
minimum elong	2020 Feb 26	01:56	6°♓54'38	3°43'13
min. Earth dist.	2020 Feb 28	17:55	4°♓03'11	0.62960 AU
morning rise	2020 Mar 03	04:56	0°♓52'56	
	2020 Mar 04	11:08	30°℞♒	
direct	2020 Mar 10	03:49	28°♒12'42	
	2020 Mar 16	07:43	0°♓	
desc. node	2020 Mar 16	19:56	0°♓17'20	
morning max el	2020 Mar 24	02:06	6°♓08'40	27°46'56
	2020 Apr 11	04:48	0°♈	
morning set	2020 Apr 27	06:29	28°♈52'23	
	2020 Apr 27	19:53	0°♉	
max. Earth dist.	2020 May 02	16:04	10°♉04'38	1.32787 AU
superior conj	2020 May 04	21:41	14°♉52'20	-0°06'30
minimum elong	2020 May 04	22:00	14°♉54'02	0°06'26
behind sun begin	2020 May 04	17:11	14°♉28'01	
behind sun end	2020 May 05	02:49	15°♉20'04	
asc. node	2020 May 05	12:26	16°♉12'04	
evening rise	2020 May 11	21:52	29°♉59'30	
	2020 May 11	21:58	0°♊	
	2020 May 28	18:09	0°♋	
evening max el	2020 Jun 04	13:07	7°♋55'26	23°36'18
desc. node	2020 Jun 12	19:09	13°♋39'24	
retrograde	2020 Jun 18	04:59	14°♋45'50	

evening set	2020 Jun 22 05:28	14°♋10'22	
min. Earth dist.	2020 Jun 28 23:30	11°♋01'36	0.55989 AU
inferior conj	2020 Jul 01 02:53	9°♋44'37	-4°26'57
minimum elong	2020 Jun 30 20:36	9°♋54'04	4°25'53
morning rise	2020 Jul 09 14:20	5°♋48'31	
direct	2020 Jul 12 08:26	5°♋29'34	
morning max el	2020 Jul 22 15:12	10°♋15'27	20°08'00
asc. node	2020 Aug 01 11:42	23°♋24'07	
	2020 Aug 05 03:32	0°♌	
morning set	2020 Aug 09 21:50	9°♌24'22	
superior conj	2020 Aug 17 15:07	25°♌09'36	1°45'42
minimum elong	2020 Aug 17 15:01	25°♌09'03	1°45'42
	2020 Aug 20 01:30	0°♍	
max. Earth dist.	2020 Aug 23 00:10	5°♍42'26	1.36718 AU
evening rise	2020 Aug 26 21:24	12°♍57'13	
	2020 Sep 05 19:46	0°♎	
desc. node	2020 Sep 08 18:29	4°♎40'14	
	2020 Sep 27 07:41	0°♏	
evening max el	2020 Oct 01 16:06	4°♏36'40	25°49'28
retrograde	2020 Oct 14 01:05	11°♏40'10	
evening set	2020 Oct 20 03:50	9°♏07'17	
min. Earth dist.	2020 Oct 24 11:16	4°♏26'20	0.66836 AU
inferior conj	2020 Oct 25 18:23	2°♏47'51	-0°55'24
minimum elong	2020 Oct 25 19:50	2°♏43'17	0°54'46
asc. node	2020 Oct 28 10:56	29°♎33'56	
	2020 Oct 28 01:33	30°℞♎	
morning rise	2020 Oct 31 12:07	26°♎54'11	
direct	2020 Nov 03 17:50	25°♎53'50	
morning max el	2020 Nov 10 17:03	29°♎47'38	19°05'52
	2020 Nov 10 21:55	0°♏	
	2020 Dec 01 19:51	0°♐	
morning set	2020 Dec 03 11:08	2°♐33'14	
desc. node	2020 Dec 05 17:48	6°♐06'38	
max. Earth dist.	2020 Dec 17 20:00	25°♐03'19	1.44878 AU
superior conj	2020 Dec 20 03:26	28°♐42'04	-1°27'07
minimum elong	2020 Dec 19 18:34	28°♐07'03	1°26'13
	2020 Dec 20 23:07	0°♑	
evening rise	2021 Jan 04 00:22	22°♑38'23	
	2021 Jan 08 12:00	0°♒	
evening max el	2021 Jan 24 01:57	22°♒51'29	18°33'52
asc. node	2021 Jan 24 10:12	23°♒12'05	
retrograde	2021 Jan 30 15:52	26°♒29'27	
evening set	2021 Feb 02 18:27	25°♒35'20	
inferior conj	2021 Feb 08 13:48	20°♒01'05	3°37'37
minimum elong	2021 Feb 08 12:26	20°♒05'10	3°37'30
min. Earth dist.	2021 Feb 10 14:25	17°♒36'53	0.64716 AU
morning rise	2021 Feb 14 05:55	13°♒52'37	
direct	2021 Feb 21 00:52	11°♒01'22	
desc. node	2021 Mar 03 16:59	16°♒14'46	
morning max el	2021 Mar 06 11:22	18°♒50'30	27°16'00
	2021 Mar 15 22:26	0°♓	
	2021 Apr 04 03:41	0°♈	
morning set	2021 Apr 10 21:45	12°♈36'05	
max. Earth dist.	2021 Apr 15 14:20	21°♈59'22	1.33724 AU
superior conj	2021 Apr 19 01:50	29°♈14'15	-0°34'17
minimum elong	2021 Apr 19 03:33	29°♈23'22	0°33'56
	2021 Apr 19 10:29	0°♉	
asc. node	2021 Apr 22 09:28	6°♉17'21	
evening rise	2021 Apr 26 08:49	14°♉42'54	
	2021 May 04 02:49	0°♊	
evening max el	2021 May 17 05:54	18°♊27'41	22°01'02
retrograde	2021 May 29 22:34	24°♊43'01	
desc. node	2021 May 30 16:11	24°♊41'48	
evening set	2021 Jun 01 15:58	24°♊26'30	
min. Earth dist.	2021 Jun 10 10:59	20°♊41'20	0.55043 AU
inferior conj	2021 Jun 11 01:13	20°♊21'23	-3°08'12
minimum elong	2021 Jun 10 17:30	20°♊32'11	3°05'55
morning rise	2021 Jun 19 20:34	16°♊28'26	
direct	2021 Jun 22 22:00	16°♊07'37	
morning max el	2021 Jul 04 19:45	21°♊41'58	21°33'03
	2021 Jul 11 20:35	0°♋	
asc. node	2021 Jul 19 08:43	12°♋26'37	
morning set	2021 Jul 25 06:34	24°♋11'10	
	2021 Jul 28 01:12	0°♌	
superior conj	2021 Aug 01 14:08	9°♌32'31	1°41'31
minimum elong	2021 Aug 01 12:42	9°♌25'06	1°41'27
max. Earth dist.	2021 Aug 05 12:25	17°♌35'59	1.35030 AU
evening rise	2021 Aug 09 21:31	26°♌11'47	
	2021 Aug 11 21:57	0°♍	
desc. node	2021 Aug 26 15:30	24°♍45'58	
	2021 Aug 30 05:10	0°♎	
evening max el	2021 Sep 14 04:25	18°♎13'37	26°45'39
retrograde	2021 Sep 27 05:10	25°♎28'25	
evening set	2021 Oct 03 21:02	22°♎46'21	
min. Earth dist.	2021 Oct 07 21:18	18°♎42'05	0.65842 AU
inferior conj	2021 Oct 09 16:18	16°♎35'27	-1°53'48
minimum elong	2021 Oct 09 19:21	16°♎26'29	1°52'35
asc. node	2021 Oct 15 07:58	11°♎08'04	
morning rise	2021 Oct 15 18:17	10°♎53'29	
direct	2021 Oct 18 15:17	10°♎07'35	
morning max el	2021 Oct 25 05:30	13°♎43'23	18°23'57
	2021 Nov 05 22:35	0°♏	
morning set	2021 Nov 13 18:39	12°♏36'34	
desc. node	2021 Nov 22 14:49	26°♏46'34	
	2021 Nov 24 15:36	0°♐	
superior conj	2021 Nov 29 04:39	7°♐10'05	-0°43'06
minimum elong	2021 Nov 28 23:07	6°♐48'17	0°42'22
max. Earth dist.	2021 Nov 30 15:08	9°♐25'35	1.45148 AU
	2021 Dec 13 17:52	0°♑	
evening rise	2021 Dec 15 09:16	2°♑34'54	
greatest brilliancy	2021 Dec 25 17:46	18°♑48'36	-0.8m
	2022 Jan 02 07:10	0°♒	
evening max el	2022 Jan 07 11:04	6°♒19'08	19°13'19
asc. node	2022 Jan 11 07:15	9°♒25'27	
retrograde	2022 Jan 14 11:41	10°♒20'15	
evening set	2022 Jan 17 20:49	9°♒13'35	
inferior conj	2022 Jan 23 10:28	3°♒22'59	3°17'55
minimum elong	2022 Jan 23 08:10	3°♒30'22	3°17'29
min. Earth dist.	2022 Jan 24 19:54	1°♒36'01	0.66081 AU
	2022 Jan 26 03:05	30°℞♑	
morning rise	2022 Jan 28 19:16	27°♑11'02	
direct	2022 Feb 04 04:13	24°♑22'35	
	2022 Feb 14 21:54	0°♒	
morning max el	2022 Feb 16 21:07	1°♒53'30	26°16'37
desc. node	2022 Feb 18 14:02	3°♒40'16	
	2022 Mar 10 01:32	0°♓	
morning set	2022 Mar 25 00:33	25°♓38'37	
	2022 Mar 27 07:45	0°♈	
max. Earth dist.	2022 Mar 29 01:24	3°♈21'43	1.35111 AU
superior conj	2022 Apr 02 23:11	13°♈11'09	-1°02'06
minimum elong	2022 Apr 03 02:18	13°♈27'08	1°01'32
asc. node	2022 Apr 09 06:32	26°♈14'46	
evening rise	2022 Apr 10 16:55	29°♈12'32	
	2022 Apr 11 02:09	0°♉	
evening max el	2022 Apr 29 08:09	29°♉26'22	20°36'29
	2022 Apr 29 22:23	0°♊	
retrograde	2022 May 10 11:48	4°♊51'31	
evening set	2022 May 12 13:51	4°♊40'54	

desc. node	2022 May 17	13:13	3°♊01'03	
inferior conj	2022 May 21	19:18	0°♊43'06	-1°14'22
minimum elong	2022 May 21	15:47	0°♊48'11	1°13'04
min. Earth dist.	2022 May 22	23:31	0°♊02'29	0.55013 AU
	2022 May 23	01:15	30°℞♉	
morning rise	2022 May 30	16:58	26°♉33'34	
direct	2022 Jun 03	08:00	26°♉05'14	
	2022 Jun 13	15:27	0°♊	
morning max el	2022 Jun 16	14:56	2°♊30'30	23°11'59
	2022 Jul 05	06:25	0°♋	
asc. node	2022 Jul 06	05:46	1°♋55'18	
morning set	2022 Jul 09	17:46	9°♋06'10	
superior conj	2022 Jul 16	19:38	24°♋15'19	1°31'19
minimum elong	2022 Jul 16	17:27	24°♋03'38	1°31'06
max. Earth dist.	2022 Jul 19	09:49	29°♋45'27	1.33722 AU
	2022 Jul 19	12:35	0°♌	
evening rise	2022 Jul 24	10:59	10°♌05'50	
	2022 Aug 04	06:58	0°♍	
desc. node	2022 Aug 13	12:33	14°♍25'16	
	2022 Aug 26	01:03	0°♎	
evening max el	2022 Aug 27	16:14	1°♎36'58	27°19'12
retrograde	2022 Sep 10	03:38	8°♎55'27	
evening set	2022 Sep 17	05:12	6°♎12'27	
min. Earth dist.	2022 Sep 20	23:10	2°♎43'48	0.64491 AU
inferior conj	2022 Sep 23	06:50	0°♎14'07	-2°51'42
minimum elong	2022 Sep 23	11:20	0°♎01'59	2°50'09
	2022 Sep 23	12:04	30°℞♍	
morning rise	2022 Sep 29	18:29	24°♍47'04	
direct	2022 Oct 02	09:07	24°♍11'58	
asc. node	2022 Oct 02	05:00	24°♍12'07	
morning max el	2022 Oct 08	21:14	27°♍38'51	17°58'55
	2022 Oct 10	23:51	0°♎	
morning set	2022 Oct 26	06:47	24°♎03'55	
	2022 Oct 29	19:22	0°♏	
superior conj	2022 Nov 08	16:43	16°♏15'09	0°05'24
minimum elong	2022 Nov 08	17:21	16°♏17'42	0°05'19
behind sun begin	2022 Nov 08	07:29	15°♏37'56	
behind sun end	2022 Nov 09	03:13	16°♏57'24	
desc. node	2022 Nov 09	11:52	17°♏32'09	
max. Earth dist.	2022 Nov 13	09:53	23°♏46'51	1.44675 AU
	2022 Nov 17	08:42	0°♐	
evening rise	2022 Nov 24	23:26	11°♐49'11	
	2022 Dec 06	22:08	0°♑	
greatest brilliancy	2022 Dec 09	06:58	3°♑30'49	-0.6m
evening max el	2022 Dec 21	15:31	19°♑48'37	20°08'21
retrograde	2022 Dec 29	09:32	24°♑21'24	
asc. node	2022 Dec 29	04:17	24°♑21'08	
evening set	2023 Jan 02	02:44	23°♑00'53	
inferior conj	2023 Jan 07	12:57	16°♑56'50	2°47'32
minimum elong	2023 Jan 07	10:19	17°♑05'40	2°46'49
min. Earth dist.	2023 Jan 08	08:42	15°♑50'24	0.67044 AU
morning rise	2023 Jan 12	17:43	10°♑43'26	
direct	2023 Jan 18	13:12	8°♑08'08	
morning max el	2023 Jan 30	05:54	15°♑06'53	24°57'52
desc. node	2023 Feb 05	11:05	22°♑08'39	
	2023 Feb 11	11:22	0°♒	
	2023 Mar 02	22:52	0°♓	
morning set	2023 Mar 07	09:46	7°♓45'24	
max. Earth dist.	2023 Mar 11	01:28	14°♓23'26	1.36927 AU
superior conj	2023 Mar 17	10:45	26°♓34'22	-1°28'07
minimum elong	2023 Mar 17	14:53	26°♓54'40	1°27'32
	2023 Mar 19	04:24	0°♈	
evening rise	2023 Mar 25	19:55	13°♈21'00	
asc. node	2023 Mar 27	03:35	15°♈59'08	

	2023 Apr 03	16:22	0°♉	
evening max el	2023 Apr 11	22:10	11°♉03'45	19°29'24
retrograde	2023 Apr 21	08:35	15°♉37'17	
evening set	2023 Apr 23	09:51	15°♉25'16	
inferior conj	2023 May 01	23:28	11°♉19'48	0°42'08
minimum elong	2023 May 02	01:13	11°♉16'58	0°41'30
desc. node	2023 May 04	10:16	9°♉45'18	
min. Earth dist.	2023 May 04	14:03	9°♉39'21	0.55930 AU
morning rise	2023 May 10	13:48	6°♉38'05	
direct	2023 May 15	03:17	5°♉50'59	
morning max el	2023 May 29	05:34	12°♉58'16	24°53'24
	2023 Jun 11	10:27	0°♊	
asc. node	2023 Jun 23	02:50	21°♊42'07	
morning set	2023 Jun 24	05:38	24°♊02'33	
	2023 Jun 27	00:24	0°♋	
superior conj	2023 Jul 01	05:06	9°♋08'45	1°16'10
minimum elong	2023 Jul 01	02:41	8°♋55'37	1°15'49
max. Earth dist.	2023 Jul 02	15:12	12°♋14'07	1.32815 AU
evening rise	2023 Jul 08	09:54	24°♋27'11	
	2023 Jul 11	04:11	0°♌	
	2023 Jul 28	21:31	0°♍	
desc. node	2023 Jul 31	09:34	3°♍26'05	
evening max el	2023 Aug 10	01:47	14°♍33'55	27°24'01
retrograde	2023 Aug 23	19:59	21°♍51'07	
evening set	2023 Aug 31	00:57	19°♍19'02	
min. Earth dist.	2023 Sep 03	15:12	16°♍20'32	0.62794 AU
inferior conj	2023 Sep 06	11:09	13°♍36'50	-3°45'45
minimum elong	2023 Sep 06	16:30	13°♍23'56	3°44'18
morning rise	2023 Sep 13	09:28	8°♍27'52	
direct	2023 Sep 15	20:21	8°♍00'11	
asc. node	2023 Sep 19	02:03	8°♍49'34	
morning max el	2023 Sep 22	13:16	11°♍26'32	17°51'38
	2023 Oct 05	00:09	0°♎	
morning set	2023 Oct 08	18:08	6°♎37'50	
superior conj	2023 Oct 20	05:38	26°♎34'20	0°47'23
minimum elong	2023 Oct 20	09:48	26°♎51'50	0°46'50
	2023 Oct 22	06:49	0°♏	
max. Earth dist.	2023 Oct 27	01:19	7°♏49'05	1.43526 AU
desc. node	2023 Oct 27	08:55	8°♏19'43	
evening rise	2023 Nov 04	07:58	20°♏54'39	
	2023 Nov 10	06:25	0°♐	
	2023 Dec 01	14:32	0°♑	
evening max el	2023 Dec 04	14:29	3°♑19'30	21°16'18
retrograde	2023 Dec 13	07:09	8°♑29'20	
asc. node	2023 Dec 16	01:19	7°♑47'10	
evening set	2023 Dec 17	10:17	6°♑53'32	
inferior conj	2023 Dec 22	18:54	0°♑39'18	2°08'48
minimum elong	2023 Dec 22	16:28	0°♑47'42	2°07'58
min. Earth dist.	2023 Dec 23	02:29	0°♑13'07	0.67618 AU
	2023 Dec 23	06:17	30°℞♐	
morning rise	2023 Dec 27	22:28	24°♐26'24	
direct	2024 Jan 02	03:08	22°♐10'52	
morning max el	2024 Jan 12	14:38	28°♐25'20	23°30'07
	2024 Jan 14	02:49	0°♑	
desc. node	2024 Jan 23	08:09	11°♑21'53	
	2024 Feb 05	05:10	0°♒	
morning set	2024 Feb 16	19:16	18°♒40'19	
max. Earth dist.	2024 Feb 20	20:13	25°♒37'30	1.39033 AU
	2024 Feb 23	07:29	0°♓	
superior conj	2024 Feb 28	08:43	9°♓14'46	-1°49'37
minimum elong	2024 Feb 28	12:49	9°♓33'56	1°49'16
evening rise	2024 Mar 08	15:07	27°♓01'34	
	2024 Mar 10	04:03	0°♈	
asc. node	2024 Mar 13	00:39	5°♈25'35	

evening max el	2024 Mar 24 22:34	23°♈19'22	18°42'06
retrograde	2024 Apr 01 22:14	27°♈13'07	
evening set	2024 Apr 04 05:02	26°♈55'12	
inferior conj	2024 Apr 11 23:03	22°♈32'20	2°13'19
minimum elong	2024 Apr 12 03:01	22°♈24'52	2°12'11
min. Earth dist.	2024 Apr 15 07:22	20°♈02'52	0.57601 AU
morning rise	2024 Apr 19 21:53	17°♈17'14	
desc. node	2024 Apr 20 07:18	17°♈06'52	
direct	2024 Apr 25 12:54	15°♈58'52	
morning max el	2024 May 09 21:29	23°♈32'32	26°21'56
	2024 May 15 17:05	0°♉	
	2024 Jun 03 07:37	0°♊	
morning set	2024 Jun 07 16:34	8°♊55'01	
asc. node	2024 Jun 08 23:54	11°♊41'18	
superior conj	2024 Jun 14 16:33	24°♊06'06	0°56'55
minimum elong	2024 Jun 14 14:24	23°♊54'16	0°56'31
max. Earth dist.	2024 Jun 15 01:49	24°♊57'08	1.32306 AU
	2024 Jun 17 09:07	0°♋	
evening rise	2024 Jun 21 15:18	9°♋06'36	
	2024 Jul 02 12:50	0°♌	
desc. node	2024 Jul 17 06:34	21°♌32'32	
evening max el	2024 Jul 22 06:39	26°♌52'37	26°56'08
	2024 Jul 25 22:42	0°♍	
retrograde	2024 Aug 05 04:56	4°♍06'17	
evening set	2024 Aug 12 03:57	1°♍58'38	
	2024 Aug 15 00:15	30°℞♌	
min. Earth dist.	2024 Aug 15 20:52	29°♌18'58	0.60831 AU
inferior conj	2024 Aug 19 01:58	26°♌35'36	-4°30'19
minimum elong	2024 Aug 19 06:43	26°♌25'30	4°29'29
morning rise	2024 Aug 26 11:16	21°♌47'34	
direct	2024 Aug 28 21:14	21°♌24'32	
asc. node	2024 Sep 04 23:07	24°♌50'34	
morning max el	2024 Sep 05 02:30	24°♌58'43	18°03'12
	2024 Sep 09 06:50	0°♍	
morning set	2024 Sep 20 22:32	20°♍00'40	
	2024 Sep 26 08:09	0°♎	
superior conj	2024 Sep 30 21:09	8°♎11'29	1°17'52
minimum elong	2024 Oct 01 01:29	8°♎30'39	1°17'24
max. Earth dist.	2024 Oct 08 11:58	21°♎18'29	1.41855 AU
desc. node	2024 Oct 13 05:54	29°♎05'45	
	2024 Oct 13 19:23	0°♏	
evening rise	2024 Oct 14 03:56	0°♏34'16	
	2024 Nov 02 19:18	0°♐	
evening max el	2024 Nov 16 08:09	16°♐51'53	22°33'01
retrograde	2024 Nov 26 02:42	22°♐40'18	
evening set	2024 Nov 30 17:44	20°♐47'51	
asc. node	2024 Dec 01 22:22	19°♐41'39	
inferior conj	2024 Dec 06 02:18	14°♐27'02	1°23'20
minimum elong	2024 Dec 06 00:30	14°♐33'14	1°22'38
min. Earth dist.	2024 Dec 05 22:48	14°♐39'09	0.67836 AU
morning rise	2024 Dec 11 07:08	8°♐16'38	
direct	2024 Dec 15 20:56	6°♐23'46	
morning max el	2024 Dec 25 02:30	11°♐49'37	22°02'57
	2025 Jan 08 10:30	0°♑	
desc. node	2025 Jan 09 05:10	1°♑06'34	
morning set	2025 Jan 26 23:51	28°♑10'47	
	2025 Jan 28 02:53	0°♒	
max. Earth dist.	2025 Feb 01 17:53	7°♒37'25	1.41171 AU
superior conj	2025 Feb 09 12:08	20°♒59'36	-2°02'55
minimum elong	2025 Feb 09 14:14	21°♒08'52	2°02'52
	2025 Feb 14 12:06	0°♓	
evening rise	2025 Feb 19 23:04	10°♓05'30	
asc. node	2025 Feb 27 21:41	24°♓27'18	
	2025 Mar 03 09:04	0°♈	

evening max el	2025 Mar 08 06:09	6°♈04'31	18°14'53
retrograde	2025 Mar 15 06:46	9°♈35'20	
evening set	2025 Mar 17 19:35	9°♈08'49	
inferior conj	2025 Mar 24 19:48	4°♈24'56	3°10'39
minimum elong	2025 Mar 24 23:02	4°♈17'50	3°10'05
min. Earth dist.	2025 Mar 28 05:23	1°♈27'42	0.59680 AU
	2025 Mar 30 02:18	30°℞♓	
morning rise	2025 Apr 01 00:09	28°♓44'32	
direct	2025 Apr 07 11:08	26°♓49'35	
desc. node	2025 Apr 07 04:20	26°♓49'48	
	2025 Apr 16 06:25	0°♈	
morning max el	2025 Apr 21 18:49	4°♈37'19	27°23'25
	2025 May 10 12:15	0°♉	
morning set	2025 May 23 00:51	23°♉37'51	
	2025 May 26 00:59	0°♊	
asc. node	2025 May 26 20:58	1°♊47'51	
max. Earth dist.	2025 May 29 14:06	7°♊43'39	1.32181 AU
superior conj	2025 May 30 04:13	9°♊01'17	0°34'18
minimum elong	2025 May 30 02:45	8°♊53'13	0°33'59
evening rise	2025 Jun 06 00:47	23°♊56'04	
	2025 Jun 08 22:58	0°♋	
	2025 Jun 26 19:09	0°♌	
evening max el	2025 Jul 04 04:39	8°♌24'49	25°56'01
desc. node	2025 Jul 04 03:34	8°♌22'16	
retrograde	2025 Jul 18 04:45	15°♌34'31	
evening set	2025 Jul 24 09:29	14°♌02'25	
min. Earth dist.	2025 Jul 28 17:06	11°♌24'58	0.58765 AU
inferior conj	2025 Jul 31 23:41	9°♌00'36	-4°56'13
minimum elong	2025 Aug 01 01:29	8°♌57'17	4°56'07
morning rise	2025 Aug 08 19:42	4°♌35'27	
direct	2025 Aug 11 07:30	4°♌14'58	
morning max el	2025 Aug 19 09:48	8°♌06'51	18°35'00
asc. node	2025 Aug 22 20:10	12°♌00'09	
	2025 Sep 02 13:23	0°♍	
morning set	2025 Sep 04 15:04	3°♍59'02	
superior conj	2025 Sep 13 10:52	20°♍54'40	1°36'30
minimum elong	2025 Sep 13 13:38	21°♍07'38	1°36'17
	2025 Sep 18 10:06	0°♎	
max. Earth dist.	2025 Sep 20 17:59	4°♎07'00	1.39868 AU
evening rise	2025 Sep 24 22:09	11°♎15'59	
desc. node	2025 Sep 30 02:54	19°♎47'08	
	2025 Oct 06 16:41	0°♏	
	2025 Oct 29 11:02	0°♐	
evening max el	2025 Oct 29 22:02	0°♐27'42	23°52'58
retrograde	2025 Nov 09 19:02	6°♐51'43	
evening set	2025 Nov 14 23:31	4°♐42'07	
asc. node	2025 Nov 18 19:23	0°♐26'19	
	2025 Nov 19 03:20	30°℞♏	
inferior conj	2025 Nov 20 09:23	28°♏18'28	0°32'31
minimum elong	2025 Nov 20 08:37	28°♏21'05	0°32'11
min. Earth dist.	2025 Nov 19 19:16	29°♏06'25	0.67716 AU
morning rise	2025 Nov 25 17:42	22°♏12'45	
direct	2025 Nov 29 17:38	20°♏42'25	
morning max el	2025 Dec 07 21:03	25°♏24'35	20°43'46
	2025 Dec 11 22:40	0°♐	
desc. node	2025 Dec 27 02:11	21°♐14'12	
	2026 Jan 01 21:11	0°♑	
morning set	2026 Jan 06 03:01	6°♑32'56	
max. Earth dist.	2026 Jan 14 23:14	20°♑34'44	1.43040 AU
	2026 Jan 20 16:41	0°♒	
superior conj	2026 Jan 21 15:49	1°♒36'53	-2°03'13
minimum elong	2026 Jan 21 13:21	1°♒26'30	2°03'09
evening rise	2026 Feb 02 15:50	22°♒24'40	
	2026 Feb 06 22:48	0°♓	

asc. node	2026 Feb 14 18:42	12°♓56'28	
evening max el	2026 Feb 19 17:41	19°♓10'15	18°07'22
retrograde	2026 Feb 26 06:48	22°♓33'55	
evening set	2026 Mar 01 00:52	21°♓57'28	
inferior conj	2026 Mar 07 11:02	16°♓52'43	3°38'09
minimum elong	2026 Mar 07 12:20	16°♓49'25	3°38'04
min. Earth dist.	2026 Mar 10 11:04	13°♓52'35	0.61813 AU
morning rise	2026 Mar 13 22:23	10°♓56'13	
direct	2026 Mar 20 19:33	8°♓29'27	
desc. node	2026 Mar 25 01:22	9°♓19'45	
morning max el	2026 Apr 03 22:34	16°♓24'16	27°49'10
	2026 Apr 15 03:21	0°♈	
	2026 May 03 02:57	0°♉	
morning set	2026 May 07 04:34	8°♉04'33	
max. Earth dist.	2026 May 13 00:08	20°♉20'30	1.32449 AU
asc. node	2026 May 13 17:59	21°♉57'14	
superior conj	2026 May 14 14:25	23°♉48'24	0°09'00
minimum elong	2026 May 14 13:59	23°♉46'06	0°08'54
behind sun begin	2026 May 14 09:43	23°♉22'48	
behind sun end	2026 May 14 18:16	24°♉09'25	
	2026 May 17 10:26	0°♊	
evening rise	2026 May 21 12:18	8°♊48'22	
	2026 Jun 01 11:56	0°♋	
evening max el	2026 Jun 15 20:00	19°♋13'42	24°31'01
desc. node	2026 Jun 21 00:36	23°♋24'18	
retrograde	2026 Jun 29 17:36	26°♋15'26	
evening set	2026 Jul 04 15:15	25°♋21'28	
min. Earth dist.	2026 Jul 10 06:59	22°♋28'21	0.56866 AU
inferior conj	2026 Jul 13 01:26	20°♋42'08	-4°50'17
minimum elong	2026 Jul 12 22:02	20°♋47'36	4°49'59
morning rise	2026 Jul 21 07:32	16°♋38'07	
direct	2026 Jul 23 22:58	16°♋19'00	
morning max el	2026 Aug 02 08:07	20°♋40'55	19°28'05
asc. node	2026 Aug 09 17:12	0°♌02'51	
	2026 Aug 09 16:28	0°♌	
morning set	2026 Aug 19 15:57	18°♌21'38	
	2026 Aug 25 11:04	0°♍	
superior conj	2026 Aug 27 17:04	4°♍26'59	1°44'50
minimum elong	2026 Aug 27 17:56	4°♍31'15	1°44'49
max. Earth dist.	2026 Sep 02 21:53	16°♍15'58	1.37818 AU
evening rise	2026 Sep 06 16:08	23°♍03'48	
	2026 Sep 10 16:21	0°♎	
desc. node	2026 Sep 16 23:55	10°♎18'59	
	2026 Sep 30 11:44	0°♏	
evening max el	2026 Oct 12 10:03	14°♏06'17	25°09'39
retrograde	2026 Oct 24 07:13	20°♏58'44	
evening set	2026 Oct 30 01:57	18°♏33'11	
min. Earth dist.	2026 Nov 03 13:34	13°♏31'58	0.67255 AU
inferior conj	2026 Nov 04 14:24	12°♏10'51	-0°22'25
minimum elong	2026 Nov 04 14:58	12°♏09'00	0°22'10
asc. node	2026 Nov 05 16:25	10°♏46'49	
morning rise	2026 Nov 10 04:12	6°♏12'11	
direct	2026 Nov 13 15:54	5°♏02'01	
morning max el	2026 Nov 20 23:31	9°♏10'32	19°37'18
greatest brilliancy	2026 Dec 04 06:21	26°♏51'25	-0.7m
	2026 Dec 06 08:33	0°♐	
desc. node	2026 Dec 13 23:13	11°♐38'07	
morning set	2026 Dec 15 24:00	14°♐46'25	
	2026 Dec 25 18:22	0°♑	
max. Earth dist.	2026 Dec 28 11:41	4°♑18'00	1.44393 AU
superior conj	2027 Jan 01 17:08	11°♑02'52	-1°45'49
minimum elong	2027 Jan 01 09:27	10°♑32'03	1°45'13
	2027 Jan 13 06:06	0°♒	
evening rise	2027 Jan 15 13:05	3°♒51'05	
	2027 Feb 01 01:26	0°♓	
asc. node	2027 Feb 01 15:43	0°♓43'17	
evening max el	2027 Feb 03 06:15	2°♓29'09	18°18'55
retrograde	2027 Feb 09 17:36	5°♓58'53	
evening set	2027 Feb 12 16:49	5°♓11'37	
inferior conj	2027 Feb 18 16:39	29°♒47'37	3°42'51
minimum elong	2027 Feb 18 16:06	29°♒49'10	3°42'50
	2027 Feb 18 12:16	30°℞♒	
min. Earth dist.	2027 Feb 21 02:15	27°♒05'46	0.63747 AU
morning rise	2027 Feb 24 14:37	23°♒41'59	
direct	2027 Mar 03 12:32	20°♒55'23	
desc. node	2027 Mar 11 22:25	24°♒12'14	
morning max el	2027 Mar 17 06:50	28°♒50'18	27°37'48
	2027 Mar 18 10:02	0°♓	
	2027 Apr 08 23:20	0°♈	
morning set	2027 Apr 21 01:18	22°♈07'29	
	2027 Apr 24 22:18	0°♉	
max. Earth dist.	2027 Apr 26 03:50	2°♉34'08	1.33128 AU
superior conj	2027 Apr 28 21:22	8°♉21'52	-0°18'12
minimum elong	2027 Apr 28 22:16	8°♉26'41	0°18'00
asc. node	2027 Apr 30 15:01	12°♉05'38	
evening rise	2027 May 06 00:01	23°♉37'11	
	2027 May 09 01:58	0°♊	
evening max el	2027 May 28 09:58	29°♊42'52	22°55'08
	2027 May 28 17:07	0°♋	
desc. node	2027 Jun 07 21:37	6°♋02'59	
retrograde	2027 Jun 10 18:15	6°♋21'40	
evening set	2027 Jun 14 04:01	5°♋56'11	
min. Earth dist.	2027 Jun 21 18:49	2°♋33'25	0.55479 AU
inferior conj	2027 Jun 23 08:00	1°♋39'43	-3°59'19
minimum elong	2027 Jun 23 00:23	1°♋50'44	3°57'34
	2027 Jun 26 07:19	30°℞♊	
morning rise	2027 Jul 01 23:11	27°♊47'17	
direct	2027 Jul 04 19:39	27°♊28'09	
	2027 Jul 12 13:48	0°♋	
morning max el	2027 Jul 15 19:25	2°♋33'40	20°42'06
asc. node	2027 Jul 27 14:15	18°♋46'36	
	2027 Aug 02 10:52	0°♌	
morning set	2027 Aug 03 22:26	3°♌01'12	
superior conj	2027 Aug 11 11:02	18°♌34'45	1°44'44
minimum elong	2027 Aug 11 10:18	18°♌31'00	1°44'44
max. Earth dist.	2027 Aug 16 05:11	28°♌05'42	1.35951 AU
	2027 Aug 17 04:43	0°♍	
evening rise	2027 Aug 20 06:37	5°♍50'16	
	2027 Sep 03 11:37	0°♎	
desc. node	2027 Sep 03 20:57	0°♎35'59	
evening max el	2027 Sep 24 21:59	27°♎45'16	26°15'38
	2027 Sep 27 09:10	0°♏	
retrograde	2027 Oct 07 14:37	4°♏55'40	
evening set	2027 Oct 13 23:10	2°♏17'52	
	2027 Oct 16 07:36	30°℞♎	
min. Earth dist.	2027 Oct 18 03:22	27°♎52'29	0.66452 AU
inferior conj	2027 Oct 19 15:31	26°♎01'16	-1°20'03
minimum elong	2027 Oct 19 17:38	25°♎54'45	1°19'11
asc. node	2027 Oct 23 13:27	21°♎40'18	
morning rise	2027 Oct 25 12:34	20°♎12'17	
direct	2027 Oct 28 14:11	19°♎18'43	
morning max el	2027 Nov 04 08:55	23°♎04'02	18°46'01
	2027 Nov 10 00:26	0°♏	
morning set	2027 Nov 25 15:05	23°♏59'37	
	2027 Nov 29 10:24	0°♐	
desc. node	2027 Nov 30 20:14	2°♐13'21	
max. Earth dist.	2027 Dec 11 04:41	18°♐29'17	1.45080 AU
superior conj	2027 Dec 11 22:17	19°♐38'24	-1°09'48

minimum elong	2027 Dec 11 14:04	19°♐06'06	1°08'52
	2027 Dec 18 11:58	0°♑	
evening rise	2027 Dec 27 11:23	14°♑19'28	
greatest brilliancy	2028 Jan 02 14:30	24°♑11'26	-0.9m
	2028 Jan 06 05:58	0°♒	
evening max el	2028 Jan 17 17:17	15°♒55'01	18°48'37
asc. node	2028 Jan 19 12:46	17°♒35'02	
retrograde	2028 Jan 24 11:02	19°♒41'54	
evening set	2028 Jan 27 16:09	18°♒42'47	
inferior conj	2028 Feb 02 08:47	13°♒01'27	3°30'46
minimum elong	2028 Feb 02 06:57	13°♒07'08	3°30'30
min. Earth dist.	2028 Feb 04 02:55	10°♒51'59	0.65346 AU
morning rise	2028 Feb 07 21:21	6°♒51'02	
direct	2028 Feb 14 12:38	3°♒59'07	
desc. node	2028 Feb 26 19:28	10°♒50'52	
morning max el	2028 Feb 27 16:36	11°♒42'59	26°53'38
	2028 Mar 13 07:07	0°♓	
	2028 Mar 31 12:28	0°♈	
morning set	2028 Apr 03 11:48	5°♈35'33	
max. Earth dist.	2028 Apr 07 21:19	14°♈13'47	1.34255 AU
superior conj	2028 Apr 11 22:56	22°♈34'10	-0°46'12
minimum elong	2028 Apr 12 01:16	22°♈46'21	0°45'43
	2028 Apr 15 11:48	0°♉	
asc. node	2028 Apr 16 12:04	2°♉08'06	
evening rise	2028 Apr 19 10:00	8°♉15'20	
	2028 May 01 01:42	0°♊	
evening max el	2028 May 09 06:13	10°♊23'49	21°23'15
retrograde	2028 May 21 08:43	16°♊18'53	
evening set	2028 May 23 17:09	16°♊06'14	
desc. node	2028 May 24 18:40	15°♊52'36	
inferior conj	2028 Jun 02 02:46	12°♊06'29	-2°22'33
minimum elong	2028 Jun 01 20:19	12°♊15'32	2°20'22
min. Earth dist.	2028 Jun 02 06:58	12°♊00'35	0.54910 AU
morning rise	2028 Jun 10 24:00	8°♊08'27	
direct	2028 Jun 14 06:06	7°♊45'25	
morning max el	2028 Jun 26 19:34	13°♊42'38	22°13'58
	2028 Jul 09 01:38	0°♋	
asc. node	2028 Jul 13 11:19	8°♋01'01	
morning set	2028 Jul 18 08:24	17°♋51'35	
	2028 Jul 24 01:51	0°♌	
superior conj	2028 Jul 25 13:08	3°♌06'50	1°37'51
minimum elong	2028 Jul 25 11:19	2°♌57'16	1°37'43
max. Earth dist.	2028 Jul 28 20:58	10°♌02'55	1.34422 AU
evening rise	2028 Aug 02 12:55	19°♌22'58	
	2028 Aug 08 05:10	0°♍	
desc. node	2028 Aug 20 17:59	20°♍31'24	
	2028 Aug 27 13:08	0°♎	
evening max el	2028 Sep 06 10:20	11°♎18'04	27°03'14
retrograde	2028 Sep 19 16:34	18°♎35'39	
evening set	2028 Sep 26 12:54	15°♎52'11	
min. Earth dist.	2028 Sep 30 10:22	12°♎03'07	0.65300 AU
inferior conj	2028 Oct 02 10:38	9°♎45'55	-2°18'37
minimum elong	2028 Oct 02 14:20	9°♎35'23	2°17'12
morning rise	2028 Oct 08 16:32	4°♎09'41	
asc. node	2028 Oct 09 10:31	3°♎50'32	
direct	2028 Oct 11 10:28	3°♎28'50	
morning max el	2028 Oct 17 23:04	7°♎00'12	18°11'11
	2028 Nov 02 15:04	0°♏	
morning set	2028 Nov 05 11:14	4°♏40'27	
desc. node	2028 Nov 16 17:17	22°♏56'10	
superior conj	2028 Nov 20 01:40	28°♏15'52	-0°22'22
minimum elong	2028 Nov 19 22:48	28°♏04'31	0°21'58
	2028 Nov 21 04:00	0°♐	
max. Earth dist.	2028 Nov 22 23:48	2°♐52'40	1.45032 AU
evening rise	2028 Dec 06 11:17	23°♐55'24	
	2028 Dec 10 09:12	0°♑	
greatest brilliancy	2028 Dec 18 21:05	13°♑03'15	-0.7m
evening max el	2028 Dec 31 00:43	29°♑24'41	19°34'59
	2028 Dec 31 14:49	0°♒	
asc. node	2029 Jan 05 09:49	3°♒17'45	
retrograde	2029 Jan 07 07:57	3°♒38'02	
evening set	2029 Jan 10 20:18	2°♒25'43	
	2029 Jan 13 12:14	30°℞♑	
inferior conj	2029 Jan 16 08:17	26°♑29'20	3°06'10
minimum elong	2029 Jan 16 05:46	26°♑37'34	3°05'36
min. Earth dist.	2029 Jan 17 11:46	24°♑59'17	0.66546 AU
morning rise	2029 Jan 21 15:00	20°♑16'40	
direct	2029 Jan 27 18:40	17°♑32'29	
morning max el	2029 Feb 09 01:47	24°♑51'07	25°44'46
desc. node	2029 Feb 12 16:30	28°♑45'57	
	2029 Feb 13 17:52	0°♒	
	2029 Mar 06 18:15	0°♓	
morning set	2029 Mar 17 07:48	18°♓16'21	
max. Earth dist.	2029 Mar 21 03:06	25°♓23'30	1.35845 AU
	2029 Mar 23 12:19	0°♈	
superior conj	2029 Mar 26 16:34	6°♈18'13	-1°13'30
minimum elong	2029 Mar 26 20:12	6°♈36'29	1°12'54
asc. node	2029 Apr 03 09:07	22°♈00'33	
evening rise	2029 Apr 03 16:13	22°♈36'47	
	2029 Apr 07 08:52	0°♉	
evening max el	2029 Apr 21 13:35	21°♉38'41	20°05'31
retrograde	2029 May 01 23:05	26°♉40'20	
evening set	2029 May 03 23:42	26°♉29'44	
desc. node	2029 May 11 15:43	23°♉17'36	
inferior conj	2029 May 12 23:27	22°♉30'34	-0°23'09
minimum elong	2029 May 12 22:23	22°♉32'10	0°22'45
min. Earth dist.	2029 May 14 20:10	21°♉23'49	0.55305 AU
morning rise	2029 May 21 19:16	18°♉08'38	
direct	2029 May 25 19:21	17°♉33'39	
morning max el	2029 Jun 08 11:50	24°♉18'15	23°55'38
	2029 Jun 13 16:46	0°♊	
asc. node	2029 Jun 30 08:22	27°♊38'00	
	2029 Jul 01 12:01	0°♋	
morning set	2029 Jul 02 20:03	2°♋47'21	
superior conj	2029 Jul 09 20:32	17°♋54'26	1°25'26
minimum elong	2029 Jul 09 18:11	17°♋41'47	1°25'08
max. Earth dist.	2029 Jul 11 22:10	22°♋21'05	1.33290 AU
	2029 Jul 15 13:37	0°♌	
evening rise	2029 Jul 17 06:47	3°♌29'40	
	2029 Jul 31 23:35	0°♍	
desc. node	2029 Aug 07 15:01	9°♍55'38	
evening max el	2029 Aug 19 21:42	24°♍32'16	27°25'15
	2029 Aug 27 02:21	0°♎	
retrograde	2029 Sep 02 12:18	1°♎49'51	
	2029 Sep 08 10:59	30°℞♍	
evening set	2029 Sep 09 16:13	29°♍10'16	
min. Earth dist.	2029 Sep 13 08:17	25°♍55'13	0.63803 AU
inferior conj	2029 Sep 15 21:11	23°♍18'33	-3°15'27
minimum elong	2029 Sep 16 02:10	23°♍05'44	3°13'51
morning rise	2029 Sep 22 13:14	17°♍58'31	
direct	2029 Sep 25 02:02	17°♍26'50	
asc. node	2029 Sep 26 07:35	17°♍34'27	
morning max el	2029 Oct 01 15:12	20°♍52'28	17°53'37
	2029 Oct 08 12:41	0°♎	
morning set	2029 Oct 18 10:02	16°♎38'25	
	2029 Oct 26 06:04	0°♏	
superior conj	2029 Oct 30 23:14	7°♏49'03	0°24'27
minimum elong	2029 Oct 31 01:50	7°♏59'43	0°24'05

desc. node	2029 Nov 03	14:18	13°♏42'37	
max. Earth dist.	2029 Nov 05	17:52	17°♏09'14	1.44262 AU
	2029 Nov 13	22:09	0°♐	
evening rise	2029 Nov 15	20:58	3°♐00'42	
	2029 Dec 03	22:47	0°♑	
evening max el	2029 Dec 14	02:58	12°♑54'55	20°35'54
retrograde	2029 Dec 22	05:51	17°♑42'28	
asc. node	2029 Dec 23	06:51	17°♑36'24	
evening set	2029 Dec 26	03:09	16°♑15'27	
inferior conj	2029 Dec 31	12:28	10°♑06'45	2°32'00
minimum elong	2029 Dec 31	09:52	10°♑15'37	2°31'13
min. Earth dist.	2030 Jan 01	02:50	9°♑17'48	0.67339 AU
morning rise	2030 Jan 05	16:25	3°♑53'37	
direct	2030 Jan 11	05:45	1°♑26'14	
morning max el	2030 Jan 22	10:11	8°♑06'24	24°21'05
desc. node	2030 Jan 30	13:32	17°♑34'53	
	2030 Feb 08	14:03	0°♒	
morning set	2030 Feb 27	07:43	29°♒54'25	
	2030 Feb 27	09:00	0°♓	
max. Earth dist.	2030 Mar 03	00:16	6°♓27'20	1.37809 AU
superior conj	2030 Mar 09	22:54	19°♓24'52	-1°37'58
minimum elong	2030 Mar 10	03:12	19°♓45'33	1°37'28
	2030 Mar 15	08:42	0°♈	
evening rise	2030 Mar 18	16:17	6°♈34'43	
asc. node	2030 Mar 21	06:10	11°♈38'14	
	2030 Apr 01	04:47	0°♉	
evening max el	2030 Apr 04	08:20	3°♉33'11	19°06'42
retrograde	2030 Apr 13	02:33	7°♉47'57	
evening set	2030 Apr 15	05:59	7°♉33'47	
inferior conj	2030 Apr 23	11:14	3°♉21'15	1°24'50
minimum elong	2030 Apr 23	14:23	3°♉15'50	1°23'48
min. Earth dist.	2030 Apr 26	11:24	1°♉18'17	0.56573 AU
desc. node	2030 Apr 28	12:44	0°♉01'28	
	2030 Apr 28	13:44	30°♈	
morning rise	2030 May 01	19:47	28°♈25'03	
direct	2030 May 06	20:15	27°♈26'11	
	2030 May 15	01:30	0°♉	
morning max el	2030 May 21	02:20	4°♉45'35	25°33'37
	2030 Jun 08	06:31	0°♊	
morning set	2030 Jun 17	07:45	17°♊43'27	
asc. node	2030 Jun 17	05:25	17°♊31'08	
	2030 Jun 22	23:56	0°♋	
superior conj	2030 Jun 24	07:05	2°♋50'41	1°08'28
minimum elong	2030 Jun 24	04:43	2°♋37'47	1°08'04
max. Earth dist.	2030 Jun 25	06:28	4°♋58'40	1.32554 AU
evening rise	2030 Jul 01	08:49	18°♋00'13	
	2030 Jul 07	10:23	0°♌	
desc. node	2030 Jul 25	12:02	28°♌35'54	
	2030 Jul 26	14:54	0°♍	
evening max el	2030 Aug 02	05:35	7°♍14'31	27°16'13
retrograde	2030 Aug 16	01:20	14°♍29'44	
evening set	2030 Aug 23	05:23	12°♍06'17	
min. Earth dist.	2030 Aug 26	19:40	9°♍17'49	0.61989 AU
inferior conj	2030 Aug 29	20:11	6°♍32'16	-4°06'17
minimum elong	2030 Aug 30	01:30	6°♍20'05	4°05'02
morning rise	2030 Sep 05	23:10	1°♍31'59	
direct	2030 Sep 08	09:28	1°♍06'28	
asc. node	2030 Sep 13	04:37	2°♍49'16	
morning max el	2030 Sep 15	06:26	4°♍34'38	17°54'14
morning set	2030 Oct 01	05:19	29°♍35'01	
	2030 Oct 01	10:50	0°♎	
superior conj	2030 Oct 11	23:48	18°♎42'18	1°01'50
minimum elong	2030 Oct 12	04:21	19°♎01'53	1°01'15
	2030 Oct 18	17:03	0°♏	
max. Earth dist.	2030 Oct 19	07:47	1°♏00'22	1.42869 AU
desc. node	2030 Oct 21	11:19	4°♏29'45	
evening rise	2030 Oct 26	08:27	12°♏15'27	
	2030 Nov 07	00:31	0°♐	
evening max el	2030 Nov 26	23:29	26°♐25'30	21°48'06
	2030 Dec 01	02:27	0°♑	
retrograde	2030 Dec 06	02:47	1°♑51'52	
evening set	2030 Dec 10	10:51	0°♑08'51	
asc. node	2030 Dec 10	03:53	0°♑22'21	
	2030 Dec 10	15:11	30°℞♐	
inferior conj	2030 Dec 15	19:14	23°♐51'10	1°50'14
minimum elong	2030 Dec 15	17:02	23°♐58'50	1°49'26
min. Earth dist.	2030 Dec 15	21:55	23°♐41'54	0.67752 AU
morning rise	2030 Dec 20	23:04	17°♐39'11	
direct	2030 Dec 25	21:14	15°♐33'26	
morning max el	2031 Jan 04	19:56	21°♐27'06	22°52'33
	2031 Jan 12	04:19	0°♑	
desc. node	2031 Jan 17	10:33	7°♑02'16	
	2031 Feb 01	21:15	0°♒	
morning set	2031 Feb 08	05:19	10°♒13'56	
max. Earth dist.	2031 Feb 12	19:46	17°♒59'17	1.39954 AU
	2031 Feb 19	15:02	0°♓	
superior conj	2031 Feb 20	13:36	1°♓42'47	-1°56'31
minimum elong	2031 Feb 20	17:09	1°♓59'01	1°56'18
evening rise	2031 Mar 02	07:10	20°♓00'55	
	2031 Mar 07	15:01	0°♈	
asc. node	2031 Mar 08	03:13	0°♈55'03	
evening max el	2031 Mar 18	12:07	16°♈02'08	18°28'01
retrograde	2031 Mar 26	00:44	19°♈44'33	
evening set	2031 Mar 28	09:59	19°♈23'20	
inferior conj	2031 Apr 04	20:02	14°♈51'31	2°41'41
minimum elong	2031 Apr 04	23:57	14°♈43'38	2°40'44
min. Earth dist.	2031 Apr 08	06:30	12°♈07'13	0.58451 AU
morning rise	2031 Apr 12	11:01	9°♈24'06	
desc. node	2031 Apr 15	09:46	8°♈14'56	
direct	2031 Apr 18	11:16	7°♈50'29	
morning max el	2031 May 02	20:32	15°♈31'40	26°52'08
	2031 May 14	14:00	0°♉	
	2031 May 31	12:23	0°♊	
morning set	2031 Jun 01	17:48	2°♊32'56	
asc. node	2031 Jun 04	02:28	7°♊34'06	
superior conj	2031 Jun 08	18:50	17°♊47'59	0°47'43
minimum elong	2031 Jun 08	16:55	17°♊37'28	0°47'19
max. Earth dist.	2031 Jun 08	18:17	17°♊45'00	1.32205 AU
	2031 Jun 14	09:09	0°♋	
evening rise	2031 Jun 15	16:13	2°♋44'43	
	2031 Jun 30	08:25	0°♌	
desc. node	2031 Jul 12	09:03	16°♌12'53	
evening max el	2031 Jul 15	07:25	19°♌12'51	26°34'04
retrograde	2031 Jul 29	06:48	26°♌25'35	
evening set	2031 Aug 04	23:46	24°♌31'39	
min. Earth dist.	2031 Aug 08	20:51	21°♌55'24	0.59954 AU
inferior conj	2031 Aug 12	04:05	19°♌17'20	-4°44'16
minimum elong	2031 Aug 12	07:54	19°♌09'40	4°43'47
morning rise	2031 Aug 19	18:05	14°♌39'20	
direct	2031 Aug 22	04:28	14°♌17'39	
morning max el	2031 Aug 29	17:35	17°♌57'51	18°14'14
asc. node	2031 Aug 31	01:39	19°♌21'04	
	2031 Sep 07	09:56	0°♍	
morning set	2031 Sep 14	15:21	13°♍13'46	
	2031 Sep 23	14:35	0°♎	
superior conj	2031 Sep 24	01:27	0°♎49'25	1°27'09
minimum elong	2031 Sep 24	05:14	1°♎06'33	1°26'47
max. Earth dist.	2031 Oct 01	15:54	14°♎11'02	1.41029 AU

evening rise	2031 Oct 06 13:02	22°♎18'43	
desc. node	2031 Oct 08 08:20	25°♎14'03	
	2031 Oct 11 08:19	0°♏	
	2031 Nov 01 02:35	0°♐	
evening max el	2031 Nov 09 15:07	9°♐58'13	23°07'02
retrograde	2031 Nov 19 21:16	16°♐03'12	
evening set	2031 Nov 24 17:47	14°♐03'23	
asc. node	2031 Nov 27 00:54	11°♐42'57	
inferior conj	2031 Nov 30 02:43	7°♐40'35	1°02'22
minimum elong	2031 Nov 30 01:19	7°♐45'25	1°01'48
min. Earth dist.	2031 Nov 29 18:39	8°♐08'24	0.67816 AU
morning rise	2031 Dec 05 08:45	1°♐31'47	
	2031 Dec 08 05:36	30°℞♏	
direct	2031 Dec 09 16:23	29°♏48'48	
	2031 Dec 11 04:22	0°♐	
morning max el	2031 Dec 18 10:25	4°♐55'44	21°27'59
desc. node	2032 Jan 04 07:35	26°♐57'25	
	2032 Jan 06 09:14	0°♑	
morning set	2032 Jan 18 21:53	19°♑11'20	
	2032 Jan 25 14:41	0°♒	
max. Earth dist.	2032 Jan 25 20:04	0°♒22'09	1.42003 AU
superior conj	2032 Feb 02 07:32	13°♒00'03	-2°04'58
minimum elong	2032 Feb 02 07:59	13°♒02'00	2°04'57
	2032 Feb 11 20:34	0°♓	
evening rise	2032 Feb 13 09:14	2°♓47'00	
asc. node	2032 Feb 23 00:15	19°♓44'15	
evening max el	2032 Feb 29 21:48	28°♓57'27	18°09'22
	2032 Mar 02 01:19	0°♈	
retrograde	2032 Mar 07 16:22	2°♈23'32	
evening set	2032 Mar 10 07:23	1°♈53'03	
	2032 Mar 13 13:47	30°℞♓	
inferior conj	2032 Mar 17 01:11	27°♓00'31	3°25'31
minimum elong	2032 Mar 17 03:39	26°♓54'45	3°25'11
min. Earth dist.	2032 Mar 20 07:47	23°♓58'45	0.60591 AU
morning rise	2032 Mar 23 21:55	21°♓12'02	
direct	2032 Mar 30 14:29	19°♓02'06	
desc. node	2032 Apr 01 06:47	19°♓09'56	
morning max el	2032 Apr 13 20:46	26°♓54'34	27°38'53
	2032 Apr 16 19:08	0°♈	
	2032 May 07 03:36	0°♉	
morning set	2032 May 16 00:25	17°♉09'57	
asc. node	2032 May 20 23:30	27°♉42'29	
max. Earth dist.	2032 May 22 05:55	0°♊28'13	1.32246 AU
	2032 May 22 00:45	0°♊	
superior conj	2032 May 23 06:07	2°♊40'43	0°23'51
minimum elong	2032 May 23 05:03	2°♊34'54	0°23'37
evening rise	2032 May 30 02:49	17°♊36'09	
	2032 Jun 05 05:43	0°♋	
	2032 Jun 25 15:57	0°♌	
evening max el	2032 Jun 26 02:14	0°♌24'53	25°22'06
desc. node	2032 Jun 28 06:04	2°♌20'55	
retrograde	2032 Jul 10 02:34	7°♌32'42	
evening set	2032 Jul 15 19:07	6°♌17'22	
min. Earth dist.	2032 Jul 20 14:14	3°♌34'54	0.57919 AU
inferior conj	2032 Jul 23 17:31	1°♌24'33	-4°58'27
minimum elong	2032 Jul 23 17:17	1°♌24'58	4°58'28
	2032 Jul 25 19:20	30°℞♋	
morning rise	2032 Jul 31 17:56	27°♋08'51	
direct	2032 Aug 03 06:52	26°♋49'14	
	2032 Aug 10 21:47	0°♌	
morning max el	2032 Aug 11 21:26	0°♌52'39	18°54'53
asc. node	2032 Aug 16 22:42	6°♌54'44	
morning set	2032 Aug 28 11:47	27°♌23'00	
	2032 Aug 29 19:41	0°♍	

superior conj	2032 Sep 05 22:48	13°♍54'53	1°41'10
minimum elong	2032 Sep 06 00:45	14°♍04'14	1°41'04
max. Earth dist.	2032 Sep 12 19:57	26°♍38'53	1.38988 AU
	2032 Sep 14 17:24	0°♎	
evening rise	2032 Sep 16 17:34	3°♎28'55	
desc. node	2032 Sep 24 05:21	15°♎51'43	
	2032 Oct 03 12:29	0°♏	
evening max el	2032 Oct 22 03:56	23°♏34'59	24°26'34
	2032 Oct 31 17:33	0°♐	
retrograde	2032 Nov 02 11:57	0°♐12'35	
	2032 Nov 04 04:38	30°℞♏	
evening set	2032 Nov 07 22:19	27°♏56'12	
min. Earth dist.	2032 Nov 12 14:35	22°♏34'42	0.67553 AU
asc. node	2032 Nov 12 21:56	22°♏10'05	
inferior conj	2032 Nov 13 09:08	21°♏32'31	0°09'38
minimum elong	2032 Nov 13 08:54	21°♏33'18	0°09'32
transit middle	2032 Nov 13 08:54	21°♏33'18	0°09'32
transit begin	2032 Nov 13 06:41	21°♏40'45	
transit end	2032 Nov 13 11:07	21°♏25'52	
morning rise	2032 Nov 18 19:31	15°♏29'12	
direct	2032 Nov 22 14:01	14°♏07'43	
morning max el	2032 Nov 30 08:11	18°♏34'34	20°13'42
	2032 Dec 09 12:05	0°♐	
desc. node	2032 Dec 21 04:35	17°♐12'13	
morning set	2032 Dec 27 19:05	27°♐19'10	
	2032 Dec 29 12:34	0°♑	
max. Earth dist.	2033 Jan 07 04:07	13°♑38'33	1.43684 AU
superior conj	2033 Jan 12 23:57	23°♑06'08	-1°58'13
minimum elong	2033 Jan 12 19:05	22°♑46'07	1°57'58
	2033 Jan 17 03:32	0°♒	
evening rise	2033 Jan 25 18:07	14°♒43'34	
	2033 Feb 03 16:04	0°♓	
asc. node	2033 Feb 08 21:17	7°♓56'29	
evening max el	2033 Feb 12 10:10	12°♓09'30	18°10'07
retrograde	2033 Feb 18 21:20	15°♓33'55	
evening set	2033 Feb 21 17:38	14°♓52'54	
inferior conj	2033 Feb 27 23:00	9°♓40'00	3°42'31
minimum elong	2033 Feb 27 23:28	9°♓38'46	3°42'30
min. Earth dist.	2033 Mar 02 17:19	6°♓45'23	0.62672 AU
morning rise	2033 Mar 06 04:12	3°♓39'13	
direct	2033 Mar 13 02:57	1°♓02'02	
desc. node	2033 Mar 19 03:48	2°♓44'02	
morning max el	2033 Mar 27 02:28	8°♓57'40	27°48'39
	2033 Apr 12 09:18	0°♈	
	2033 Apr 29 08:09	0°♉	
morning set	2033 Apr 30 01:29	1°♉27'09	
max. Earth dist.	2033 May 05 13:36	12°♉55'42	1.32685 AU
superior conj	2033 May 07 15:12	17°♉22'45	-0°02'23
minimum elong	2033 May 07 15:18	17°♉23'21	0°02'21
behind sun begin	2033 May 07 10:09	16°♉55'26	
behind sun end	2033 May 07 20:28	17°♉51'17	
asc. node	2033 May 07 20:34	17°♉51'53	
	2033 May 13 10:57	0°♊	
evening rise	2033 May 14 14:40	2°♊27'38	
	2033 May 29 15:50	0°♋	
evening max el	2033 Jun 07 16:25	11°♋02'43	23°50'42
desc. node	2033 Jun 15 03:05	16°♋26'37	
retrograde	2033 Jun 21 10:05	17°♋56'22	
evening set	2033 Jun 25 16:08	17°♋16'34	
min. Earth dist.	2033 Jul 02 03:01	14°♋12'17	0.56198 AU
inferior conj	2033 Jul 04 10:48	12°♋47'26	-4°34'43
minimum elong	2033 Jul 04 05:11	12°♋56'01	4°33'53
morning rise	2033 Jul 12 20:52	8°♋49'35	
direct	2033 Jul 15 14:20	8°♋30'35	
morning max el	2033 Jul 25 15:12	13°♋09'51	19°56'59

asc. node	2033 Aug 03 19:46	25°♋16'32	
	2033 Aug 06 12:31	0°♌	
morning set	2033 Aug 12 15:25	11°♌54'10	
superior conj	2033 Aug 20 10:33	27°♌43'59	1°45'43
minimum elong	2033 Aug 20 10:42	27°♌44'40	1°45'43
	2033 Aug 21 13:55	0°♍	
max. Earth dist.	2033 Aug 26 00:56	8°♍38'10	1.36997 AU
evening rise	2033 Aug 29 20:57	15°♍43'49	
	2033 Sep 07 03:49	0°♎	
desc. node	2033 Sep 11 02:24	6°♎18'20	
	2033 Sep 28 01:44	0°♏	
evening max el	2033 Oct 04 16:04	7°♏15'30	25°39'31
retrograde	2033 Oct 16 22:03	14°♏16'09	
evening set	2033 Oct 22 22:47	11°♏45'03	
min. Earth dist.	2033 Oct 27 07:17	6°♏58'51	0.66960 AU
inferior conj	2033 Oct 28 12:46	5°♏24'49	-0°46'36
minimum elong	2033 Oct 28 13:58	5°♏20'58	0°46'05
asc. node	2033 Oct 30 18:57	2°♏38'18	
	2033 Nov 02 12:07	30°℞♎	
morning rise	2033 Nov 03 05:25	29°♎29'47	
direct	2033 Nov 06 12:40	28°♎26'56	
	2033 Nov 10 18:34	0°♏	
morning max el	2033 Nov 13 13:45	2°♏24'03	19°13'29
	2033 Dec 03 02:51	0°♐	
morning set	2033 Dec 06 21:21	5°♐51'24	
desc. node	2033 Dec 08 01:39	7°♐41'32	
max. Earth dist.	2033 Dec 20 19:16	27°♐37'16	1.44780 AU
	2033 Dec 22 07:24	0°♑	
superior conj	2033 Dec 23 15:09	2°♑05'46	-1°32'35
minimum elong	2033 Dec 23 06:23	1°♑31'00	1°31'45
evening rise	2034 Jan 07 05:51	25°♑44'59	
	2034 Jan 09 19:35	0°♒	
asc. node	2034 Jan 26 18:18	25°♒21'03	
evening max el	2034 Jan 26 22:24	25°♒31'33	18°29'26
retrograde	2034 Feb 02 11:22	29°♒07'00	
evening set	2034 Feb 05 13:05	28°♒14'38	
inferior conj	2034 Feb 11 09:29	22°♒42'51	3°39'27
minimum elong	2034 Feb 11 08:18	22°♒46'18	3°39'21
min. Earth dist.	2034 Feb 13 12:24	20°♒13'50	0.64477 AU
morning rise	2034 Feb 17 03:00	16°♒35'01	
direct	2034 Feb 23 22:54	13°♒44'39	
desc. node	2034 Mar 06 00:51	18°♒25'09	
morning max el	2034 Mar 09 11:36	21°♒35'28	27°22'40
	2034 Mar 16 19:53	0°♓	
	2034 Apr 05 13:01	0°♈	
morning set	2034 Apr 13 18:18	15°♈15'54	
max. Earth dist.	2034 Apr 18 13:28	24°♈55'41	1.33552 AU
	2034 Apr 20 23:46	0°♉	
superior conj	2034 Apr 21 20:08	1°♉47'37	-0°30'03
minimum elong	2034 Apr 21 21:39	1°♉55'36	0°29'43
asc. node	2034 Apr 24 17:37	7°♉57'57	
evening rise	2034 Apr 29 01:53	17°♉12'33	
	2034 May 05 11:03	0°♊	
evening max el	2034 May 20 08:13	21°♊33'00	22°14'50
retrograde	2034 Jun 02 05:24	27°♊55'09	
desc. node	2034 Jun 02 00:06	27°♊55'02	
evening set	2034 Jun 05 02:38	27°♊36'44	
min. Earth dist.	2034 Jun 13 14:24	23°♊57'55	0.55125 AU
inferior conj	2034 Jun 14 10:59	23°♊28'57	-3°23'04
minimum elong	2034 Jun 14 03:05	23°♊40'05	3°20'51
morning rise	2034 Jun 23 05:23	19°♊36'56	
direct	2034 Jun 26 05:24	19°♊16'41	
morning max el	2034 Jul 07 21:30	24°♊43'10	21°19'21
	2034 Jul 12 16:13	0°♋	

asc. node	2034 Jul 21 16:50	14°♋14'30	
morning set	2034 Jul 27 23:41	26°♋39'27	
	2034 Jul 29 14:13	0°♌	
superior conj	2034 Aug 04 08:24	12°♌03'26	1°42'35
minimum elong	2034 Aug 04 07:08	11°♌56'55	1°42'31
max. Earth dist.	2034 Aug 08 11:54	20°♌30'26	1.35258 AU
evening rise	2034 Aug 12 18:44	28°♌51'28	
	2034 Aug 13 09:14	0°♍	
desc. node	2034 Aug 28 23:27	26°♍27'18	
	2034 Aug 31 08:33	0°♎	
evening max el	2034 Sep 17 04:16	20°♎53'03	26°38'27
retrograde	2034 Sep 30 03:00	28°♎06'59	
evening set	2034 Oct 06 17:07	25°♎25'41	
min. Earth dist.	2034 Oct 10 18:22	21°♎16'03	0.66016 AU
inferior conj	2034 Oct 12 11:36	19°♎13'12	-1°44'53
minimum elong	2034 Oct 12 14:24	19°♎04'50	1°43'46
asc. node	2034 Oct 17 16:00	14°♎00'30	
morning rise	2034 Oct 18 12:16	13°♎29'26	
direct	2034 Oct 21 10:22	12°♎41'40	
morning max el	2034 Oct 28 01:32	16°♎19'32	18°29'08
	2034 Nov 07 04:05	0°♏	
morning set	2034 Nov 17 00:30	15°♏41'37	
desc. node	2034 Nov 24 22:43	28°♏20'30	
	2034 Nov 25 23:51	0°♐	
superior conj	2034 Dec 02 16:45	10°♐34'01	-0°50'21
minimum elong	2034 Dec 02 10:21	10°♐08'53	0°49'33
max. Earth dist.	2034 Dec 03 14:01	11°♐57'31	1.45155 AU
	2034 Dec 15 01:35	0°♑	
evening rise	2034 Dec 18 18:14	5°♑49'54	
greatest brilliancy	2034 Dec 28 08:02	20°♑56'10	-0.8m
	2035 Jan 03 07:28	0°♒	
evening max el	2035 Jan 10 08:04	8°♒58'56	19°06'22
asc. node	2035 Jan 13 15:19	11°♒45'07	
retrograde	2035 Jan 17 06:44	12°♒56'13	
evening set	2035 Jan 20 14:45	11°♒51'34	
inferior conj	2035 Jan 26 05:06	6°♒03'12	3°21'39
minimum elong	2035 Jan 26 02:54	6°♒10'12	3°21'16
min. Earth dist.	2035 Jan 27 16:43	4°♒10'16	0.65902 AU
	2035 Jan 31 10:58	30°℞♑	
morning rise	2035 Jan 31 14:45	29°♑51'30	
direct	2035 Feb 07 01:25	27°♑01'49	
	2035 Feb 14 14:32	0°♒	
morning max el	2035 Feb 19 21:32	4°♒36'45	26°26'57
desc. node	2035 Feb 20 21:55	5°♒39'30	
	2035 Mar 11 07:16	0°♓	
morning set	2035 Mar 27 23:17	28°♓25'44	
	2035 Mar 28 19:13	0°♈	
max. Earth dist.	2035 Apr 01 02:19	6°♈22'41	1.34873 AU
superior conj	2035 Apr 05 18:42	15°♈48'46	-0°57'57
minimum elong	2035 Apr 05 21:37	16°♈03'49	0°57'25
asc. node	2035 Apr 11 14:41	27°♈56'44	
	2035 Apr 12 14:22	0°♉	
evening rise	2035 Apr 13 10:34	1°♉44'39	
	2035 Apr 30 01:45	0°♊	
evening max el	2035 May 02 08:44	2°♊26'10	20°48'05
retrograde	2035 May 13 18:40	7°♊59'29	
evening set	2035 May 15 21:46	7°♊48'38	
desc. node	2035 May 19 21:07	6°♊36'22	
inferior conj	2035 May 25 04:45	3°♊50'47	-1°32'39
minimum elong	2035 May 25 00:23	3°♊57'01	1°31'04
min. Earth dist.	2035 May 26 02:53	3°♊19'13	0.54952 AU
	2035 Jun 02 04:33	30°℞♉	
morning rise	2035 Jun 03 02:34	29°♉44'46	
direct	2035 Jun 06 14:53	29°♉18'11	

	2035 Jun	10	22:32	0°♊	
morning max el	2035 Jun	19	17:52	5°♊36'30	22°56'45
	2035 Jul	06	16:37	0°♋	
asc. node	2035 Jul	08	13:55	3°♋39'36	
morning set	2035 Jul	12	10:36	11°♋33'06	
superior conj	2035 Jul	19	13:05	26°♋43'28	1°33'13
minimum elong	2035 Jul	19	10:59	26°♋32'16	1°33'00
	2035 Jul	21	02:06	0°♌	
max. Earth dist.	2035 Jul	22	07:43	2°♌35'36	1.33889 AU
evening rise	2035 Jul	27	06:26	12°♌39'55	
	2035 Aug	05	15:28	0°♍	
desc. node	2035 Aug	15	20:27	16°♍10'47	
	2035 Aug	26	12:51	0°♎	
evening max el	2035 Aug	30	16:11	4°♎18'35	27°15'54
retrograde	2035 Sep	13	02:28	11°♎37'18	
evening set	2035 Sep	20	02:49	8°♎53'44	
min. Earth dist.	2035 Sep	23	21:36	5°♎19'57	0.64712 AU
inferior conj	2035 Sep	26	03:23	2°♎53'07	-2°43'09
minimum elong	2035 Sep	26	07:41	2°♎41'20	2°41'36
	2035 Sep	28	22:18	30°℞♍	
morning rise	2035 Oct	02	13:31	27°♍23'40	
asc. node	2035 Oct	04	13:05	26°♍49'31	
direct	2035 Oct	05	04:53	26°♍47'14	
	2035 Oct	11	10:49	0°♎	
morning max el	2035 Oct	11	16:57	0°♎15'06	18°01'30
morning set	2035 Oct	29	08:34	26°♎56'49	
	2035 Oct	31	04:18	0°♏	
desc. node	2035 Nov	11	19:44	19°♏05'05	
superior conj	2035 Nov	12	01:57	19°♏30'03	-0°01'46
minimum elong	2035 Nov	12	01:44	19°♏29'09	0°01'44
behind sun begin	2035 Nov	11	15:14	18°♏47'05	
behind sun end	2035 Nov	12	12:13	20°♏11'09	
max. Earth dist.	2035 Nov	16	08:45	26°♏18'54	1.44787 AU
	2035 Nov	18	16:53	0°♐	
evening rise	2035 Nov	28	10:28	15°♐08'16	
	2035 Dec	08	03:27	0°♑	
greatest brilliancy	2035 Dec	12	11:15	6°♑28'55	-0.6m
evening max el	2035 Dec	24	13:18	22°♑28'14	19°59'17
asc. node	2035 Dec	31	12:21	26°♑53'24	
retrograde	2036 Jan	01	04:25	26°♑55'53	
evening set	2036 Jan	04	20:16	25°♑37'37	
inferior conj	2036 Jan	10	06:52	19°♑35'29	2°52'43
minimum elong	2036 Jan	10	04:15	19°♑44'14	2°52'02
min. Earth dist.	2036 Jan	11	04:36	18°♑22'48	0.66926 AU
morning rise	2036 Jan	15	12:02	13°♑22'08	
direct	2036 Jan	21	09:42	10°♑44'13	
morning max el	2036 Feb	02	06:22	17°♑48'49	25°10'22
desc. node	2036 Feb	07	18:57	23°♑59'35	
	2036 Feb	12	12:03	0°♒	
	2036 Mar	03	07:48	0°♓	
morning set	2036 Mar	09	11:27	10°♓41'42	
max. Earth dist.	2036 Mar	13	03:35	17°♓24'52	1.36635 AU
superior conj	2036 Mar	19	07:54	29°♓17'25	-1°24'23
minimum elong	2036 Mar	19	11:56	29°♓37'19	1°23'48
	2036 Mar	19	16:31	0°♈	
evening rise	2036 Mar	27	14:27	15°♈56'21	
asc. node	2036 Mar	28	11:42	17°♈43'02	
	2036 Apr	03	22:09	0°♉	
evening max el	2036 Apr	13	21:03	13°♉57'26	19°38'07
retrograde	2036 Apr	23	13:18	18°♉37'49	
evening set	2036 Apr	25	14:07	18°♉26'21	
inferior conj	2036 May	04	06:34	14°♉23'01	0°25'39
minimum elong	2036 May	04	07:40	14°♉21'17	0°25'15
desc. node	2036 May	05	18:09	13°♉26'43	
min. Earth dist.	2036 May	06	17:06	12°♉50'58	0.55742 AU
morning rise	2036 May	12	22:36	9°♉46'29	
direct	2036 May	17	08:29	9°♉02'52	
morning max el	2036 May	31	08:42	16°♉05'00	24°38'43
	2036 Jun	11	13:06	0°♊	
asc. node	2036 Jun	24	10:59	23°♊23'42	
morning set	2036 Jun	25	22:26	26°♊29'04	
	2036 Jun	27	14:02	0°♋	
superior conj	2036 Jul	02	22:04	11°♋35'19	1°18'45
minimum elong	2036 Jul	02	19:39	11°♋22'13	1°18'24
max. Earth dist.	2036 Jul	04	12:00	15°♋00'59	1.32922 AU
evening rise	2036 Jul	10	04:06	26°♋57'32	
	2036 Jul	11	16:16	0°♌	
	2036 Jul	28	23:16	0°♍	
desc. node	2036 Aug	01	17:28	5°♍18'06	
evening max el	2036 Aug	12	02:19	17°♍20'38	27°25'27
retrograde	2036 Aug	25	19:48	24°♍38'07	
evening set	2036 Sep	02	00:42	22°♍03'43	
min. Earth dist.	2036 Sep	05	15:16	19°♍01'10	0.63062 AU
inferior conj	2036 Sep	08	09:26	16°♍18'52	-3°38'06
minimum elong	2036 Sep	08	14:43	16°♍05'52	3°36'35
morning rise	2036 Sep	15	06:06	11°♍06'51	
direct	2036 Sep	17	17:20	10°♍38'16	
asc. node	2036 Sep	20	10:09	11°♍13'15	
morning max el	2036 Sep	24	09:06	14°♍04'18	17°51'31
	2036 Oct	05	08:21	0°♎	
morning set	2036 Oct	10	16:54	9°♎22'14	
superior conj	2036 Oct	22	10:46	29°♎37'05	0°41'43
minimum elong	2036 Oct	22	14:39	29°♎53'15	0°41'11
	2036 Oct	22	16:16	0°♏	
desc. node	2036 Oct	28	16:45	9°♏52'31	
max. Earth dist.	2036 Oct	29	00:52	10°♏25'11	1.43736 AU
evening rise	2036 Nov	06	18:45	24°♏12'23	
	2036 Nov	10	13:20	0°♐	
	2036 Dec	01	09:40	0°♑	
evening max el	2036 Dec	06	13:08	5°♑58'59	21°05'32
retrograde	2036 Dec	15	02:06	11°♑02'51	
asc. node	2036 Dec	17	09:23	10°♑33'20	
evening set	2036 Dec	19	03:40	9°♑29'25	
inferior conj	2036 Dec	24	12:25	3°♑16'37	2°15'07
minimum elong	2036 Dec	24	09:56	3°♑25'11	2°14'18
min. Earth dist.	2036 Dec	24	21:45	2°♑44'30	0.67560 AU
	2036 Dec	26	23:09	30°℞♐	
morning rise	2036 Dec	29	16:00	27°♐03'35	
direct	2037 Jan	03	22:57	24°♐44'46	
	2037 Jan	13	11:53	0°♑	
morning max el	2037 Jan	14	14:49	1°♑06'00	23°43'19
desc. node	2037 Jan	24	15:58	13°♑06'39	
	2037 Feb	05	11:26	0°♒	
morning set	2037 Feb	19	00:49	21°♒47'52	
max. Earth dist.	2037 Feb	22	22:31	28°♒34'18	1.38716 AU
	2037 Feb	23	17:52	0°♓	
superior conj	2037 Mar	02	08:09	12°♓04'45	-1°46'47
minimum elong	2037 Mar	02	12:22	12°♓24'35	1°46'24
evening rise	2037 Mar	11	10:58	29°♓41'18	
	2037 Mar	11	14:48	0°♈	
asc. node	2037 Mar	15	08:43	7°♈12'15	
evening max el	2037 Mar	27	20:05	26°♈07'38	18°47'48
	2037 Apr	03	16:24	0°♉	
retrograde	2037 Apr	05	00:06	0°♉06'06	
	2037 Apr	06	08:16	30°℞♈	
evening set	2037 Apr	07	06:02	29°♈49'13	
inferior conj	2037 Apr	15	02:56	25°♈29'09	2°01'39
minimum elong	2037 Apr	15	06:48	25°♈22'03	2°00'31

min. Earth dist.	2037 Apr 18 09:43	23°♈05'58	0.57323 AU
desc. node	2037 Apr 22 15:10	20°♈33'57	
morning rise	2037 Apr 23 04:26	20°♈18'50	
direct	2037 Apr 28 15:56	19°♈05'43	
morning max el	2037 May 12 23:57	26°♈35'51	26°10'13
	2037 May 16 05:46	0°♉	
	2037 Jun 04 18:27	0°♊	
morning set	2037 Jun 10 09:34	11°♊22'11	
asc. node	2037 Jun 11 08:00	13°♊21'02	
superior conj	2037 Jun 17 09:18	26°♊32'11	1°00'05
minimum elong	2037 Jun 17 07:05	26°♊19'59	0°59'41
max. Earth dist.	2037 Jun 17 22:07	27°♊42'36	1.32357 AU
	2037 Jun 18 23:11	0°♋	
evening rise	2037 Jun 24 08:42	11°♋34'40	
	2037 Jul 03 21:01	0°♌	
desc. node	2037 Jul 19 14:29	23°♌33'53	
evening max el	2037 Jul 25 08:06	29°♌45'47	27°02'29
	2037 Jul 25 14:09	0°♍	
retrograde	2037 Aug 08 05:46	6°♍59'35	
evening set	2037 Aug 15 06:27	4°♍47'34	
min. Earth dist.	2037 Aug 18 22:24	2°♍06'05	0.61133 AU
	2037 Aug 21 08:56	30°℞♌	
inferior conj	2037 Aug 22 02:28	29°♌21'42	-4°24'34
minimum elong	2037 Aug 22 07:26	29°♌10'55	4°23'37
morning rise	2037 Aug 29 10:07	24°♌30'19	
direct	2037 Aug 31 20:07	24°♌06'40	
asc. node	2037 Sep 07 07:12	27°♌02'21	
morning max el	2037 Sep 07 22:56	27°♌39'01	18°00'16
	2037 Sep 10 02:18	0°♍	
morning set	2037 Sep 23 19:09	22°♍38'55	
	2037 Sep 27 18:59	0°♎	
superior conj	2037 Oct 03 22:34	11°♎03'13	1°14'01
minimum elong	2037 Oct 04 03:01	11°♎22'47	1°13'31
max. Earth dist.	2037 Oct 11 12:33	24°♎01'13	1.42132 AU
	2037 Oct 15 04:07	0°♏	
desc. node	2037 Oct 15 13:46	0°♏38'57	
evening rise	2037 Oct 17 12:10	3°♏44'45	
	2037 Nov 03 22:40	0°♐	
evening max el	2037 Nov 19 07:33	19°♐30'59	22°21'12
retrograde	2037 Nov 28 22:01	25°♐13'29	
evening set	2037 Dec 03 11:14	23°♐23'27	
asc. node	2037 Dec 04 06:25	22°♐40'51	
inferior conj	2037 Dec 08 19:43	17°♐03'22	1°30'36
minimum elong	2037 Dec 08 17:48	17°♐10'01	1°29'52
min. Earth dist.	2037 Dec 08 17:47	17°♐10'04	0.67831 AU
morning rise	2037 Dec 14 00:13	10°♐52'36	
direct	2037 Dec 18 16:12	8°♐56'22	
morning max el	2037 Dec 28 02:01	14°♐29'02	22°15'33
	2038 Jan 09 13:32	0°♑	
desc. node	2038 Jan 11 12:59	2°♑46'54	
	2038 Jan 29 11:22	0°♒	
morning set	2038 Jan 30 09:49	1°♒30'40	
max. Earth dist.	2038 Feb 04 19:36	10°♒26'52	1.40864 AU
superior conj	2038 Feb 12 14:40	23°♒58'27	-2°01'38
minimum elong	2038 Feb 12 17:14	24°♒09'54	2°01'32
	2038 Feb 15 22:41	0°♓	
evening rise	2038 Feb 22 20:50	12°♓51'13	
asc. node	2038 Mar 02 05:44	26°♓18'07	
	2038 Mar 04 10:56	0°♈	
evening max el	2038 Mar 11 02:47	8°♈48'52	18°17'40
retrograde	2038 Mar 18 06:07	12°♈22'16	
evening set	2038 Mar 20 18:03	11°♈57'08	
inferior conj	2038 Mar 27 20:41	7°♈16'16	3°04'03
minimum elong	2038 Mar 28 00:09	7°♈08'50	3°03'21
min. Earth dist.	2038 Mar 31 06:50	4°♈21'41	0.59355 AU
morning rise	2038 Apr 04 03:46	1°♈38'58	
	2038 Apr 08 13:08	30°℞♓	
desc. node	2038 Apr 09 12:10	29°♓52'17	
direct	2038 Apr 10 12:12	29°♓49'35	
	2038 Apr 12 11:56	0°♈	
morning max el	2038 Apr 24 20:27	7°♈35'39	27°16'28
	2038 May 11 18:01	0°♉	
morning set	2038 May 25 18:24	26°♉07'18	
	2038 May 27 14:31	0°♊	
asc. node	2038 May 29 05:02	3°♊26'55	
superior conj	2038 Jun 01 21:04	11°♊28'19	0°37'55
minimum elong	2038 Jun 01 19:28	11°♊19'32	0°37'36
max. Earth dist.	2038 Jun 01 10:32	10°♊30'20	1.32177 AU
evening rise	2038 Jun 08 17:45	26°♊23'25	
	2038 Jun 10 11:13	0°♋	
	2038 Jun 27 15:59	0°♌	
desc. node	2038 Jul 06 11:30	10°♌37'00	
evening max el	2038 Jul 07 07:08	11°♌24'48	26°06'44
retrograde	2038 Jul 21 06:59	18°♌35'11	
evening set	2038 Jul 27 15:25	16°♌57'08	
min. Earth dist.	2038 Jul 31 19:44	14°♌20'42	0.59072 AU
inferior conj	2038 Aug 04 02:55	11°♌52'10	-4°54'00
minimum elong	2038 Aug 04 05:20	11°♌47'37	4°53'50
morning rise	2038 Aug 11 21:24	7°♌23'44	
direct	2038 Aug 14 08:49	7°♌02'57	
morning max el	2038 Aug 22 07:20	10°♌51'17	18°28'59
asc. node	2038 Aug 25 04:15	14°♌02'23	
	2038 Sep 03 23:41	0°♍	
morning set	2038 Sep 07 10:08	6°♍32'29	
superior conj	2038 Sep 16 09:22	23°♍37'33	1°34'21
minimum elong	2038 Sep 16 12:25	23°♍51'43	1°34'08
	2038 Sep 19 21:04	0°♎	
max. Earth dist.	2038 Sep 23 19:13	6°♎55'55	1.40174 AU
evening rise	2038 Sep 28 02:45	14°♎15'59	
desc. node	2038 Oct 02 10:49	21°♎21'09	
	2038 Oct 07 23:26	0°♏	
	2038 Oct 29 23:58	0°♐	
evening max el	2038 Nov 01 21:48	3°♐05'41	23°41'03
retrograde	2038 Nov 12 14:56	9°♐24'56	
evening set	2038 Nov 17 17:22	7°♐17'45	
asc. node	2038 Nov 21 03:27	3°♐33'29	
min. Earth dist.	2038 Nov 22 14:22	1°♐37'06	0.67755 AU
inferior conj	2038 Nov 23 02:58	0°♐54'08	0°40'32
minimum elong	2038 Nov 23 02:01	0°♐57'22	0°40'08
	2038 Nov 23 18:54	30°℞♏	
morning rise	2038 Nov 28 10:38	24°♏47'39	
direct	2038 Dec 02 12:30	23°♏14'10	
morning max el	2038 Dec 10 19:31	28°♏02'23	20°54'50
	2038 Dec 12 15:41	0°♐	
desc. node	2038 Dec 29 10:01	22°♐51'19	
	2039 Jan 03 04:05	0°♑	
morning set	2039 Jan 09 15:59	10°♑00'21	
max. Earth dist.	2039 Jan 17 23:45	23°♑15'51	1.42786 AU
	2039 Jan 22 02:00	0°♒	
superior conj	2039 Jan 24 22:09	4°♒46'05	-2°04'14
minimum elong	2039 Jan 24 20:31	4°♒39'07	2°04'12
evening rise	2039 Feb 05 16:09	25°♒17'34	
	2039 Feb 08 07:27	0°♓	
asc. node	2039 Feb 17 02:46	14°♓52'44	
evening max el	2039 Feb 22 13:56	21°♓51'55	18°07'17
retrograde	2039 Mar 01 04:12	25°♓15'56	
evening set	2039 Mar 03 21:27	24°♓41'06	
inferior conj	2039 Mar 10 09:28	19°♓39'27	3°35'37

minimum elong	2039 Mar 10 11:04	19°♓35'28	3°35'28
min. Earth dist.	2039 Mar 13 11:22	16°♓38'08	0.61496 AU
morning rise	2039 Mar 16 23:07	13°♓44'40	
direct	2039 Mar 23 19:20	11°♓21'59	
desc. node	2039 Mar 27 09:13	11°♓57'46	
morning max el	2039 Apr 06 23:28	19°♓16'41	27°47'46
	2039 Apr 16 02:00	0°♈	
	2039 May 04 13:49	0°♉	
morning set	2039 May 09 22:57	10°♉36'58	
max. Earth dist.	2039 May 15 21:09	23°♉09'23	1.32382 AU
asc. node	2039 May 16 02:04	23°♉36'09	
superior conj	2039 May 17 07:36	26°♉17'02	0°12'59
minimum elong	2039 May 17 07:00	26°♉13'46	0°12'51
behind sun begin	2039 May 17 03:59	25°♉57'18	
behind sun end	2039 May 17 10:01	26°♉30'14	
	2039 May 19 00:22	0°♊	
evening rise	2039 May 24 05:06	11°♊15'34	
	2039 Jun 02 18:31	0°♋	
evening max el	2039 Jun 18 23:10	22°♋18'46	24°44'42
desc. node	2039 Jun 23 08:31	25°♋57'24	
retrograde	2039 Jul 02 21:48	29°♋22'43	
evening set	2039 Jul 08 00:39	28°♋23'20	
min. Earth dist.	2039 Jul 13 10:24	25°♋33'25	0.57127 AU
inferior conj	2039 Jul 16 07:44	23°♋40'20	-4°53'52
minimum elong	2039 Jul 16 05:10	23°♋44'32	4°53'42
morning rise	2039 Jul 24 12:24	19°♋33'37	
direct	2039 Jul 27 03:07	19°♋14'26	
morning max el	2039 Aug 05 07:13	23°♋31'04	19°18'49
	2039 Aug 10 17:38	0°♌	
asc. node	2039 Aug 12 01:18	1°♌57'48	
morning set	2039 Aug 22 09:57	20°♌51'37	
	2039 Aug 26 23:38	0°♍	
superior conj	2039 Aug 30 13:26	7°♍03'18	1°44'08
minimum elong	2039 Aug 30 14:35	7°♍08'54	1°44'06
max. Earth dist.	2039 Sep 05 22:48	19°♍08'22	1.38115 AU
evening rise	2039 Sep 09 17:19	25°♍54'04	
	2039 Sep 12 02:05	0°♎	
desc. node	2039 Sep 19 07:52	11°♎54'40	
	2039 Oct 01 13:30	0°♏	
evening max el	2039 Oct 15 09:55	16°♏43'42	24°58'46
retrograde	2039 Oct 27 03:54	23°♏32'59	
evening set	2039 Nov 01 20:27	21°♏09'41	
min. Earth dist.	2039 Nov 06 09:13	16°♏03'08	0.67339 AU
inferior conj	2039 Nov 07 08:26	14°♏46'45	-0°13'51
minimum elong	2039 Nov 07 08:47	14°♏45'37	0°13'42
transit middle	2039 Nov 07 08:47	14°♏45'37	0°13'42
transit begin	2039 Nov 07 07:18	14°♏50'29	
transit end	2039 Nov 07 10:16	14°♏40'44	
asc. node	2039 Nov 08 00:30	13°♏54'10	
morning rise	2039 Nov 12 21:17	8°♏46'47	
direct	2039 Nov 16 10:38	7°♏33'51	
morning max el	2039 Nov 23 20:51	11°♏46'57	19°46'17
greatest brilliancy	2039 Dec 07 05:57	29°♏30'32	-0.7m
	2039 Dec 07 13:53	0°♐	
desc. node	2039 Dec 16 07:05	13°♐13'17	
morning set	2039 Dec 19 12:15	18°♐10'26	
	2039 Dec 27 02:34	0°♑	
max. Earth dist.	2039 Dec 31 11:02	6°♑52'29	1.44228 AU
superior conj	2040 Jan 05 03:23	14°♑22'36	-1°49'42
minimum elong	2040 Jan 04 20:20	13°♑54'09	1°49'13
	2040 Jan 14 14:58	0°♒	
evening rise	2040 Jan 18 16:38	6°♒52'25	
	2040 Feb 01 21:16	0°♓	
asc. node	2040 Feb 03 23:49	2°♓46'50	
evening max el	2040 Feb 06 02:33	5°♓09'26	18°16'03
retrograde	2040 Feb 12 13:39	8°♓37'27	
evening set	2040 Feb 15 12:03	7°♓51'54	
inferior conj	2040 Feb 21 13:13	2°♓30'48	3°43'17
minimum elong	2040 Feb 21 12:55	2°♓31'38	3°43'17
	2040 Feb 23 19:37	30°℞♒	
min. Earth dist.	2040 Feb 24 01:11	29°♒45'00	0.63479 AU
morning rise	2040 Feb 27 12:56	26°♒26'12	
direct	2040 Mar 05 11:20	23°♒41'27	
desc. node	2040 Mar 13 06:15	26°♒30'47	
	2040 Mar 17 14:43	0°♓	
morning max el	2040 Mar 19 07:11	1°♓37'08	27°41'40
	2040 Apr 09 06:33	0°♈	
morning set	2040 Apr 22 20:54	24°♈43'44	
	2040 Apr 25 11:19	0°♉	
max. Earth dist.	2040 Apr 28 01:54	5°♉26'17	1.32998 AU
superior conj	2040 Apr 30 15:10	10°♉52'43	-0°14'00
minimum elong	2040 Apr 30 15:51	10°♉56'24	0°13'50
behind sun begin	2040 Apr 30 13:13	10°♉42'13	
behind sun end	2040 Apr 30 18:30	11°♉10'36	
asc. node	2040 May 01 23:08	13°♉44'47	
evening rise	2040 May 07 16:53	26°♉04'58	
	2040 May 09 13:51	0°♊	
	2040 May 27 20:42	0°♋	
evening max el	2040 May 30 12:55	2°♋48'52	23°09'31
desc. node	2040 Jun 09 05:32	8°♋59'40	
retrograde	2040 Jun 13 00:19	9°♋32'16	
evening set	2040 Jun 16 15:00	9°♋03'40	
min. Earth dist.	2040 Jun 23 22:28	5°♋46'00	0.55641 AU
inferior conj	2040 Jun 25 16:53	4°♋43'59	-4°10'15
minimum elong	2040 Jun 25 09:38	4°♋54'38	4°08'43
morning rise	2040 Jul 04 06:48	0°♋50'34	
direct	2040 Jul 07 02:21	0°♋31'33	
morning max el	2040 Jul 17 20:12	5°♋30'08	20°29'46
asc. node	2040 Jul 28 22:21	20°♋35'59	
	2040 Aug 02 22:31	0°♌	
morning set	2040 Aug 05 15:44	5°♌28'53	
superior conj	2040 Aug 13 05:53	21°♌06'18	1°45'14
minimum elong	2040 Aug 13 05:22	21°♌03'40	1°45'13
	2040 Aug 17 17:02	0°♍	
max. Earth dist.	2040 Aug 18 05:10	0°♍58'58	1.36211 AU
evening rise	2040 Aug 22 05:03	8°♍32'35	
	2040 Sep 03 18:29	0°♎	
desc. node	2040 Sep 05 04:55	2°♎14'19	
	2040 Sep 26 12:23	0°♏	
evening max el	2040 Sep 26 21:55	0°♏23'18	26°06'52
retrograde	2040 Oct 09 12:05	7°♏31'39	
evening set	2040 Oct 15 18:35	4°♏55'32	
min. Earth dist.	2040 Oct 19 23:54	0°♏24'37	0.66590 AU
	2040 Oct 20 07:53	30°℞♎	
inferior conj	2040 Oct 21 10:16	28°♎37'46	-1°11'13
minimum elong	2040 Oct 21 12:08	28°♎31'56	1°10'25
asc. node	2040 Oct 24 21:33	24°♎39'14	
morning rise	2040 Oct 27 06:07	22°♎47'03	
direct	2040 Oct 30 09:06	21°♎51'12	
morning max el	2040 Nov 06 05:17	25°♎39'22	18°52'37
	2040 Nov 09 22:57	0°♏	
morning set	2040 Nov 27 23:31	27°♏11'38	
	2040 Nov 29 18:20	0°♐	
desc. node	2040 Dec 02 04:09	3°♐47'08	
max. Earth dist.	2040 Dec 13 03:33	21°♐00'48	1.45025 AU
superior conj	2040 Dec 14 10:39	23°♐03'08	-1°16'17
minimum elong	2040 Dec 14 02:03	22°♐29'17	1°15'19
	2040 Dec 18 20:17	0°♑	

evening rise	2040 Dec 29 18:27	17°♑29'20	
	2041 Jan 06 11:59	0°♒	
evening max el	2041 Jan 19 14:00	18°♒34'45	18°43'05
asc. node	2041 Jan 20 20:51	19°♒47'52	
retrograde	2041 Jan 26 06:14	22°♒18'10	
evening set	2041 Jan 29 10:27	21°♒20'50	
inferior conj	2041 Feb 04 04:00	15°♒42'02	3°33'24
minimum elong	2041 Feb 04 02:18	15°♒47'10	3°33'13
min. Earth dist.	2041 Feb 06 00:25	13°♒27'10	0.65138 AU
morning rise	2041 Feb 09 17:44	9°♒32'13	
direct	2041 Feb 16 10:27	6°♒40'13	
desc. node	2041 Feb 28 03:18	12°♒55'18	
morning max el	2041 Mar 01 16:46	14°♒26'09	27°01'57
	2041 Mar 14 09:21	0°♓	
	2041 Apr 01 23:04	0°♈	
morning set	2041 Apr 06 09:10	8°♈17'27	
max. Earth dist.	2041 Apr 10 21:01	17°♈10'46	1.34059 AU
superior conj	2041 Apr 14 17:42	25°♈08'36	-0°41'57
minimum elong	2041 Apr 14 19:50	25°♈19'43	0°41'31
	2041 Apr 17 01:04	0°♉	
asc. node	2041 Apr 18 20:11	3°♉48'23	
evening rise	2041 Apr 22 03:15	10°♉45'03	
	2041 May 02 04:57	0°♊	
evening max el	2041 May 12 07:54	13°♊26'31	21°36'14
retrograde	2041 May 24 15:38	19°♊28'51	
evening set	2041 May 27 02:48	19°♊15'07	
desc. node	2041 May 27 02:31	19°♊15'15	
inferior conj	2041 Jun 05 12:39	15°♊13'57	-2°39'28
minimum elong	2041 Jun 05 05:38	15°♊23'46	2°37'12
min. Earth dist.	2041 Jun 05 10:23	15°♊17'07	0.54933 AU
morning rise	2041 Jun 14 09:20	11°♊18'07	
direct	2041 Jun 17 13:41	10°♊55'57	
morning max el	2041 Jun 29 21:49	16°♊45'16	21°59'24
	2041 Jul 10 06:29	0°♋	
asc. node	2041 Jul 15 19:26	9°♋46'45	
morning set	2041 Jul 21 01:20	20°♋18'30	
	2041 Jul 25 15:27	0°♌	
superior conj	2041 Jul 28 06:58	5°♌35'42	1°39'17
minimum elong	2041 Jul 28 05:17	5°♌26'51	1°39'10
max. Earth dist.	2041 Jul 31 19:48	12°♌55'25	1.34627 AU
evening rise	2041 Aug 05 09:18	21°♌59'38	
	2041 Aug 09 15:37	0°♍	
desc. node	2041 Aug 23 01:55	22°♍13'44	
	2041 Aug 28 12:52	0°♎	
evening max el	2041 Sep 09 10:20	13°♎58'13	26°57'35
retrograde	2041 Sep 22 14:44	21°♎14'49	
evening set	2041 Sep 29 09:34	18°♎31'45	
min. Earth dist.	2041 Oct 03 08:02	14°♎37'19	0.65499 AU
inferior conj	2041 Oct 05 06:25	12°♎23'48	-2°09'47
minimum elong	2041 Oct 05 09:53	12°♎13'47	2°08'26
morning rise	2041 Oct 11 10:55	6°♎45'24	
asc. node	2041 Oct 11 18:36	6°♎36'15	
direct	2041 Oct 14 05:52	6°♎02'49	
morning max el	2041 Oct 20 18:52	9°♎35'32	18°15'16
	2041 Nov 03 22:43	0°♏	
morning set	2041 Nov 08 15:16	7°♏39'36	
desc. node	2041 Nov 19 01:13	24°♏29'10	
	2041 Nov 22 12:31	0°♐	
superior conj	2041 Nov 23 12:49	1°♐36'00	-0°29'47
minimum elong	2041 Nov 23 08:58	1°♐20'49	0°29'15
max. Earth dist.	2041 Nov 25 22:46	5°♐24'18	1.45091 AU
evening rise	2041 Dec 09 21:21	27°♐12'10	
	2041 Dec 11 16:24	0°♑	
greatest brilliancy	2041 Dec 21 14:43	15°♑22'32	-0.7m

	2042 Jan 01 01:20	0°♒	
evening max el	2042 Jan 02 22:05	2°♒03'52	19°27'03
asc. node	2042 Jan 07 17:52	5°♒41'56	
retrograde	2042 Jan 10 02:48	6°♒12'39	
evening set	2042 Jan 13 14:01	5°♒02'17	
	2042 Jan 18 10:25	30°℞♑	
inferior conj	2042 Jan 19 02:32	29°♑07'53	3°10'32
minimum elong	2042 Jan 19 00:05	29°♑15'50	3°10'01
min. Earth dist.	2042 Jan 20 08:03	27°♑31'55	0.66396 AU
morning rise	2042 Jan 24 09:55	22°♑55'30	
direct	2042 Jan 30 15:32	20°♑09'37	
morning max el	2042 Feb 12 02:07	27°♑32'36	25°56'14
	2042 Feb 14 09:52	0°♒	
desc. node	2042 Feb 15 00:21	0°♒40'22	
	2042 Mar 08 01:47	0°♓	
morning set	2042 Mar 20 07:39	21°♓06'13	
max. Earth dist.	2042 Mar 24 04:38	28°♓24'41	1.35581 AU
	2042 Mar 25 00:21	0°♈	
superior conj	2042 Mar 29 12:42	8°♈57'27	-1°09'28
minimum elong	2042 Mar 29 16:10	9°♈14'58	1°08'54
asc. node	2042 Apr 05 17:13	23°♈42'41	
evening rise	2042 Apr 06 10:11	25°♈09'39	
	2042 Apr 08 19:35	0°♉	
evening max el	2042 Apr 24 13:25	24°♉35'24	20°15'55
retrograde	2042 May 05 05:13	29°♉45'11	
evening set	2042 May 07 06:06	29°♉34'40	
desc. node	2042 May 13 23:32	26°♉57'38	
inferior conj	2042 May 16 08:04	25°♉36'18	-0°41'15
minimum elong	2042 May 16 06:08	25°♉39'09	0°40'32
min. Earth dist.	2042 May 17 23:14	24°♉38'40	0.55181 AU
morning rise	2042 May 25 04:44	21°♉19'07	
direct	2042 May 29 01:31	20°♉46'42	
morning max el	2042 Jun 11 14:55	27°♉24'38	23°40'27
	2042 Jun 14 03:57	0°♊	
asc. node	2042 Jul 02 16:29	29°♊20'57	
	2042 Jul 03 00:11	0°♋	
morning set	2042 Jul 05 12:51	5°♋14'07	
superior conj	2042 Jul 12 13:44	20°♋21'39	1°27'38
minimum elong	2042 Jul 12 11:26	20°♋09'18	1°27'22
max. Earth dist.	2042 Jul 14 19:44	25°♋10'37	1.33431 AU
	2042 Jul 17 02:47	0°♌	
evening rise	2042 Jul 20 01:40	6°♌02'00	
	2042 Aug 02 05:59	0°♍	
desc. node	2042 Aug 09 22:54	11°♍43'28	
evening max el	2042 Aug 22 21:52	27°♍15'50	27°23'45
	2042 Aug 26 00:54	0°♎	
retrograde	2042 Sep 05 11:21	4°♎33'39	
evening set	2042 Sep 12 14:37	1°♎52'38	
	2042 Sep 14 19:45	30°℞♍	
min. Earth dist.	2042 Sep 16 07:17	28°♍33'00	0.64054 AU
inferior conj	2042 Sep 18 18:23	25°♍58'35	-3°07'06
minimum elong	2042 Sep 18 23:13	25°♍45'56	3°05'30
morning rise	2042 Sep 25 08:53	20°♍36'03	
direct	2042 Sep 27 22:18	20°♍03'12	
asc. node	2042 Sep 28 15:39	20°♍05'52	
morning max el	2042 Oct 04 10:53	23°♍28'59	17°55'04
	2042 Oct 09 15:18	0°♎	
morning set	2042 Oct 21 10:25	19°♎27'08	
	2042 Oct 27 15:27	0°♏	
superior conj	2042 Nov 03 06:45	10°♏58'30	0°17'51
minimum elong	2042 Nov 03 08:43	11°♏06'33	0°17'34
desc. node	2042 Nov 05 22:13	15°♏15'20	
max. Earth dist.	2042 Nov 08 17:10	19°♏43'05	1.44422 AU
	2042 Nov 15 06:05	0°♐	

evening rise	2042 Nov 19 08:14	6°♐19'41	
	2042 Dec 05 01:51	0°♑	
evening max el	2042 Dec 17 01:05	15°♑33'56	20°26'01
retrograde	2042 Dec 25 00:44	20°♑16'14	
asc. node	2042 Dec 25 14:54	20°♑14'17	
evening set	2042 Dec 28 20:35	18°♑51'28	
inferior conj	2043 Jan 03 06:10	12°♑44'16	2°37'44
minimum elong	2043 Jan 03 03:33	12°♑53'10	2°36'57
min. Earth dist.	2043 Jan 03 22:22	11°♑49'17	0.67241 AU
morning rise	2043 Jan 08 10:20	6°♑31'02	
direct	2043 Jan 14 01:50	4°♑00'52	
morning max el	2043 Jan 25 10:40	10°♑47'45	24°34'09
desc. node	2043 Feb 01 21:25	19°♑22'37	
	2043 Feb 09 17:53	0°♒	
	2043 Feb 28 18:44	0°♓	
morning set	2043 Mar 02 10:59	2°♓55'16	
max. Earth dist.	2043 Mar 06 02:54	9°♓28'30	1.37496 AU
superior conj	2043 Mar 12 20:59	22°♓10'36	-1°34'33
minimum elong	2043 Mar 13 01:15	22°♓31'17	1°34'01
	2043 Mar 16 20:35	0°♈	
evening rise	2043 Mar 21 11:21	9°♈12'02	
asc. node	2043 Mar 23 14:14	13°♈23'08	
	2043 Apr 02 00:55	0°♉	
evening max el	2043 Apr 07 06:33	6°♉24'21	19°14'10
retrograde	2043 Apr 16 06:18	10°♉45'30	
evening set	2043 Apr 18 08:51	10°♉32'11	
inferior conj	2043 Apr 26 17:05	6°♉22'10	1°10'11
minimum elong	2043 Apr 26 19:48	6°♉17'35	1°09'16
min. Earth dist.	2043 Apr 29 14:12	4°♉26'52	0.56335 AU
desc. node	2043 Apr 30 20:33	3°♉39'14	
morning rise	2043 May 05 03:48	1°♉30'59	
direct	2043 May 10 00:20	0°♉36'33	
morning max el	2043 May 24 05:25	7°♉51'57	25°19'54
	2043 Jun 09 13:47	0°♊	
asc. node	2043 Jun 19 13:31	19°♊11'57	
morning set	2043 Jun 20 00:38	20°♊10'23	
	2043 Jun 24 14:00	0°♋	
superior conj	2043 Jun 26 23:56	5°♋17'00	1°11'18
minimum elong	2043 Jun 26 21:33	5°♋03'58	1°10'55
max. Earth dist.	2043 Jun 28 03:03	7°♋45'05	1.32636 AU
evening rise	2043 Jul 04 02:39	20°♋29'20	
	2043 Jul 08 21:15	0°♌	
	2043 Jul 27 10:18	0°♍	
desc. node	2043 Jul 27 19:53	0°♍31'12	
evening max el	2043 Aug 05 06:19	10°♍03'08	27°19'37
retrograde	2043 Aug 19 01:33	17°♍19'09	
evening set	2043 Aug 26 06:09	14°♍52'17	
min. Earth dist.	2043 Aug 29 20:14	12°♍00'40	0.62276 AU
inferior conj	2043 Sep 01 19:17	9°♍15'23	-3°59'15
minimum elong	2043 Sep 02 00:39	9°♍02'52	3°57'55
morning rise	2043 Sep 08 20:39	4°♍12'05	
direct	2043 Sep 11 07:04	3°♍45'53	
asc. node	2043 Sep 15 12:43	5°♍07'32	
morning max el	2043 Sep 18 02:28	7°♍13'12	17°52'55
	2043 Oct 02 20:45	0°♎	
morning set	2043 Oct 04 03:00	2°♎15'56	
superior conj	2043 Oct 15 03:13	21°♎39'49	0°56'55
minimum elong	2043 Oct 15 07:42	21°♎58'54	0°56'21
	2043 Oct 20 02:23	0°♏	
max. Earth dist.	2043 Oct 22 07:38	3°♏38'20	1.43108 AU
desc. node	2043 Oct 23 19:13	6°♏02'34	
evening rise	2043 Oct 29 18:15	15°♏29'59	
	2043 Nov 08 06:25	0°♐	
evening max el	2043 Nov 29 22:22	29°♐04'14	21°36'51
	2043 Nov 30 20:54	0°♑	
retrograde	2043 Dec 08 21:58	4°♑25'00	
asc. node	2043 Dec 12 11:56	3°♑14'22	
evening set	2043 Dec 13 04:15	2°♑44'31	
	2043 Dec 15 20:44	30°℞♐	
inferior conj	2043 Dec 18 12:40	26°♐27'54	1°57'01
minimum elong	2043 Dec 18 10:23	26°♐35'51	1°56'12
min. Earth dist.	2043 Dec 18 17:02	26°♐12'48	0.67710 AU
morning rise	2043 Dec 23 16:21	20°♐15'31	
direct	2043 Dec 28 16:45	18°♐06'20	
morning max el	2044 Jan 07 20:00	24°♐07'31	23°05'39
	2044 Jan 13 01:22	0°♑	
desc. node	2044 Jan 19 18:26	8°♑45'04	
	2044 Feb 03 04:39	0°♒	
morning set	2044 Feb 11 12:48	13°♒27'13	
max. Earth dist.	2044 Feb 15 21:53	20°♒53'08	1.39630 AU
	2044 Feb 21 01:40	0°♓	
superior conj	2044 Feb 23 14:16	4°♓36'23	-1°54'17
minimum elong	2044 Feb 23 18:04	4°♓53'52	1°54'00
evening rise	2044 Mar 04 03:48	22°♓43'18	
	2044 Mar 07 23:49	0°♈	
asc. node	2044 Mar 09 11:15	2°♈43'31	
evening max el	2044 Mar 20 09:13	18°♈48'53	18°32'33
retrograde	2044 Mar 28 01:31	22°♈34'59	
evening set	2044 Mar 30 09:52	22°♈15'00	
inferior conj	2044 Apr 06 22:40	17°♈46'25	2°32'13
minimum elong	2044 Apr 07 02:40	17°♈38'35	2°31'11
min. Earth dist.	2044 Apr 10 08:42	15°♈06'48	0.58148 AU
morning rise	2044 Apr 14 16:26	12°♈23'01	
desc. node	2044 Apr 16 17:36	11°♈32'31	
direct	2044 Apr 20 13:34	10°♈54'46	
morning max el	2044 May 04 22:47	18°♈33'43	26°42'09
	2044 May 14 13:09	0°♉	
	2044 Jun 01 00:42	0°♊	
morning set	2044 Jun 03 11:01	5°♊01'06	
asc. node	2044 Jun 05 10:34	9°♊13'38	
superior conj	2044 Jun 10 11:38	20°♊14'34	0°51'04
minimum elong	2044 Jun 10 09:38	20°♊03'32	0°50'41
max. Earth dist.	2044 Jun 10 14:28	20°♊30'12	1.32233 AU
	2044 Jun 14 22:45	0°♋	
evening rise	2044 Jun 17 09:25	5°♋12'17	
	2044 Jun 30 13:29	0°♌	
desc. node	2044 Jul 13 16:54	18°♌19'17	
evening max el	2044 Jul 17 09:14	22°♌08'44	26°42'27
retrograde	2044 Jul 31 08:22	29°♌22'01	
evening set	2044 Aug 07 03:42	27°♌23'05	
min. Earth dist.	2044 Aug 10 23:02	24°♌45'58	0.60258 AU
inferior conj	2044 Aug 14 05:41	22°♌05'37	-4°39'49
minimum elong	2044 Aug 14 09:53	21°♌56'59	4°39'13
morning rise	2044 Aug 21 18:03	17°♌24'08	
direct	2044 Aug 24 04:12	17°♌02'04	
morning max el	2044 Aug 31 14:27	20°♌40'03	18°09'59
asc. node	2044 Sep 01 09:47	21°♌28'55	
	2044 Sep 07 15:30	0°♍	
morning set	2044 Sep 16 11:14	15°♍49'50	
	2044 Sep 24 01:38	0°♎	
superior conj	2044 Sep 26 01:32	3°♎37'19	1°24'03
minimum elong	2044 Sep 26 05:32	3°♎55'18	1°23'40
max. Earth dist.	2044 Oct 03 16:34	16°♎55'42	1.41322 AU
evening rise	2044 Oct 08 19:46	25°♎25'11	
desc. node	2044 Oct 09 16:15	26°♎47'53	
	2044 Oct 11 16:22	0°♏	
	2044 Nov 01 02:35	0°♐	
evening max el	2044 Nov 11 14:42	12°♐37'08	22°55'05

retrograde	2044 Nov 21 16:52	18°♐36'30	
evening set	2044 Nov 26 11:24	16°♐39'20	
asc. node	2044 Nov 28 08:59	14°♐46'49	
inferior conj	2044 Dec 01 20:11	10°♐17'07	1°10'00
minimum elong	2044 Dec 01 18:38	10°♐22'28	1°09'22
min. Earth dist.	2044 Dec 01 13:43	10°♐39'26	0.67831 AU
morning rise	2044 Dec 07 01:45	4°♐07'38	
direct	2044 Dec 11 11:31	2°♐21'10	
morning max el	2044 Dec 20 09:30	7°♐34'38	21°39'58
desc. node	2045 Jan 05 15:29	28°♐36'49	
	2045 Jan 06 14:20	0°♑	
morning set	2045 Jan 21 09:25	22°♑35'31	
	2045 Jan 25 23:34	0°♒	
max. Earth dist.	2045 Jan 27 20:58	3°♒06'57	1.41720 AU
superior conj	2045 Feb 04 11:36	16°♒03'22	-2°04'33
minimum elong	2045 Feb 04 12:42	16°♒08'08	2°04'32
	2045 Feb 12 06:44	0°♓	
evening rise	2045 Feb 15 07:59	5°♓35'33	
asc. node	2045 Feb 24 08:18	21°♓37'14	
	2045 Mar 02 04:45	0°♈	
evening max el	2045 Mar 03 18:16	1°♈40'46	18°10'56
retrograde	2045 Mar 10 14:42	5°♈08'07	
evening set	2045 Mar 13 04:58	4°♈39'03	
	2045 Mar 19 20:22	30°℞♓	
inferior conj	2045 Mar 20 00:56	29°♓49'35	3°20'45
minimum elong	2045 Mar 20 03:42	29°♓43'18	3°20'20
min. Earth dist.	2045 Mar 23 08:49	26°♓48'52	0.60273 AU
morning rise	2045 Mar 27 00:18	24°♓03'48	
direct	2045 Apr 02 15:10	21°♓58'54	
desc. node	2045 Apr 03 14:38	22°♓01'32	
morning max el	2045 Apr 16 21:56	29°♓49'51	27°34'13
	2045 Apr 17 02:02	0°♈	
	2045 May 08 12:07	0°♉	
morning set	2045 May 18 18:17	19°♉40'22	
asc. node	2045 May 23 07:36	29°♉21'27	
	2045 May 23 14:42	0°♊	
max. Earth dist.	2045 May 25 02:24	3°♊14'56	1.32216 AU
superior conj	2045 May 25 23:06	5°♊08'28	0°27'39
minimum elong	2045 May 25 21:54	5°♊01'48	0°27'24
evening rise	2045 Jun 01 19:41	20°♊03'22	
	2045 Jun 06 16:20	0°♋	
	2045 Jun 25 21:27	0°♌	
evening max el	2045 Jun 29 05:13	3°♌27'59	25°34'26
desc. node	2045 Jun 30 13:55	4°♌43'00	
retrograde	2045 Jul 13 05:38	10°♌36'26	
evening set	2045 Jul 19 02:39	9°♌15'19	
min. Earth dist.	2045 Jul 23 17:24	6°♌34'54	0.58209 AU
inferior conj	2045 Jul 26 22:05	4°♌19'20	-4°58'30
minimum elong	2045 Jul 26 22:37	4°♌18'23	4°58'29
morning rise	2045 Aug 03 20:58	0°♌00'18	
	2045 Aug 03 21:25	30°℞♋	
direct	2045 Aug 06 09:28	29°♋40'23	
	2045 Aug 08 19:52	0°♌	
morning max el	2045 Aug 14 19:35	3°♌39'40	18°47'31
asc. node	2045 Aug 19 06:50	8°♌54'18	
morning set	2045 Aug 31 06:25	29°♌55'32	
	2045 Aug 31 07:20	0°♍	
superior conj	2045 Sep 08 20:20	16°♍35'15	1°39'41
minimum elong	2045 Sep 08 22:35	16°♍45'55	1°39'33
max. Earth dist.	2045 Sep 15 21:15	29°♍30'40	1.39295 AU
	2045 Sep 16 03:53	0°♎	
evening rise	2045 Sep 19 20:44	6°♎25'32	
desc. node	2045 Sep 26 13:17	17°♎27'02	
	2045 Oct 04 17:35	0°♏	
evening max el	2045 Oct 25 03:56	26°♏13'53	24°14'55
	2045 Oct 29 11:42	0°♐	
retrograde	2045 Nov 05 08:07	2°♐46'46	
evening set	2045 Nov 10 16:25	0°♐32'47	
	2045 Nov 11 07:01	30°℞♏	
asc. node	2045 Nov 15 06:02	25°♏19'14	
min. Earth dist.	2045 Nov 15 09:54	25°♏06'18	0.67619 AU
inferior conj	2045 Nov 16 02:54	24°♏09'05	0°17'55
minimum elong	2045 Nov 16 02:28	24°♏10'33	0°17'44
morning rise	2045 Nov 21 12:31	18°♏04'52	
direct	2045 Nov 25 08:54	16°♏40'16	
morning max el	2045 Dec 03 06:07	21°♏12'10	20°23'55
	2045 Dec 10 12:57	0°♐	
desc. node	2045 Dec 23 12:32	18°♐49'21	
	2045 Dec 30 20:07	0°♑	
morning set	2045 Dec 31 08:15	0°♑46'57	
max. Earth dist.	2046 Jan 10 04:12	16°♑17'20	1.43474 AU
superior conj	2046 Jan 16 08:02	26°♑20'32	-2°00'24
minimum elong	2046 Jan 16 04:01	26°♑03'53	2°00'14
	2046 Jan 18 12:42	0°♒	
evening rise	2046 Jan 28 19:43	17°♒40'09	
	2046 Feb 04 22:12	0°♓	
asc. node	2046 Feb 11 05:20	9°♓55'45	
evening max el	2046 Feb 15 06:25	14°♓50'49	18°08'47
retrograde	2046 Feb 21 18:00	18°♓14'38	
evening set	2046 Feb 24 13:34	17°♓35'11	
inferior conj	2046 Mar 02 20:31	12°♓25'06	3°41'20
minimum elong	2046 Mar 02 21:17	12°♓23'07	3°41'19
min. Earth dist.	2046 Mar 05 16:55	9°♓28'11	0.62375 AU
morning rise	2046 Mar 09 03:48	6°♓25'45	
direct	2046 Mar 16 02:12	3°♓52'01	
desc. node	2046 Mar 21 11:41	5°♓13'30	
morning max el	2046 Mar 30 03:00	11°♓47'25	27°49'41
	2046 Apr 13 12:35	0°♈	
	2046 Apr 30 20:06	0°♉	
morning set	2046 May 02 20:22	4°♉01'26	
max. Earth dist.	2046 May 08 11:05	15°♉46'38	1.32592 AU
superior conj	2046 May 10 08:38	19°♉52'49	0°01'46
minimum elong	2046 May 10 08:34	19°♉52'22	0°01'45
behind sun begin	2046 May 10 03:25	19°♉24'26	
behind sun end	2046 May 10 13:42	20°♉20'20	
asc. node	2046 May 10 04:39	19°♉31'09	
	2046 May 15 00:18	0°♊	
evening rise	2046 May 17 07:29	4°♊55'46	
	2046 May 30 16:52	0°♋	
evening max el	2046 Jun 10 19:46	14°♋09'53	24°04'59
desc. node	2046 Jun 17 10:57	19°♋10'11	
retrograde	2046 Jun 24 14:58	21°♋06'31	
evening set	2046 Jun 29 02:36	20°♋21'59	
min. Earth dist.	2046 Jul 05 06:29	17°♋21'56	0.56423 AU
inferior conj	2046 Jul 07 18:23	15°♋49'22	-4°41'21
minimum elong	2046 Jul 07 13:31	15°♋56'57	4°40'44
morning rise	2046 Jul 16 03:05	11°♋49'33	
direct	2046 Jul 18 19:51	11°♋30'30	
morning max el	2046 Jul 28 14:59	16°♋03'17	19°46'23
asc. node	2046 Aug 06 03:54	27°♋09'51	
	2046 Aug 07 20:08	0°♌	
morning set	2046 Aug 15 09:08	14°♌24'05	
superior conj	2046 Aug 23 06:14	0°♍18'50	1°45'34
minimum elong	2046 Aug 23 06:37	0°♍20'47	1°45'33
	2046 Aug 23 02:26	0°♍	
max. Earth dist.	2046 Aug 29 01:50	11°♍33'24	1.37283 AU
evening rise	2046 Sep 01 20:54	18°♍31'13	
	2046 Sep 08 12:25	0°♎	

desc. node	2046 Sep 13	10:19	7°♎55'38		
	2046 Sep 28	22:44	0°♏		
evening max el	2046 Oct 07	16:00	9°♏53'46	25°29'19	
retrograde	2046 Oct 19	18:56	16°♏51'37		
evening set	2046 Oct 25	17:36	14°♏22'21		
min. Earth dist.	2046 Oct 30	03:12	9°♏30'56	0.67072 AU	
inferior conj	2046 Oct 31	07:03	8°♏01'21	-0°37'55	
minimum elong	2046 Oct 31	08:01	7°♏58'13	0°37'30	
asc. node	2046 Nov 02	03:05	5°♏43'20		
morning rise	2046 Nov 05	22:40	2°♏05'04		
direct	2046 Nov 09	07:26	0°♏59'43		
morning max el	2046 Nov 16	10:37	5°♏00'27	19°21'29	
greatest brilliancy	2046 Nov 30	05:48	23°♏39'05	-0.7m	
	2046 Dec 04	09:30	0°♐		
morning set	2046 Dec 10	08:10	9°♐11'22		
desc. node	2046 Dec 10	09:35	9°♐16'54		
	2046 Dec 23	15:40	0°♑		
max. Earth dist.	2046 Dec 23	18:37	0°♑11'38	1.44661 AU	
superior conj	2046 Dec 27	02:35	5°♑28'51	-1°37'41	
minimum elong	2046 Dec 26	18:04	4°♑54'57	1°36'55	
evening rise	2047 Jan 10	10:51	28°♑50'34		
	2047 Jan 11	03:33	0°♒		
asc. node	2047 Jan 29	02:22	27°♒28'37		
evening max el	2047 Jan 29	18:47	28°♒11'49	18°25'22	
	2047 Jan 31	19:34	0°♓		
retrograde	2047 Feb 05	07:01	1°♓45'04		
evening set	2047 Feb 08	07:50	0°♓54'29		
	2047 Feb 09	16:51	30°℞♒		
inferior conj	2047 Feb 14	05:22	25°♒25'18	3°40'56	
minimum elong	2047 Feb 14	04:24	25°♒28'05	3°40'53	
min. Earth dist.	2047 Feb 16	10:36	22°♒51'35	0.64229 AU	
morning rise	2047 Feb 20	00:22	19°♒18'08		
direct	2047 Feb 26	21:05	16°♒28'53		
desc. node	2047 Mar 08	08:45	20°♒38'01		
morning max el	2047 Mar 12	11:53	24°♒21'19	27°28'40	
	2047 Mar 17	14:29	0°♓		
	2047 Apr 06	21:46	0°♈		
morning set	2047 Apr 16	14:34	17°♈55'04		
max. Earth dist.	2047 Apr 21	12:21	27°♈51'24	1.33392 AU	
	2047 Apr 22	12:59	0°♉		
superior conj	2047 Apr 24	14:17	4°♉20'28	-0°25'47	
minimum elong	2047 Apr 24	15:35	4°♉27'19	0°25'31	
asc. node	2047 Apr 27	01:40	9°♉37'55		
evening rise	2047 May 01	18:53	19°♉41'55		
	2047 May 06	20:31	0°♊		
evening max el	2047 May 23	10:40	24°♊38'36	22°28'48	
	2047 May 31	02:38	0°♋		
desc. node	2047 Jun 04	07:58	1°♋04'03		
retrograde	2047 Jun 05	12:05	1°♋07'11		
evening set	2047 Jun 08	13:28	0°♋46'34		
	2047 Jun 11	03:05	30°℞♊		
min. Earth dist.	2047 Jun 16	17:54	27°♊13'44	0.55230 AU	
inferior conj	2047 Jun 17	20:34	26°♊35'55	-3°36'56	
minimum elong	2047 Jun 17	12:38	26°♊47'11	3°34'51	
morning rise	2047 Jun 26	13:55	22°♊44'16		
direct	2047 Jun 29	12:35	22°♊24'31		
morning max el	2047 Jul 10	23:01	27°♊43'24	21°05'56	
	2047 Jul 13	04:57	0°♋		
asc. node	2047 Jul 24	00:56	16°♋02'54		
morning set	2047 Jul 30	16:48	29°♋07'31		
	2047 Jul 31	02:57	0°♌		
superior conj	2047 Aug 07	02:46	14°♌34'28	1°43'29	
minimum elong	2047 Aug 07	01:41	14°♌28'54	1°43'26	
max. Earth dist.	2047 Aug 11	11:25	23°♌24'17	1.35494 AU	
	2047 Aug 14	20:51	0°♍		
evening rise	2047 Aug 15	16:11	1°♍31'37		
desc. node	2047 Aug 31	07:19	28°♍07'37		
	2047 Sep 01	13:04	0°♎		
evening max el	2047 Sep 20	04:03	23°♎31'51	26°30'52	
	2047 Sep 29	07:04	0°♏		
retrograde	2047 Oct 03	00:46	0°♏44'51		
	2047 Oct 06	12:31	30°℞♎		
evening set	2047 Oct 09	13:00	28°♎04'32		
min. Earth dist.	2047 Oct 13	15:14	23°♎49'29	0.66176 AU	
inferior conj	2047 Oct 15	06:42	21°♎50'30	-1°36'02	
minimum elong	2047 Oct 15	09:16	21°♎42'47	1°34'59	
asc. node	2047 Oct 20	00:08	16°♎54'28		
morning rise	2047 Oct 21	06:05	16°♎04'56		
direct	2047 Oct 24	05:21	15°♎15'16		
morning max el	2047 Oct 30	21:38	18°♎55'31	18°34'40	
	2047 Nov 08	08:22	0°♏		
morning set	2047 Nov 20	06:56	18°♏48'26		
desc. node	2047 Nov 27	06:37	29°♏54'45		
	2047 Nov 27	07:57	0°♐		
superior conj	2047 Dec 06	04:59	13°♐58'36	-0°57'28	
minimum elong	2047 Dec 05	21:49	13°♐30'29	0°56'35	
max. Earth dist.	2047 Dec 06	12:48	14°♐29'16	1.45142 AU	
	2047 Dec 16	09:26	0°♑		
evening rise	2047 Dec 22	02:41	9°♑03'50		
greatest brilliancy	2047 Dec 30	20:54	22°♑58'26	-0.8m	
	2048 Jan 04	09:54	0°♒		
evening max el	2048 Jan 13	04:57	11°♒38'56	18°59'47	
asc. node	2048 Jan 15	23:24	14°♒03'11		
retrograde	2048 Jan 20	01:47	15°♒32'30		
evening set	2048 Jan 23	08:45	14°♒29'49		
inferior conj	2048 Jan 28	23:50	8°♒43'51	3°25'06	
minimum elong	2048 Jan 28	21:45	8°♒50'24	3°24'46	
min. Earth dist.	2048 Jan 30	13:43	6°♒44'57	0.65716 AU	
morning rise	2048 Feb 03	10:25	2°♒32'26		
	2048 Feb 07	18:21	30°℞♑		
direct	2048 Feb 09	22:45	29°♑41'43		
	2048 Feb 12	05:34	0°♒		
morning max el	2048 Feb 22	21:50	7°♒20'15	26°36'44	
desc. node	2048 Feb 23	05:47	7°♒40'25		
	2048 Mar 11	12:08	0°♓		
	2048 Mar 29	06:23	0°♈		
morning set	2048 Mar 29	21:32	1°♈11'27		
max. Earth dist.	2048 Apr 03	02:49	9°♈22'34	1.34649 AU	
superior conj	2048 Apr 07	13:55	18°♈25'29	-0°53'47	
minimum elong	2048 Apr 07	16:39	18°♈39'33	0°53'16	
asc. node	2048 Apr 12	22:42	29°♈37'58		
	2048 Apr 13	02:55	0°♉		
evening rise	2048 Apr 15	04:02	4°♉16'01		
	2048 Apr 29	16:21	0°♊		
evening max el	2048 May 04	09:31	5°♊26'34	21°00'00	
retrograde	2048 May 16	01:32	11°♊07'43		
evening set	2048 May 18	06:02	10°♊56'28		
desc. node	2048 May 21	04:58	10°♊08'25		
inferior conj	2048 May 27	14:16	6°♊58'17	-1°50'42	
minimum elong	2048 May 27	09:05	7°♊05'37	1°48'53	
min. Earth dist.	2048 May 28	06:12	6°♊35'42	0.54915 AU	
morning rise	2048 Jun 05	12:02	2°♊55'26		
direct	2048 Jun 08	21:57	2°♊30'17		
morning max el	2048 Jun 21	20:35	8°♊41'32	22°41'42	
	2048 Jul 07	01:43	0°♋		
asc. node	2048 Jul 09	21:59	5°♋24'00		
morning set	2048 Jul 14	03:23	13°♋59'54		
superior conj	2048 Jul 21	06:35	29°♋11'47	1°34'58	

minimum elong	2048 Jul 21	04:34	29°♋01'07	1°34'48	
	2048 Jul 21	15:40	0°♌		
max. Earth dist.	2048 Jul 24	05:43	5°♌26'00	1.34064 AU	
evening rise	2048 Jul 29	02:02	15°♌14'40		
	2048 Aug 06	00:33	0°♍		
desc. node	2048 Aug 17	04:19	17°♍55'30		
	2048 Aug 26	05:13	0°♎		
evening max el	2048 Sep 01	16:05	7°♎00'05	27°12'02	
retrograde	2048 Sep 15	01:09	14°♎18'43		
evening set	2048 Sep 22	00:09	11°♎34'58		
min. Earth dist.	2048 Sep 25	19:49	7°♎55'52	0.64925 AU	
inferior conj	2048 Sep 27	23:41	5°♎32'12	-2°34'28	
minimum elong	2048 Sep 28	03:47	5°♎20'49	2°32'58	
morning rise	2048 Oct 04	08:20	0°♎00'18		
	2048 Oct 04	08:36	30°℞♍		
asc. node	2048 Oct 05	21:12	29°♍29'22		
direct	2048 Oct 07	00:30	29°♍22'27		
	2048 Oct 09	16:43	0°♎		
morning max el	2048 Oct 13	12:39	2°♎51'27	18°04'29	
morning set	2048 Oct 31	10:54	29°♎51'41		
	2048 Oct 31	12:53	0°♏		
desc. node	2048 Nov 13	03:38	20°♏38'41		
superior conj	2048 Nov 14	11:42	22°♏46'50	-0°09'00	
minimum elong	2048 Nov 14	10:35	22°♏42'22	0°08'51	
behind sun begin	2048 Nov 14	01:32	22°♏06'16		
behind sun end	2048 Nov 14	19:38	23°♏18'27		
max. Earth dist.	2048 Nov 18	07:31	28°♏50'57	1.44887 AU	
	2048 Nov 19	01:03	0°♐		
evening rise	2048 Nov 30	21:18	18°♐27'19		
	2048 Dec 08	09:17	0°♑		
greatest brilliancy	2048 Dec 14	10:35	9°♑09'36	-0.7m	
evening max el	2048 Dec 26	10:58	25°♑08'14	19°50'31	
asc. node	2049 Jan 01	20:27	29°♑23'54		
retrograde	2049 Jan 02	23:14	29°♑30'48		
evening set	2049 Jan 06	13:48	28°♑14'42		
inferior conj	2049 Jan 12	00:51	22°♑14'33	2°57'41	
minimum elong	2049 Jan 11	22:15	22°♑23'09	2°57'03	
min. Earth dist.	2049 Jan 13	00:34	20°♑55'42	0.66801 AU	
morning rise	2049 Jan 17	06:29	16°♑01'22		
direct	2049 Jan 23	06:19	13°♑21'00		
morning max el	2049 Feb 04	06:45	20°♑30'58	25°22'38	
desc. node	2049 Feb 09	02:49	25°♑51'56		
	2049 Feb 12	10:55	0°♒		
	2049 Mar 04	16:17	0°♓		
morning set	2049 Mar 12	12:35	13°♓36'36		
max. Earth dist.	2049 Mar 16	05:27	20°♓26'23	1.36352 AU	
	2049 Mar 21	04:32	0°♈		
superior conj	2049 Mar 22	04:45	1°♈59'50	-1°20'35	
minimum elong	2049 Mar 22	08:40	2°♈19'15	1°19'59	
evening rise	2049 Mar 30	08:47	18°♈31'21		
asc. node	2049 Mar 30	19:44	19°♈26'41		
	2049 Apr 05	05:43	0°♉		
evening max el	2049 Apr 16	20:09	16°♉52'20	19°47'17	
retrograde	2049 Apr 26	18:20	21°♉39'51		
evening set	2049 Apr 28	18:52	21°♉28'48		
inferior conj	2049 May 07	14:01	17°♉27'17	0°08'40	
minimum elong	2049 May 07	14:24	17°♉26'41	0°08'32	
transit middle	2049 May 07	14:24	17°♉26'41	0°08'32	
transit begin	2049 May 07	11:04	17°♉31'51		
transit end	2049 May 07	17:45	17°♉21'30		
desc. node	2049 May 08	01:58	17°♉08'45		
min. Earth dist.	2049 May 09	20:07	16°♉03'52	0.55570 AU	
morning rise	2049 May 16	07:33	12°♉55'58		
direct	2049 May 20	13:57	12°♉15'34		
morning max el	2049 Jun 03	11:44	19°♉12'00	24°23'52	
	2049 Jun 12	12:53	0°♊		
asc. node	2049 Jun 26	19:01	25°♊05'47		
morning set	2049 Jun 28	15:12	28°♊56'07		
	2049 Jun 29	03:16	0°♋		
superior conj	2049 Jul 05	15:04	14°♋02'35	1°21'14	
minimum elong	2049 Jul 05	12:40	13°♋49'36	1°20'55	
max. Earth dist.	2049 Jul 07	08:58	17°♋49'07	1.33040 AU	
evening rise	2049 Jul 12	22:29	29°♋29'03		
	2049 Jul 13	04:35	0°♌		
	2049 Jul 30	02:29	0°♍		
desc. node	2049 Aug 04	01:18	7°♍09'19		
evening max el	2049 Aug 15	02:45	20°♍07'13	27°26'05	
retrograde	2049 Aug 28	19:21	27°♍24'47		
evening set	2049 Sep 05	00:02	24°♍48'24		
min. Earth dist.	2049 Sep 08	15:05	21°♍41'34	0.63327 AU	
inferior conj	2049 Sep 11	07:24	19°♍01'03	-3°30'11	
minimum elong	2049 Sep 11	12:36	18°♍48'02	3°28'38	
morning rise	2049 Sep 18	02:26	13°♍46'04		
direct	2049 Sep 20	14:09	13°♍16'28		
asc. node	2049 Sep 22	18:15	13°♍39'28		
morning max el	2049 Sep 27	04:53	16°♍42'15	17°51'50	
	2049 Oct 06	15:25	0°♎		
morning set	2049 Oct 13	16:06	12°♎08'28		
	2049 Oct 24	01:37	0°♏		
superior conj	2049 Oct 25	16:33	2°♏42'13	0°35'46	
minimum elong	2049 Oct 25	20:03	2°♏56'44	0°35'18	
desc. node	2049 Oct 31	00:39	11°♏25'57		
max. Earth dist.	2049 Nov 01	00:23	13°♏01'22	1.43937 AU	
evening rise	2049 Nov 10	05:46	27°♏31'22		
	2049 Nov 11	20:25	0°♐		
	2049 Dec 02	07:52	0°♑		
evening max el	2049 Dec 09	11:40	8°♑38'57	20°54'58	
retrograde	2049 Dec 17	20:59	13°♑36'53		
asc. node	2049 Dec 19	17:29	13°♑17'43		
evening set	2049 Dec 21	21:03	12°♑05'43		
inferior conj	2049 Dec 27	05:59	5°♑54'21	2°21'19	
minimum elong	2049 Dec 27	03:26	6°♑03'05	2°20'29	
min. Earth dist.	2049 Dec 27	17:03	5°♑16'20	0.67494 AU	
morning rise	2050 Jan 01	09:38	29°♐41'17		
	2050 Jan 01	01:30	30°℞♐		
direct	2050 Jan 06	18:52	27°♐19'20		
	2050 Jan 13	08:19	0°♑		
morning max el	2050 Jan 17	15:05	3°♑47'10	23°56'32	
desc. node	2050 Jan 26	23:52	14°♑52'48		
	2050 Feb 06	17:00	0°♒		
morning set	2050 Feb 22	05:45	24°♒54'05		
	2050 Feb 25	04:00	0°♓		
max. Earth dist.	2050 Feb 26	01:00	1°♓32'59	1.38396 AU	
superior conj	2050 Mar 05	07:13	14°♓54'11	-1°43'49	
minimum elong	2050 Mar 05	11:30	15°♓14'29	1°43'22	
	2050 Mar 13	01:52	0°♈		
evening rise	2050 Mar 14	06:36	2°♈20'58		
asc. node	2050 Mar 17	16:47	8°♈59'05		
evening max el	2050 Mar 30	17:47	28°♈57'22	18°54'01	
	2050 Mar 31	21:30	0°♉		
retrograde	2050 Apr 08	02:28	3°♉01'09		
evening set	2050 Apr 10	07:33	2°♉45'15		
	2050 Apr 16	02:13	30°℞♈		
inferior conj	2050 Apr 18	07:21	28°♈27'53	1°49'14	
minimum elong	2050 Apr 18	11:02	28°♈21'17	1°48'05	
min. Earth dist.	2050 Apr 21	12:10	26°♈11'27	0.57049 AU	
desc. node	2050 Apr 24	23:01	24°♈05'08		
morning rise	2050 Apr 26	11:25	23°♈22'28		
direct	2050 May 01	19:10	22°♈14'32		

morning max el	2050 May 16 02:36	29°♈41'00	25°57'56
	2050 May 16 10:24	0°♉	
	2050 Jun 06 04:18	0°♊	
morning set	2050 Jun 13 02:34	13°♊50'18	
asc. node	2050 Jun 13 16:03	15°♊01'38	
superior conj	2050 Jun 20 02:06	28°♊59'14	1°03'09
minimum elong	2050 Jun 19 23:49	28°♊46'44	1°02'46
	2050 Jun 20 13:10	0°♋	
max. Earth dist.	2050 Jun 20 18:34	0°♋29'39	1.32417 AU
evening rise	2050 Jun 27 02:14	14°♋04'00	
	2050 Jul 05 05:52	0°♌	
desc. node	2050 Jul 21 22:20	25°♌34'09	
	2050 Jul 25 18:35	0°♍	
evening max el	2050 Jul 28 09:25	2°♍38'41	27°08'00
retrograde	2050 Aug 11 06:22	9°♍52'45	
evening set	2050 Aug 18 08:29	7°♍36'31	
min. Earth dist.	2050 Aug 21 23:40	4°♍52'55	0.61437 AU
inferior conj	2050 Aug 25 02:36	2°♍07'51	-4°18'24
minimum elong	2050 Aug 25 07:44	1°♍56'28	4°17'21
	2050 Aug 27 14:51	30°℞♌	
morning rise	2050 Sep 01 08:38	27°♌13'14	
direct	2050 Sep 03 18:42	26°♌48'57	
asc. node	2050 Sep 09 15:17	29°♌16'31	
	2050 Sep 10 11:02	0°♍	
morning max el	2050 Sep 10 19:15	0°♍19'38	17°57'45
morning set	2050 Sep 26 16:03	25°♍18'36	
	2050 Sep 29 05:31	0°♎	
superior conj	2050 Oct 07 00:32	13°♎57'10	1°09'54
minimum elong	2050 Oct 07 05:03	14°♎16'56	1°09'23
max. Earth dist.	2050 Oct 14 13:05	26°♎43'46	1.42402 AU
	2050 Oct 16 12:56	0°♏	
desc. node	2050 Oct 17 21:41	2°♏12'41	
evening rise	2050 Oct 20 20:52	6°♏57'06	
	2050 Nov 05 02:44	0°♐	
evening max el	2050 Nov 22 06:51	22°♐10'42	22°09'30
retrograde	2050 Dec 01 17:19	27°♐47'27	
evening set	2050 Dec 06 04:44	25°♐59'49	
asc. node	2050 Dec 06 14:32	25°♐39'00	
inferior conj	2050 Dec 11 13:09	19°♐40'31	1°37'46
minimum elong	2050 Dec 11 11:07	19°♐47'32	1°36'59
min. Earth dist.	2050 Dec 11 12:48	19°♐41'44	0.67813 AU
morning rise	2050 Dec 16 17:23	13°♐29'22	
direct	2050 Dec 21 11:32	11°♐29'48	
morning max el	2050 Dec 31 01:46	17°♐09'37	22°28'22
	2051 Jan 10 15:14	0°♑	
desc. node	2051 Jan 13 20:56	4°♑28'53	
	2051 Jan 30 19:24	0°♒	
morning set	2051 Feb 02 19:14	4°♒49'59	
max. Earth dist.	2051 Feb 07 21:37	13°♒18'58	1.40548 AU
superior conj	2051 Feb 15 16:45	26°♒56'52	-2°00'04
minimum elong	2051 Feb 15 19:43	27°♒10'15	1°59'56
	2051 Feb 17 09:10	0°♓	
evening rise	2051 Feb 25 18:20	15°♓37'06	
asc. node	2051 Mar 04 13:50	28°♓09'13	
	2051 Mar 05 15:29	0°♈	
evening max el	2051 Mar 13 23:35	11°♈34'46	18°20'54
retrograde	2051 Mar 21 05:56	15°♈11'04	
evening set	2051 Mar 23 16:57	14°♈47'21	
inferior conj	2051 Mar 30 22:05	10°♈09'34	2°56'40
minimum elong	2051 Mar 31 01:45	10°♈01'53	2°55'53
min. Earth dist.	2051 Apr 03 08:33	7°♈18'09	0.59033 AU
morning rise	2051 Apr 07 07:56	4°♈35'29	
desc. node	2051 Apr 11 20:04	2°♈59'42	
direct	2051 Apr 13 13:37	2°♈51'43	
morning max el	2051 Apr 27 22:22	10°♈36'08	27°08'40
	2051 May 12 22:14	0°♉	
morning set	2051 May 28 11:53	28°♉37'11	
	2051 May 29 03:40	0°♊	
asc. node	2051 May 31 13:06	5°♊06'38	
superior conj	2051 Jun 04 13:55	13°♊55'55	0°41'30
minimum elong	2051 Jun 04 12:12	13°♊46'28	0°41'09
max. Earth dist.	2051 Jun 04 06:56	13°♊17'28	1.32181 AU
evening rise	2051 Jun 11 10:47	28°♊51'25	
	2051 Jun 11 23:49	0°♋	
	2051 Jun 28 15:38	0°♌	
desc. node	2051 Jul 08 19:21	12°♌49'41	
evening max el	2051 Jul 10 09:24	14°♌24'07	26°16'50
retrograde	2051 Jul 24 09:02	21°♌35'20	
evening set	2051 Jul 30 20:50	19°♌51'28	
min. Earth dist.	2051 Aug 03 22:15	17°♌15'32	0.59381 AU
inferior conj	2051 Aug 07 05:43	14°♌43'15	-4°51'11
minimum elong	2051 Aug 07 08:41	14°♌37'31	4°50'55
morning rise	2051 Aug 14 22:39	10°♌11'32	
direct	2051 Aug 17 09:41	9°♌50'28	
morning max el	2051 Aug 25 04:41	13°♌35'36	18°23'25
asc. node	2051 Aug 27 12:20	16°♌06'30	
	2051 Sep 05 09:02	0°♍	
morning set	2051 Sep 10 05:23	9°♍06'53	
superior conj	2051 Sep 19 08:14	26°♍22'07	1°32'00
minimum elong	2051 Sep 19 11:34	26°♍37'25	1°31'43
	2051 Sep 21 07:58	0°♎	
max. Earth dist.	2051 Sep 26 20:13	9°♎43'57	1.40476 AU
evening rise	2051 Oct 01 07:51	17°♎18'02	
desc. node	2051 Oct 04 18:42	22°♎55'30	
	2051 Oct 09 06:29	0°♏	
	2051 Oct 30 17:19	0°♐	
evening max el	2051 Nov 04 21:31	5°♐44'29	23°29'10
retrograde	2051 Nov 15 10:50	11°♐59'03	
evening set	2051 Nov 20 11:12	9°♐54'21	
asc. node	2051 Nov 23 11:35	6°♐40'52	
inferior conj	2051 Nov 25 20:32	3°♐30'53	0°48'26
minimum elong	2051 Nov 25 19:25	3°♐34'43	0°47'59
min. Earth dist.	2051 Nov 25 09:29	4°♐08'42	0.67783 AU
	2051 Nov 28 13:04	30°℞♏	
morning rise	2051 Dec 01 03:35	27°♏23'34	
direct	2051 Dec 05 07:25	25°♏46'51	
	2051 Dec 13 01:19	0°♐	
morning max el	2051 Dec 13 18:13	0°♐41'28	21°06'12
desc. node	2051 Dec 31 17:59	24°♐30'06	
	2052 Jan 04 10:23	0°♑	
morning set	2052 Jan 13 04:48	13°♑28'31	
max. Earth dist.	2052 Jan 21 00:23	25°♑58'46	1.42521 AU
	2052 Jan 23 11:01	0°♒	
superior conj	2052 Jan 28 03:59	7°♒54'54	-2°04'51
minimum elong	2052 Jan 28 03:08	7°♒51'15	2°04'51
evening rise	2052 Feb 08 16:08	28°♒10'29	
	2052 Feb 09 16:29	0°♓	
asc. node	2052 Feb 19 10:53	16°♓49'10	
evening max el	2052 Feb 25 10:15	24°♓34'56	18°07'37
retrograde	2052 Mar 03 01:52	27°♓59'28	
evening set	2052 Mar 05 18:18	27°♓26'14	
inferior conj	2052 Mar 12 08:15	22°♓27'45	3°32'27
minimum elong	2052 Mar 12 10:11	22°♓23'06	3°32'15
min. Earth dist.	2052 Mar 15 11:57	19°♓25'44	0.61180 AU
morning rise	2052 Mar 19 00:19	16°♓34'55	
direct	2052 Mar 25 19:24	14°♓16'28	
desc. node	2052 Mar 28 17:08	14°♓40'02	
morning max el	2052 Apr 09 00:28	22°♓10'45	27°45'28

	2052 Apr 15 21:43	0°♈	
	2052 May 05 00:01	0°♉	
morning set	2052 May 11 17:13	13°♉09'31	
asc. node	2052 May 17 10:09	25°♉15'33	
max. Earth dist.	2052 May 17 17:58	25°♉57'59	1.32325 AU
superior conj	2052 May 19 00:45	28°♉46'04	0°16'56
minimum elong	2052 May 18 23:59	28°♉41'50	0°16'45
	2052 May 19 14:16	0°♊	
evening rise	2052 May 25 21:54	13°♊43'15	
	2052 Jun 03 02:25	0°♋	
evening max el	2052 Jun 21 02:18	25°♋23'52	24°58'07
desc. node	2052 Jun 24 16:22	28°♋27'45	
	2052 Jun 26 23:09	0°♌	
retrograde	2052 Jul 05 01:45	2°♌29'35	
evening set	2052 Jul 10 09:36	1°♌24'42	
	2052 Jul 13 07:37	30°℞♋	
min. Earth dist.	2052 Jul 15 13:48	28°♋37'41	0.57395 AU
inferior conj	2052 Jul 18 13:34	26°♋38'09	-4°56'29
minimum elong	2052 Jul 18 11:51	26°♋41'02	4°56'24
morning rise	2052 Jul 26 16:47	22°♋28'29	
direct	2052 Jul 29 06:48	22°♋09'12	
morning max el	2052 Aug 07 06:02	26°♋20'59	19°10'01
	2052 Aug 10 13:36	0°♌	
asc. node	2052 Aug 13 09:23	3°♌54'27	
morning set	2052 Aug 24 04:04	23°♌22'44	
	2052 Aug 27 11:54	0°♍	
superior conj	2052 Sep 01 10:04	9°♍41'09	1°43'16
minimum elong	2052 Sep 01 11:30	9°♍48'06	1°43'12
max. Earth dist.	2052 Sep 07 23:45	22°♍01'02	1.38416 AU
evening rise	2052 Sep 11 18:59	28°♍46'33	
	2052 Sep 12 11:54	0°♎	
desc. node	2052 Sep 20 15:43	13°♎30'31	
	2052 Oct 01 16:14	0°♏	
evening max el	2052 Oct 17 09:50	19°♏22'10	24°47'40
retrograde	2052 Oct 29 00:30	26°♏07'47	
evening set	2052 Nov 03 14:50	23°♏46'52	
min. Earth dist.	2052 Nov 08 04:47	18°♏35'01	0.67420 AU
inferior conj	2052 Nov 09 02:22	17°♏23'30	-0°05'23
minimum elong	2052 Nov 09 02:30	17°♏23'03	0°05'19
transit middle	2052 Nov 09 02:30	17°♏23'03	0°05'19
transit begin	2052 Nov 08 23:54	17°♏31'42	
transit end	2052 Nov 09 05:07	17°♏14'26	
asc. node	2052 Nov 09 08:37	17°♏02'50	
morning rise	2052 Nov 14 14:18	11°♏22'17	
direct	2052 Nov 18 05:25	10°♏06'26	
morning max el	2052 Nov 25 18:18	14°♏24'14	19°55'35
	2052 Dec 07 18:08	0°♐	
desc. node	2052 Dec 17 15:01	14°♐49'39	
morning set	2052 Dec 22 00:52	21°♐36'21	
	2052 Dec 27 10:28	0°♑	
max. Earth dist.	2053 Jan 02 10:28	9°♑28'17	1.44053 AU
superior conj	2053 Jan 07 13:08	17°♑41'48	-1°53'10
minimum elong	2053 Jan 07 06:48	17°♑16'06	1°52'46
	2053 Jan 14 23:51	0°♒	
evening rise	2053 Jan 20 19:40	9°♒53'07	
	2053 Feb 01 21:31	0°♓	
asc. node	2053 Feb 05 07:55	4°♓49'55	
evening max el	2053 Feb 07 22:50	7°♓50'34	18°13'32
retrograde	2053 Feb 14 09:46	11°♓17'01	
evening set	2053 Feb 17 07:25	10°♓33'06	
inferior conj	2053 Feb 23 10:00	5°♓14'55	3°43'19
minimum elong	2053 Feb 23 09:58	5°♓15'00	3°43'19
min. Earth dist.	2053 Feb 26 00:17	2°♓25'33	0.63206 AU
	2053 Feb 28 12:07	30°℞♒	

morning rise	2053 Mar 01 11:33	29°♒11'31	
direct	2053 Mar 08 10:16	26°♒29'01	
desc. node	2053 Mar 15 14:12	28°♒52'35	
	2053 Mar 17 05:57	0°♓	
morning max el	2053 Mar 22 07:30	4°♓25'00	27°44'48
	2053 Apr 10 12:47	0°♈	
morning set	2053 Apr 25 16:18	27°♈19'50	
	2053 Apr 26 24:00	0°♉	
max. Earth dist.	2053 Apr 30 23:43	8°♉18'10	1.32877 AU
superior conj	2053 May 03 08:53	13°♉23'51	-0°09'48
minimum elong	2053 May 03 09:21	13°♉26'25	0°09'42
behind sun begin	2053 May 03 05:09	13°♉03'47	
behind sun end	2053 May 03 13:33	13°♉49'05	
asc. node	2053 May 04 07:12	15°♉24'17	
evening rise	2053 May 10 09:43	28°♉33'12	
	2053 May 11 02:11	0°♊	
	2053 May 28 09:40	0°♋	
evening max el	2053 Jun 02 16:03	5°♋55'58	23°23'58
desc. node	2053 Jun 11 13:23	11°♋53'15	
retrograde	2053 Jun 16 06:05	12°♋43'21	
evening set	2053 Jun 20 01:56	12°♋11'14	
min. Earth dist.	2053 Jun 27 02:06	8°♋58'29	0.55818 AU
inferior conj	2053 Jun 29 01:28	7°♋48'20	-4°20'04
minimum elong	2053 Jun 28 18:43	7°♋58'23	4°18'48
morning rise	2053 Jul 07 14:03	3°♋53'35	
direct	2053 Jul 10 08:48	3°♋34'37	
morning max el	2053 Jul 20 20:42	8°♋26'23	20°17'53
asc. node	2053 Jul 31 06:26	22°♋26'55	
	2053 Aug 04 09:14	0°♌	
morning set	2053 Aug 08 09:08	7°♌57'45	
superior conj	2053 Aug 16 00:54	23°♌39'15	1°45'32
minimum elong	2053 Aug 16 00:37	23°♌37'46	1°45'32
	2053 Aug 19 05:19	0°♍	
max. Earth dist.	2053 Aug 21 05:28	3°♍53'50	1.36479 AU
evening rise	2053 Aug 25 03:50	11°♍16'50	
	2053 Sep 05 01:44	0°♎	
desc. node	2053 Sep 07 12:42	3°♎52'27	
	2053 Sep 26 23:18	0°♏	
evening max el	2053 Sep 29 21:50	3°♏02'00	25°57'41
retrograde	2053 Oct 12 09:18	10°♏07'52	
evening set	2053 Oct 18 13:46	7°♏33'29	
min. Earth dist.	2053 Oct 22 20:14	2°♏57'09	0.66726 AU
inferior conj	2053 Oct 24 04:51	1°♏14'46	-1°02'23
minimum elong	2053 Oct 24 06:28	1°♏09'38	1°01'41
	2053 Oct 25 04:53	30°℞♎	
asc. node	2053 Oct 27 05:39	27°♎40'25	
morning rise	2053 Oct 29 23:32	25°♎22'23	
direct	2053 Nov 02 03:57	24°♎24'09	
morning max el	2053 Nov 09 01:43	28°♎15'16	18°59'34
	2053 Nov 10 16:32	0°♏	
morning set	2053 Dec 01 08:33	0°♐26'06	
	2053 Dec 01 01:53	0°♐	
desc. node	2053 Dec 04 12:01	5°♐21'37	
max. Earth dist.	2053 Dec 16 02:30	23°♐33'19	1.44956 AU
superior conj	2053 Dec 17 22:50	26°♐27'57	-1°22'25
minimum elong	2053 Dec 17 14:01	25°♐53'11	1°21'29
	2053 Dec 20 04:30	0°♑	
evening rise	2054 Jan 02 00:55	20°♑38'19	
	2054 Jan 07 18:39	0°♒	
evening max el	2054 Jan 22 10:37	21°♒14'58	18°37'57
asc. node	2054 Jan 23 04:57	21°♒59'42	
retrograde	2054 Jan 29 01:30	24°♒55'16	
evening set	2054 Feb 01 04:50	23°♒59'39	
inferior conj	2054 Feb 06 23:19	18°♒23'19	3°35'49

minimum elong	2054 Feb 06 21:48	18°♒27'52	3°35'39
min. Earth dist.	2054 Feb 08 22:01	16°♒03'18	0.64916 AU
morning rise	2054 Feb 12 14:19	12°♒14'12	
direct	2054 Feb 19 08:19	9°♒22'28	
desc. node	2054 Mar 02 11:14	15°♒02'23	
morning max el	2054 Mar 04 16:55	17°♒10'15	27°09'48
	2054 Mar 15 09:53	0°♓	
	2054 Apr 03 09:06	0°♈	
morning set	2054 Apr 09 06:14	10°♈59'14	
max. Earth dist.	2054 Apr 13 20:33	20°♈08'18	1.33871 AU
superior conj	2054 Apr 17 12:19	27°♈43'20	-0°37'41
minimum elong	2054 Apr 17 14:13	27°♈53'20	0°37'17
	2054 Apr 18 14:14	0°♉	
asc. node	2054 Apr 21 04:14	5°♉29'02	
evening rise	2054 Apr 24 20:26	13°♉15'24	
	2054 May 03 10:25	0°♊	
evening max el	2054 May 15 09:50	16°♊30'52	21°49'32
retrograde	2054 May 27 22:31	22°♊40'21	
desc. node	2054 May 29 10:25	22°♊35'17	
evening set	2054 May 30 12:54	22°♊25'14	
inferior conj	2054 Jun 08 22:35	18°♊22'08	-2°55'47
minimum elong	2054 Jun 08 15:07	18°♊32'35	2°53'28
min. Earth dist.	2054 Jun 08 13:49	18°♊34'24	0.54981 AU
morning rise	2054 Jun 17 18:33	14°♊28'05	
direct	2054 Jun 20 21:18	14°♊06'41	
morning max el	2054 Jul 02 23:53	19°♊47'52	21°45'03
	2054 Jul 11 08:35	0°♋	
asc. node	2054 Jul 18 03:28	11°♋33'20	
morning set	2054 Jul 23 18:19	22°♋46'11	
	2054 Jul 27 04:50	0°♌	
superior conj	2054 Jul 31 00:55	8°♌05'25	1°40'34
minimum elong	2054 Jul 30 23:23	7°♌57'21	1°40'29
max. Earth dist.	2054 Aug 03 18:51	15°♌48'55	1.34843 AU
evening rise	2054 Aug 08 05:56	24°♌37'30	
	2054 Aug 11 02:23	0°♍	
desc. node	2054 Aug 25 09:43	23°♍55'23	
	2054 Aug 29 14:13	0°♎	
evening max el	2054 Sep 12 10:14	16°♎38'01	26°51'21
retrograde	2054 Sep 25 12:41	23°♎53'35	
evening set	2054 Oct 02 05:57	21°♎11'01	
min. Earth dist.	2054 Oct 06 05:25	17°♎11'16	0.65691 AU
inferior conj	2054 Oct 08 01:57	15°♎01'26	-2°00'55
minimum elong	2054 Oct 08 05:12	14°♎51'59	1°59'38
morning rise	2054 Oct 14 05:05	9°♎21'04	
asc. node	2054 Oct 14 02:41	9°♎24'13	
direct	2054 Oct 17 01:08	8°♎36'43	
morning max el	2054 Oct 23 14:40	12°♎10'54	18°19'42
	2054 Nov 05 05:43	0°♏	
morning set	2054 Nov 11 19:48	10°♏40'24	
desc. node	2054 Nov 21 09:01	26°♏02'08	
	2054 Nov 23 20:57	0°♐	
superior conj	2054 Nov 27 00:12	4°♐57'08	-0°37'09
minimum elong	2054 Nov 26 19:24	4°♐38'13	0°36'31
max. Earth dist.	2054 Nov 28 21:38	7°♐55'52	1.45130 AU
	2054 Dec 12 23:47	0°♑	
evening rise	2054 Dec 13 06:56	0°♑28'01	
greatest brilliancy	2054 Dec 24 07:06	17°♑37'41	-0.8m
	2055 Jan 01 19:36	0°♒	
evening max el	2055 Jan 05 19:15	4°♒43'15	19°19'32
asc. node	2055 Jan 10 01:59	8°♒04'36	
retrograde	2055 Jan 12 21:41	8°♒47'49	
evening set	2055 Jan 16 07:47	7°♒39'23	
inferior conj	2055 Jan 21 20:53	1°♒47'01	3°14'42
minimum elong	2055 Jan 21 18:31	1°♒54'39	3°14'14
min. Earth dist.	2055 Jan 23 04:29	0°♒05'07	0.66230 AU
	2055 Jan 23 06:05	30°℞♑	
morning rise	2055 Jan 27 05:00	25°♑34'52	
direct	2055 Feb 02 12:25	22°♑47'31	
	2055 Feb 14 20:32	0°♒	
morning max el	2055 Feb 15 02:27	0°♒14'50	26°07'24
desc. node	2055 Feb 17 08:16	2°♒36'46	
	2055 Mar 09 08:34	0°♓	
morning set	2055 Mar 23 07:03	23°♓55'25	
	2055 Mar 26 12:07	0°♈	
max. Earth dist.	2055 Mar 27 06:05	1°♈26'52	1.35325 AU
superior conj	2055 Apr 01 08:36	11°♈36'26	-1°05'24
minimum elong	2055 Apr 01 11:53	11°♈53'07	1°04'50
asc. node	2055 Apr 08 01:17	25°♈24'59	
evening rise	2055 Apr 09 04:01	27°♈42'41	
	2055 Apr 10 06:54	0°♉	
evening max el	2055 Apr 27 13:31	27°♉33'35	20°26'46
	2055 Apr 30 10:53	0°♊	
retrograde	2055 May 08 11:41	2°♊51'41	
evening set	2055 May 10 13:05	2°♊41'10	
desc. node	2055 May 16 07:27	0°♊36'49	
	2055 May 17 11:10	30°℞♉	
inferior conj	2055 May 19 17:03	28°♉43'14	-0°59'33
minimum elong	2055 May 19 14:14	28°♉47'20	0°58'31
min. Earth dist.	2055 May 21 02:24	27°♉54'47	0.55082 AU
morning rise	2055 May 28 14:19	24°♉30'22	
direct	2055 Jun 01 07:58	24°♉00'16	
	2055 Jun 14 04:24	0°♊	
morning max el	2055 Jun 14 18:00	0°♊31'23	23°25'09
	2055 Jul 04 11:40	0°♋	
asc. node	2055 Jul 05 00:31	1°♋04'06	
morning set	2055 Jul 08 05:39	7°♋41'04	
superior conj	2055 Jul 15 07:01	22°♋49'19	1°29'44
minimum elong	2055 Jul 15 04:47	22°♋37'19	1°29'29
max. Earth dist.	2055 Jul 17 17:25	28°♋00'29	1.33584 AU
	2055 Jul 18 16:08	0°♌	
evening rise	2055 Jul 22 20:44	8°♌34'59	
	2055 Aug 03 13:17	0°♍	
desc. node	2055 Aug 12 06:45	13°♍30'16	
	2055 Aug 25 22:33	0°♎	
evening max el	2055 Aug 25 21:57	29°♍58'35	27°21'34
retrograde	2055 Sep 08 10:17	7°♎16'42	
evening set	2055 Sep 15 12:43	4°♎34'28	
min. Earth dist.	2055 Sep 19 06:03	1°♎10'05	0.64293 AU
	2055 Sep 20 08:41	30°℞♍	
inferior conj	2055 Sep 21 15:20	28°♍38'06	-2°58'38
minimum elong	2055 Sep 21 19:59	28°♍25'43	2°57'04
morning rise	2055 Sep 28 04:18	23°♍13'08	
direct	2055 Sep 30 18:21	22°♍39'06	
asc. node	2055 Sep 30 23:44	22°♍39'22	
morning max el	2055 Oct 07 06:35	26°♍05'21	17°56'57
	2055 Oct 10 14:27	0°♎	
morning set	2055 Oct 24 11:15	22°♎17'10	
	2055 Oct 29 00:43	0°♏	
superior conj	2055 Nov 06 14:52	14°♏09'50	0°11'02
minimum elong	2055 Nov 06 16:08	14°♏14'57	0°10'52
behind sun begin	2055 Nov 06 08:29	13°♏43'59	
behind sun end	2055 Nov 06 23:47	14°♏45'53	
desc. node	2055 Nov 08 06:03	16°♏47'49	
max. Earth dist.	2055 Nov 11 16:22	22°♏16'24	1.44563 AU
	2055 Nov 16 14:10	0°♐	
evening rise	2055 Nov 22 19:26	9°♐38'43	
	2055 Dec 06 05:56	0°♑	
evening max el	2055 Dec 19 23:03	18°♑12'56	20°16'25

retrograde	2055 Dec 27 19:37	22°♑50'05	
asc. node	2055 Dec 27 23:01	22°♑49'59	
evening set	2055 Dec 31 14:02	21°♑27'36	
inferior conj	2056 Jan 05 23:55	15°♑22'03	2°43'14
minimum elong	2056 Jan 05 21:18	15°♑30'56	2°42'30
min. Earth dist.	2056 Jan 06 18:00	14°♑20'56	0.67137 AU
morning rise	2056 Jan 11 04:23	9°♑08'41	
direct	2056 Jan 16 22:01	6°♑35'45	
morning max el	2056 Jan 28 11:10	13°♑29'11	24°47'01
desc. node	2056 Feb 04 05:17	21°♑11'20	
	2056 Feb 10 20:46	0°♒	
	2056 Mar 01 04:13	0°♓	
morning set	2056 Mar 04 13:38	5°♓54'10	
max. Earth dist.	2056 Mar 08 05:20	12°♓29'32	1.37189 AU
superior conj	2056 Mar 14 18:41	24°♓55'03	-1°31'02
minimum elong	2056 Mar 14 22:53	25°♓15'35	1°30'28
	2056 Mar 17 08:38	0°♈	
evening rise	2056 Mar 23 06:13	11°♈48'25	
asc. node	2056 Mar 24 22:20	15°♈07'42	
	2056 Apr 02 02:01	0°♉	
evening max el	2056 Apr 09 05:00	9°♉16'14	19°22'07
retrograde	2056 Apr 18 10:25	13°♉43'56	
evening set	2056 Apr 20 12:12	13°♉31'23	
inferior conj	2056 Apr 28 23:22	9°♉23'51	0°54'54
minimum elong	2056 Apr 29 01:36	9°♉20'11	0°54'07
min. Earth dist.	2056 May 01 17:06	7°♉36'26	0.56113 AU
desc. node	2056 May 02 04:29	7°♉18'32	
morning rise	2056 May 07 12:06	4°♉37'42	
direct	2056 May 12 04:50	3°♉47'19	
morning max el	2056 May 26 08:32	10°♉58'29	25°05'48
	2056 Jun 09 19:37	0°♊	
asc. node	2056 Jun 20 21:35	20°♊52'34	
morning set	2056 Jun 21 17:30	22°♊37'10	
	2056 Jun 25 03:59	0°♋	
superior conj	2056 Jun 28 16:51	7°♋43'26	1°14'04
minimum elong	2056 Jun 28 14:27	7°♋30'19	1°13'41
max. Earth dist.	2056 Jun 29 23:42	10°♋31'26	1.32728 AU
evening rise	2056 Jul 05 20:38	22°♋58'53	
	2056 Jul 09 08:42	0°♌	
	2056 Jul 27 08:37	0°♍	
desc. node	2056 Jul 29 03:47	2°♍25'18	
evening max el	2056 Aug 07 06:58	12°♍50'58	27°22'19
retrograde	2056 Aug 21 01:42	20°♍07'44	
evening set	2056 Aug 28 06:35	17°♍37'53	
min. Earth dist.	2056 Aug 31 20:41	14°♍42'43	0.62554 AU
inferior conj	2056 Sep 03 18:06	11°♍58'07	-3°51'58
minimum elong	2056 Sep 03 23:29	11°♍45'21	3°50'34
morning rise	2056 Sep 10 17:50	6°♍51'47	
direct	2056 Sep 13 04:28	6°♍24'51	
asc. node	2056 Sep 16 20:47	7°♍27'40	
morning max el	2056 Sep 19 22:29	9°♍51'35	17°52'04
	2056 Oct 03 06:11	0°♎	
morning set	2056 Oct 06 01:08	4°♎58'13	
superior conj	2056 Oct 17 07:20	24°♎39'24	0°51'44
minimum elong	2056 Oct 17 11:40	24°♎57'43	0°51'10
	2056 Oct 20 11:49	0°♏	
max. Earth dist.	2056 Oct 24 07:21	6°♏15'25	1.43338 AU
desc. node	2056 Oct 25 03:05	7°♏35'10	
evening rise	2056 Nov 01 04:32	18°♏45'58	
	2056 Nov 08 12:49	0°♐	
	2056 Nov 30 06:37	0°♑	
evening max el	2056 Dec 01 21:11	1°♑43'09	21°25'43
retrograde	2056 Dec 10 17:04	6°♑58'07	
asc. node	2056 Dec 13 20:04	6°♑04'07	
evening set	2056 Dec 14 21:39	5°♑20'09	
	2056 Dec 19 14:08	30°℞♐	
inferior conj	2056 Dec 20 06:10	29°♐04'45	2°03'37
minimum elong	2056 Dec 20 03:47	29°♐12'58	2°02'48
min. Earth dist.	2056 Dec 20 12:15	28°♐43'42	0.67665 AU
morning rise	2056 Dec 25 09:44	22°♐52'03	
direct	2056 Dec 30 12:26	20°♐39'24	
morning max el	2057 Jan 09 20:08	26°♐47'50	23°18'45
	2057 Jan 12 19:23	0°♑	
desc. node	2057 Jan 21 02:19	10°♑28'20	
	2057 Feb 03 11:46	0°♒	
morning set	2057 Feb 13 19:35	16°♒38'04	
max. Earth dist.	2057 Feb 17 23:56	23°♒47'06	1.39308 AU
	2057 Feb 21 12:18	0°♓	
superior conj	2057 Feb 25 14:29	7°♓28'13	-1°51'48
minimum elong	2057 Feb 25 18:28	7°♓46'45	1°51'29
evening rise	2057 Mar 07 00:08	25°♓24'15	
	2057 Mar 09 09:37	0°♈	
asc. node	2057 Mar 11 19:23	4°♈31'14	
evening max el	2057 Mar 23 06:29	21°♈35'48	18°37'32
retrograde	2057 Mar 31 02:40	25°♈25'54	
evening set	2057 Apr 02 10:08	25°♈07'04	
inferior conj	2057 Apr 10 01:44	20°♈41'37	2°21'58
minimum elong	2057 Apr 10 05:45	20°♈33'56	2°20'53
min. Earth dist.	2057 Apr 13 11:01	18°♈07'14	0.57848 AU
morning rise	2057 Apr 17 22:15	15°♈22'35	
desc. node	2057 Apr 19 01:31	14°♈53'21	
direct	2057 Apr 23 16:08	13°♈59'40	
morning max el	2057 May 08 01:06	21°♈35'58	26°31'36
	2057 May 15 09:18	0°♉	
	2057 Jun 02 12:33	0°♊	
morning set	2057 Jun 06 04:13	7°♊29'03	
asc. node	2057 Jun 07 18:39	10°♊53'04	
superior conj	2057 Jun 13 04:28	22°♊41'12	0°54'23
minimum elong	2057 Jun 13 02:22	22°♊29'42	0°53'59
max. Earth dist.	2057 Jun 13 10:44	23°♊15'39	1.32265 AU
	2057 Jun 16 12:35	0°♋	
evening rise	2057 Jun 20 02:43	7°♋40'15	
	2057 Jul 01 19:55	0°♌	
desc. node	2057 Jul 16 00:48	20°♌24'04	
evening max el	2057 Jul 20 11:01	25°♌04'04	26°50'10
	2057 Jul 26 20:14	0°♍	
retrograde	2057 Aug 03 09:46	2°♍17'37	
evening set	2057 Aug 10 07:11	0°♍13'54	
	2057 Aug 10 16:28	30°℞♌	
min. Earth dist.	2057 Aug 14 01:05	27°♌35'34	0.60565 AU
inferior conj	2057 Aug 17 06:58	24°♌53'24	-4°34'52
minimum elong	2057 Aug 17 11:30	24°♌43'55	4°34'08
morning rise	2057 Aug 24 17:42	20°♌08'22	
direct	2057 Aug 27 03:42	19°♌45'49	
morning max el	2057 Sep 03 11:13	23°♌21'45	18°06'09
asc. node	2057 Sep 03 17:51	23°♌38'03	
	2057 Sep 08 18:28	0°♍	
morning set	2057 Sep 19 07:25	18°♍26'43	
	2057 Sep 25 12:42	0°♎	
superior conj	2057 Sep 29 02:07	6°♎26'30	1°20'42
minimum elong	2057 Sep 29 06:18	6°♎45'12	1°20'15
max. Earth dist.	2057 Oct 06 17:14	19°♎39'36	1.41614 AU
evening rise	2057 Oct 12 03:06	28°♎33'10	
desc. node	2057 Oct 12 00:07	28°♎21'12	
	2057 Oct 13 00:45	0°♏	
	2057 Nov 02 04:12	0°♐	
evening max el	2057 Nov 14 14:18	15°♐16'02	22°43'08
retrograde	2057 Nov 24 12:21	21°♐09'28	

evening set	2057 Nov 29 04:59	19°♐14'52	
asc. node	2057 Nov 30 17:06	17°♐48'50	
inferior conj	2057 Dec 04 13:39	12°♐53'21	1°17'28
minimum elong	2057 Dec 04 11:58	12°♐59'11	1°16'49
min. Earth dist.	2057 Dec 04 08:47	13°♐10'12	0.67843 AU
morning rise	2057 Dec 09 18:48	6°♐43'19	
direct	2057 Dec 14 06:45	4°♐53'23	
morning max el	2057 Dec 23 08:44	10°♐13'21	21°52'09
desc. node	2058 Jan 07 23:22	0°♑16'11	
	2058 Jan 07 18:52	0°♑	
morning set	2058 Jan 24 20:26	25°♑57'48	
	2058 Jan 27 08:26	0°♒	
max. Earth dist.	2058 Jan 30 22:10	5°♒52'53	1.41429 AU
superior conj	2058 Feb 07 15:08	19°♒04'38	-2°03'48
minimum elong	2058 Feb 07 16:48	19°♒11'59	2°03'46
	2058 Feb 13 17:12	0°♓	
evening rise	2058 Feb 18 06:22	8°♓22'30	
asc. node	2058 Feb 26 16:25	23°♓29'12	
	2058 Mar 02 21:58	0°♈	
evening max el	2058 Mar 06 14:46	4°♈23'56	18°12'56
retrograde	2058 Mar 13 13:19	7°♈53'00	
evening set	2058 Mar 16 02:50	7°♈25'18	
inferior conj	2058 Mar 23 01:03	2°♈38'53	3°15'20
minimum elong	2058 Mar 23 04:05	2°♈32'07	3°14'50
	2058 Mar 26 00:28	30°℞♓	
min. Earth dist.	2058 Mar 26 09:58	29°♓39'46	0.59949 AU
morning rise	2058 Mar 30 03:05	26°♓55'56	
direct	2058 Apr 05 15:57	24°♓56'21	
desc. node	2058 Apr 05 22:34	24°♓56'33	
	2058 Apr 16 22:17	0°♈	
morning max el	2058 Apr 19 23:14	2°♈45'41	27°28'50
	2058 May 09 19:46	0°♉	
morning set	2058 May 21 12:02	22°♉10'14	
	2058 May 25 04:34	0°♊	
asc. node	2058 May 25 15:41	1°♊00'13	
max. Earth dist.	2058 May 27 22:54	6°♊01'40	1.32191 AU
superior conj	2058 May 28 16:03	7°♊35'49	0°31'24
minimum elong	2058 May 28 14:41	7°♊28'21	0°31'07
evening rise	2058 Jun 04 12:35	22°♊30'32	
	2058 Jun 08 03:39	0°♋	
	2058 Jun 26 10:44	0°♌	
evening max el	2058 Jul 02 08:07	6°♌30'22	25°46'19
desc. node	2058 Jul 02 21:51	7°♌02'34	
retrograde	2058 Jul 16 08:23	13°♌39'24	
evening set	2058 Jul 22 09:42	12°♌12'19	
min. Earth dist.	2058 Jul 26 20:26	9°♌33'41	0.58510 AU
inferior conj	2058 Jul 30 02:16	7°♌13'13	-4°57'40
minimum elong	2058 Jul 30 03:31	7°♌10'57	4°57'37
morning rise	2058 Aug 06 23:37	2°♌50'51	
direct	2058 Aug 09 11:43	2°♌30'38	
morning max el	2058 Aug 17 17:31	6°♌25'50	18°40'31
asc. node	2058 Aug 21 14:53	10°♌54'32	
	2058 Sep 01 18:34	0°♍	
morning set	2058 Sep 03 01:10	2°♍28'15	
superior conj	2058 Sep 11 18:11	19°♍16'16	1°37'59
minimum elong	2058 Sep 11 20:43	19°♍28'14	1°37'48
	2058 Sep 17 14:38	0°♎	
max. Earth dist.	2058 Sep 18 22:37	2°♎21'39	1.39608 AU
evening rise	2058 Sep 23 00:23	9°♎23'09	
desc. node	2058 Sep 28 21:09	19°♎01'28	
	2058 Oct 05 23:26	0°♏	
evening max el	2058 Oct 28 03:53	28°♏52'13	24°03'07
	2058 Oct 29 08:00	0°♐	
retrograde	2058 Nov 08 04:12	5°♐20'19	
evening set	2058 Nov 13 10:26	3°♐08'41	
	2058 Nov 16 09:27	30°℞♏	
asc. node	2058 Nov 17 14:07	28°♏27'35	
min. Earth dist.	2058 Nov 18 05:08	27°♏37'15	0.67677 AU
inferior conj	2058 Nov 18 20:35	26°♏45'00	0°26'07
minimum elong	2058 Nov 18 19:58	26°♏47'07	0°25'51
morning rise	2058 Nov 24 05:28	20°♏39'59	
direct	2058 Nov 28 03:47	19°♏12'16	
morning max el	2058 Dec 06 04:14	23°♏49'32	20°34'27
	2058 Dec 11 11:49	0°♐	
desc. node	2058 Dec 25 20:25	20°♐26'10	
	2059 Jan 01 03:29	0°♑	
morning set	2059 Jan 03 21:28	4°♑14'48	
max. Earth dist.	2059 Jan 13 04:32	18°♑57'04	1.43246 AU
superior conj	2059 Jan 19 15:33	29°♑33'07	-2°02'10
minimum elong	2059 Jan 19 12:23	29°♑19'55	2°02'04
	2059 Jan 19 21:59	0°♒	
evening rise	2059 Jan 31 20:54	20°♒35'25	
	2059 Feb 06 05:34	0°♓	
asc. node	2059 Feb 13 13:26	11°♓53'50	
evening max el	2059 Feb 18 02:38	17°♓31'58	18°07'50
retrograde	2059 Feb 24 14:56	20°♓55'33	
evening set	2059 Feb 27 09:42	20°♓17'43	
inferior conj	2059 Mar 05 18:20	15°♓10'27	3°39'42
minimum elong	2059 Mar 05 19:23	15°♓07'44	3°39'38
min. Earth dist.	2059 Mar 08 16:43	12°♓11'38	0.62072 AU
morning rise	2059 Mar 12 03:47	9°♓12'35	
direct	2059 Mar 19 01:36	6°♓42'32	
desc. node	2059 Mar 23 19:36	7°♓45'41	
morning max el	2059 Apr 02 03:37	14°♓37'39	27°49'50
	2059 Apr 14 14:29	0°♈	
	2059 May 02 07:46	0°♉	
morning set	2059 May 05 15:00	6°♉34'19	
max. Earth dist.	2059 May 11 08:20	18°♉36'08	1.32509 AU
asc. node	2059 May 12 12:44	21°♉09'49	
superior conj	2059 May 13 01:56	22°♉21'38	0°05'50
minimum elong	2059 May 13 01:40	22°♉20'07	0°05'46
behind sun begin	2059 May 12 20:50	21°♉53'53	
behind sun end	2059 May 13 06:29	22°♉46'23	
	2059 May 16 14:00	0°♊	
evening rise	2059 May 20 00:14	7°♊22'50	
	2059 May 31 20:33	0°♋	
evening max el	2059 Jun 13 23:00	17°♋15'32	24°19'06
desc. node	2059 Jun 19 18:50	21°♋49'13	
retrograde	2059 Jun 27 19:32	24°♋15'01	
evening set	2059 Jul 02 12:41	23°♋25'26	
min. Earth dist.	2059 Jul 08 09:52	20°♋29'17	0.56660 AU
inferior conj	2059 Jul 11 01:27	18°♋49'14	-4°46'52
minimum elong	2059 Jul 10 21:23	18°♋55'41	4°46'26
morning rise	2059 Jul 19 08:46	14°♋47'15	
direct	2059 Jul 22 00:50	14°♋28'10	
morning max el	2059 Jul 31 14:29	18°♋54'52	19°36'16
asc. node	2059 Aug 08 11:57	29°♋02'58	
	2059 Aug 09 02:00	0°♌	
morning set	2059 Aug 18 02:54	16°♌53'27	
	2059 Aug 24 15:05	0°♍	
superior conj	2059 Aug 26 02:06	2°♍53'38	1°45'12
minimum elong	2059 Aug 26 02:45	2°♍56'52	1°45'12
max. Earth dist.	2059 Sep 01 02:44	14°♍27'14	1.37572 AU
evening rise	2059 Sep 04 21:13	21°♍18'59	
	2059 Sep 09 21:36	0°♎	
desc. node	2059 Sep 15 18:09	9°♎31'41	
	2059 Sep 29 22:00	0°♏	
evening max el	2059 Oct 10 15:52	12°♏31'08	25°18'51

retrograde	2059 Oct 22 15:43	19°♏26'12		
evening set	2059 Oct 28 12:18	16°♏58'54		
min. Earth dist.	2059 Nov 01 22:57	12°♏02'14	0.67174 AU	
inferior conj	2059 Nov 03 01:12	10°♏37'08	-0°29'15	
minimum elong	2059 Nov 03 01:57	10°♏34'42	0°28'56	
asc. node	2059 Nov 04 11:09	8°♏48'50		
morning rise	2059 Nov 08 15:49	4°♏39'35		
direct	2059 Nov 12 02:08	3°♏31'41		
morning max el	2059 Nov 19 07:38	7°♏36'27	19°29'50	
greatest brilliancy	2059 Dec 02 17:05	25°♏32'13	-0.7m	
	2059 Dec 05 15:50	0°♐		
desc. node	2059 Dec 12 17:26	10°♐51'38		
morning set	2059 Dec 13 19:32	12°♐32'34		
	2059 Dec 24 24:00	0°♑		
max. Earth dist.	2059 Dec 26 17:57	2°♑45'42	1.44523 AU	
superior conj	2059 Dec 30 13:39	8°♑50'36	-1°42'22	
minimum elong	2059 Dec 30 05:32	8°♑18'10	1°41'42	
	2060 Jan 12 11:58	0°♒		
evening rise	2060 Jan 13 15:21	1°♒54'28		
asc. node	2060 Jan 31 10:28	29°♒34'28		
	2060 Jan 31 19:33	0°♓		
evening max el	2060 Feb 01 15:07	0°♓51'43	18°21'40	
retrograde	2060 Feb 08 02:47	4°♓22'59		
evening set	2060 Feb 11 02:44	3°♓34'11		
	2060 Feb 15 09:08	30°♑℞		
inferior conj	2060 Feb 17 01:28	28°♒07'45	3°42'05	
minimum elong	2060 Feb 17 00:44	28°♒09'51	3°42'02	
min. Earth dist.	2060 Feb 19 09:03	25°♒29'29	0.63975 AU	
morning rise	2060 Feb 22 22:02	22°♒01'17		
direct	2060 Feb 29 19:25	19°♒13'22		
desc. node	2060 Mar 09 16:38	22°♒52'33		
morning max el	2060 Mar 14 12:12	27°♒07'15	27°33'54	
	2060 Mar 17 05:29	0°♓		
	2060 Apr 07 06:05	0°♈		
morning set	2060 Apr 18 10:34	20°♈32'35		
	2060 Apr 23 02:14	0°♉		
max. Earth dist.	2060 Apr 23 10:55	0°♉45'16	1.33245 AU	
superior conj	2060 Apr 26 08:17	6°♉51'56	-0°21'34	
minimum elong	2060 Apr 26 09:21	6°♉57'39	0°21'20	
asc. node	2060 Apr 28 09:46	11°♉17'11		
evening rise	2060 May 03 11:47	22°♉10'00		
	2060 May 07 07:10	0°♊		
evening max el	2060 May 25 13:12	27°♊43'27	22°42'54	
	2060 May 28 03:05	0°♋		
desc. node	2060 Jun 05 15:51	4°♋07'40		
retrograde	2060 Jun 07 18:31	4°♋17'52		
evening set	2060 Jun 11 00:18	3°♋54'46		
min. Earth dist.	2060 Jun 18 21:22	0°♋27'30	0.55353 AU	
	2060 Jun 19 16:37	30°♋℞		
inferior conj	2060 Jun 20 05:50	29°♊41'03	-3°49'51	
minimum elong	2060 Jun 19 22:00	29°♊52'16	3°47'55	
morning rise	2060 Jun 28 22:02	25°♊49'15		
direct	2060 Jul 01 19:30	25°♊29'52		
	2060 Jul 12 05:40	0°♋		
morning max el	2060 Jul 13 00:13	0°♋41'31	20°53'00	
asc. node	2060 Jul 25 09:00	17°♋50'52		
	2060 Jul 31 15:26	0°♌		
morning set	2060 Aug 01 09:57	1°♌34'55		
superior conj	2060 Aug 08 21:17	17°♌05'16	1°44'13	
minimum elong	2060 Aug 08 20:24	17°♌00'42	1°44'13	
max. Earth dist.	2060 Aug 13 11:04	26°♌17'31	1.35734 AU	
	2060 Aug 15 08:49	0°♍		
evening rise	2060 Aug 17 13:57	4°♍12'05		
desc. node	2060 Sep 01 15:09	29°♍46'40		
	2060 Sep 01 18:38	0°♎		
evening max el	2060 Sep 22 03:51	26°♎10'05	26°22'51	
	2060 Sep 26 15:12	0°♍		
retrograde	2060 Oct 04 22:27	3°♍21'52		
evening set	2060 Oct 11 08:42	0°♍42'49		
	2060 Oct 12 04:03	30°♌℞		
min. Earth dist.	2060 Oct 15 11:59	26°♎22'15	0.66328 AU	
inferior conj	2060 Oct 17 01:40	24°♎27'20	-1°27'09	
minimum elong	2060 Oct 17 03:59	24°♎20'16	1°26'11	
asc. node	2060 Oct 21 08:12	19°♎50'06		
morning rise	2060 Oct 22 23:47	18°♎39'56		
direct	2060 Oct 26 00:17	17°♎48'13		
morning max el	2060 Nov 01 17:49	21°♎31'07	18°40'35	
	2060 Nov 08 11:06	0°♍		
morning set	2060 Nov 22 14:05	21°♍56'42		
	2060 Nov 27 16:08	0°♐		
desc. node	2060 Nov 28 14:27	1°♐28'05		
superior conj	2060 Dec 08 17:20	17°♐23'03	-1°04'23	
minimum elong	2060 Dec 08 09:32	16°♐52'24	1°03'27	
max. Earth dist.	2060 Dec 08 11:31	17°♐00'13	1.45117 AU	
	2060 Dec 16 17:36	0°♑		
evening rise	2060 Dec 24 10:39	12°♑15'51		
greatest brilliancy	2061 Jan 01 06:35	24°♑47'11	-0.8m	
	2061 Jan 04 14:06	0°♒		
evening max el	2061 Jan 15 01:46	14°♒18'17	18°53'35	
asc. node	2061 Jan 17 07:30	16°♒18'47		
retrograde	2061 Jan 21 20:54	18°♒08'09		
evening set	2061 Jan 25 02:50	17°♒07'25		
inferior conj	2061 Jan 30 18:44	11°♒23'56	3°28'18	
minimum elong	2061 Jan 30 16:46	11°♒30'01	3°28'00	
min. Earth dist.	2061 Feb 01 10:53	9°♒19'15	0.65524 AU	
morning rise	2061 Feb 05 06:21	5°♒12'58		
direct	2061 Feb 11 20:18	2°♒21'28		
desc. node	2061 Feb 24 13:40	9°♒42'05		
morning max el	2061 Feb 24 22:06	10°♒03'07	26°46'00	
	2061 Mar 12 16:16	0°♓		
	2061 Mar 30 17:27	0°♈		
morning set	2061 Apr 01 19:28	3°♈55'21		
max. Earth dist.	2061 Apr 06 02:58	12°♈20'41	1.34434 AU	
superior conj	2061 Apr 10 08:59	21°♈00'54	-0°49'35	
minimum elong	2061 Apr 10 11:30	21°♈13'56	0°49'05	
	2061 Apr 14 15:53	0°♉		
asc. node	2061 Apr 15 06:48	1°♉18'34		
evening rise	2061 Apr 17 21:25	6°♉46'16		
	2061 Apr 30 13:31	0°♊		
evening max el	2061 May 07 10:38	8°♊27'24	21°12'20	
retrograde	2061 May 19 08:27	14°♊16'09		
evening set	2061 May 21 14:49	14°♊04'16		
desc. node	2061 May 23 12:53	13°♊36'45		
inferior conj	2061 May 30 23:57	10°♊05'26	-2°08'29	
minimum elong	2061 May 30 18:01	10°♊13'46	2°06'27	
min. Earth dist.	2061 May 31 09:37	9°♊51'49	0.54899 AU	
morning rise	2061 Jun 08 21:27	6°♊05'22		
direct	2061 Jun 12 05:15	5°♊41'24		
morning max el	2061 Jun 24 23:07	11°♊45'17	22°26'47	
	2061 Jul 08 09:35	0°♋		
asc. node	2061 Jul 12 06:03	7°♋08'19		
morning set	2061 Jul 16 20:13	16°♋26'17		
	2061 Jul 23 05:21	0°♌		
superior conj	2061 Jul 24 00:11	1°♌39'54	1°36'37	
minimum elong	2061 Jul 23 22:17	1°♌29'49	1°36'28	
max. Earth dist.	2061 Jul 27 03:59	8°♌16'39	1.34248 AU	
evening rise	2061 Jul 31 21:55	17°♌49'45		
	2061 Aug 07 10:17	0°♍		

desc. node	2061 Aug 19 12:11	19°♍38'57	
	2061 Aug 27 01:04	0°♎	
evening max el	2061 Sep 04 16:03	9°♎40'55	27°07'35
retrograde	2061 Sep 17 23:41	16°♎59'10	
evening set	2061 Sep 24 21:16	14°♎15'31	
min. Earth dist.	2061 Sep 28 17:54	10°♎31'03	0.65130 AU
inferior conj	2061 Sep 30 19:49	8°♎10'46	-2°25'43
minimum elong	2061 Sep 30 23:43	7°♎59'50	2°24'15
morning rise	2061 Oct 07 03:00	2°♎36'30	
asc. node	2061 Oct 08 05:16	2°♎11'12	
direct	2061 Oct 09 20:03	1°♎57'06	
morning max el	2061 Oct 16 08:24	5°♎27'18	18°07'53
	2061 Nov 01 21:16	0°♏	
morning set	2061 Nov 03 13:52	2°♏48'01	
desc. node	2061 Nov 15 11:27	22°♏11'23	
superior conj	2061 Nov 17 22:03	26°♏04'55	-0°16'22
minimum elong	2061 Nov 17 19:59	25°♏56'41	0°16'04
behind sun begin	2061 Nov 17 18:30	25°♏50'47	
behind sun end	2061 Nov 17 21:28	26°♏02'35	
	2061 Nov 20 09:26	0°♐	
max. Earth dist.	2061 Nov 21 06:22	1°♐22'31	1.44976 AU
evening rise	2061 Dec 04 07:57	21°♐45'34	
	2061 Dec 09 15:49	0°♑	
greatest brilliancy	2061 Dec 17 07:08	11°♑39'36	-0.7m
evening max el	2061 Dec 29 08:33	27°♑47'41	19°42'03
	2061 Dec 31 18:37	0°♒	
asc. node	2062 Jan 04 04:33	1°♒51'46	
retrograde	2062 Jan 05 18:04	2°♒05'13	
evening set	2062 Jan 09 07:26	0°♒51'10	
	2062 Jan 10 09:17	30°℞♑	
inferior conj	2062 Jan 14 18:57	24°♑53'03	3°02'26
minimum elong	2062 Jan 14 16:24	25°♑01'28	3°01'51
min. Earth dist.	2062 Jan 15 20:42	23°♑28'07	0.66670 AU
morning rise	2062 Jan 20 01:08	18°♑40'08	
direct	2062 Jan 26 03:04	15°♑57'35	
morning max el	2062 Feb 07 07:08	23°♑12'22	25°34'38
desc. node	2062 Feb 11 10:42	27°♑44'33	
	2062 Feb 13 07:55	0°♒	
	2062 Mar 06 00:33	0°♓	
morning set	2062 Mar 15 13:16	16°♓29'25	
max. Earth dist.	2062 Mar 19 07:15	23°♓27'38	1.36073 AU
	2062 Mar 22 16:38	0°♈	
superior conj	2062 Mar 25 01:23	4°♈40'58	-1°16'41
minimum elong	2062 Mar 25 05:09	4°♈59'47	1°16'05
evening rise	2062 Apr 02 03:01	21°♈05'24	
asc. node	2062 Apr 02 03:52	21°♈09'45	
	2062 Apr 06 14:50	0°♉	
evening max el	2062 Apr 19 19:36	19°♉47'59	19°56'56
retrograde	2062 Apr 29 23:50	24°♉43'02	
evening set	2062 May 02 00:19	24°♉32'16	
desc. node	2062 May 10 09:55	20°♉50'31	
inferior conj	2062 May 10 22:02	20°♉32'11	-0°08'49
minimum elong	2062 May 10 21:38	20°♉32'47	0°08'41
transit middle	2062 May 10 21:38	20°♉32'47	0°08'41
transit begin	2062 May 10 18:17	20°♉37'52	
transit end	2062 May 11 00:58	20°♉27'43	
min. Earth dist.	2062 May 12 23:14	19°♉17'41	0.55416 AU
morning rise	2062 May 19 16:50	16°♉06'02	
direct	2062 May 23 19:49	15°♉28'38	
morning max el	2062 Jun 06 14:52	22°♉18'48	24°08'46
	2062 Jun 13 09:16	0°♊	
asc. node	2062 Jun 29 03:06	26°♊47'48	
	2062 Jun 30 16:15	0°♋	
morning set	2062 Jul 01 08:00	1°♋22'42	
superior conj	2062 Jul 08 08:09	16°♋29'28	1°23'38
minimum elong	2062 Jul 08 05:47	16°♋16'38	1°23'19
max. Earth dist.	2062 Jul 10 06:11	20°♋37'26	1.33169 AU
	2062 Jul 14 17:22	0°♌	
evening rise	2062 Jul 15 17:03	2°♌00'31	
	2062 Jul 31 07:14	0°♍	
desc. node	2062 Aug 06 09:14	8°♍58'57	
evening max el	2062 Aug 18 03:10	22°♍52'20	27°25'55
	2062 Aug 29 22:09	0°♎	
retrograde	2062 Aug 31 18:44	0°♎09'49	
	2062 Sep 02 14:16	30°℞♍	
evening set	2062 Sep 07 23:02	27°♍31'39	
min. Earth dist.	2062 Sep 11 14:37	24°♍20'26	0.63589 AU
inferior conj	2062 Sep 14 05:06	21°♍41'54	-3°22'08
minimum elong	2062 Sep 14 10:11	21°♍28'58	3°20'32
morning rise	2062 Sep 20 22:32	16°♍24'07	
direct	2062 Sep 23 10:48	15°♍53'25	
asc. node	2062 Sep 25 02:18	16°♍06'52	
morning max el	2062 Sep 30 00:36	19°♍19'03	17°52'35
	2062 Oct 07 21:22	0°♎	
morning set	2062 Oct 16 15:43	14°♎55'04	
	2062 Oct 25 11:09	0°♏	
superior conj	2062 Oct 28 22:57	5°♏48'22	0°29'35
minimum elong	2062 Oct 29 01:59	6°♏00'52	0°29'10
desc. node	2062 Nov 02 08:30	12°♏58'22	
max. Earth dist.	2062 Nov 03 23:56	15°♏36'37	1.44123 AU
	2062 Nov 13 03:57	0°♐	
evening rise	2062 Nov 13 16:57	0°♐50'06	
	2062 Dec 03 08:29	0°♑	
evening max el	2062 Dec 12 10:07	11°♑18'20	20°44'37
retrograde	2062 Dec 20 15:54	16°♑10'34	
asc. node	2062 Dec 22 01:36	15°♑59'34	
evening set	2062 Dec 24 14:29	14°♑41'37	
inferior conj	2062 Dec 29 23:36	8°♑31'41	2°27'17
minimum elong	2062 Dec 29 21:02	8°♑40'30	2°26'30
min. Earth dist.	2062 Dec 30 12:26	7°♑47'48	0.67417 AU
morning rise	2063 Jan 04 03:24	2°♑18'35	
	2063 Jan 08 10:29	30°℞♐	
direct	2063 Jan 09 14:51	29°♐53'40	
	2063 Jan 10 20:03	0°♑	
morning max el	2063 Jan 20 15:28	6°♑28'08	24°09'43
desc. node	2063 Jan 29 07:44	16°♑38'57	
	2063 Feb 07 22:05	0°♒	
morning set	2063 Feb 25 10:06	27°♒58'04	
	2063 Feb 26 14:07	0°♓	
max. Earth dist.	2063 Mar 01 03:40	4°♓32'44	1.38079 AU
superior conj	2063 Mar 08 05:58	17°♓42'03	-1°40'38
minimum elong	2063 Mar 08 10:17	18°♓02'39	1°40'10
	2063 Mar 14 13:22	0°♈	
evening rise	2063 Mar 17 02:04	4°♈59'35	
asc. node	2063 Mar 20 00:55	10°♈45'10	
	2063 Mar 31 23:06	0°♉	
evening max el	2063 Apr 02 15:42	1°♉47'20	19°00'39
retrograde	2063 Apr 11 05:23	5°♉56'54	
evening set	2063 Apr 13 09:34	5°♉41'57	
inferior conj	2063 Apr 21 12:19	1°♉27'13	1°35'58
minimum elong	2063 Apr 21 15:44	1°♉21'14	1°34'52
	2063 Apr 23 14:05	30°℞♈	
min. Earth dist.	2063 Apr 24 14:45	29°♈17'56	0.56787 AU
desc. node	2063 Apr 27 06:57	27°♈38'41	
morning rise	2063 Apr 29 18:50	26°♈26'45	
direct	2063 May 04 22:42	25°♈23'49	
	2063 May 16 01:30	0°♉	
morning max el	2063 May 19 05:28	2°♉46'30	25°45'05
	2063 Jun 07 13:22	0°♊	

morning set	2063 Jun 15	19:33	16°♊17'45		
asc. node	2063 Jun 16	00:10	16°♊42'06		
	2063 Jun 22	03:20	0°♋		
superior conj	2063 Jun 22	18:56	1°♋25'40	1°06'10	
minimum elong	2063 Jun 22	16:37	1°♋12'55	1°05'45	
max. Earth dist.	2063 Jun 23	15:08	3°♋16'20	1.32488 AU	
evening rise	2063 Jun 29	19:54	16°♋32'56		
	2063 Jul 06	15:42	0°♌		
desc. node	2063 Jul 24	06:16	27°♌32'16		
	2063 Jul 26	06:51	0°♍		
evening max el	2063 Jul 31	10:31	5°♍29'28	27°12'44	
retrograde	2063 Aug 14	06:46	12°♍44'01		
evening set	2063 Aug 21	10:03	10°♍23'46		
min. Earth dist.	2063 Aug 25	00:41	7°♍37'41	0.61735 AU	
inferior conj	2063 Aug 28	02:21	4°♍52'17	-4°11'55	
minimum elong	2063 Aug 28	07:37	4°♍40'24	4°10'45	
morning rise	2063 Sep 04	06:45	29°♌54'35		
	2063 Sep 04	00:36	30°℞♌		
direct	2063 Sep 06	16:55	29°♌29'39		
	2063 Sep 09	07:53	0°♍		
asc. node	2063 Sep 11	23:21	1°♍31'27		
morning max el	2063 Sep 13	15:28	2°♍58'52	17°55'42	
morning set	2063 Sep 29	13:13	27°♍58'10		
	2063 Sep 30	15:59	0°♎		
superior conj	2063 Oct 10	02:58	16°♎51'53	1°05'32	
minimum elong	2063 Oct 10	07:32	17°♎11'38	1°04'58	
max. Earth dist.	2063 Oct 17	13:25	29°♎24'28	1.42656 AU	
	2063 Oct 17	22:05	0°♏		
desc. node	2063 Oct 20	05:34	3°♏45'38		
evening rise	2063 Oct 24	05:59	10°♏09'54		
	2063 Nov 06	07:38	0°♐		
evening max el	2063 Nov 25	06:00	24°♐49'54	21°57'56	
	2063 Dec 02	10:18	0°♑		
retrograde	2063 Dec 04	12:36	0°♑21'04		
	2063 Dec 06	12:33	30°℞♐		
evening set	2063 Dec 08	22:12	28°♐35'53		
asc. node	2063 Dec 08	22:36	28°♐35'04		
inferior conj	2063 Dec 14	06:35	22°♐17'23	1°44'46	
minimum elong	2063 Dec 14	04:27	22°♐24'47	1°43'59	
min. Earth dist.	2063 Dec 14	07:50	22°♐13'04	0.67784 AU	
morning rise	2063 Dec 19	10:35	16°♐05'50		
direct	2063 Dec 24	06:54	14°♐02'57		
morning max el	2064 Jan 03	01:40	19°♐50'10	22°41'20	
	2064 Jan 11	15:35	0°♑		
desc. node	2064 Jan 16	04:46	6°♑10'37		
	2064 Feb 01	03:16	0°♒		
morning set	2064 Feb 06	04:01	8°♒07'05		
max. Earth dist.	2064 Feb 10	23:41	16°♒11'29	1.40232 AU	
superior conj	2064 Feb 18	18:20	29°♒53'16	-1°58'14	
minimum elong	2064 Feb 18	21:39	0°♓08'21	1°58'03	
	2064 Feb 18	19:49	0°♓		
evening rise	2064 Feb 28	15:33	18°♓21'29		
asc. node	2064 Mar 05	21:58	29°♓59'14		
	2064 Mar 05	22:08	0°♈		
evening max el	2064 Mar 15	20:26	14°♈20'16	18°24'31	
retrograde	2064 Mar 23	06:04	17°♈59'45		
evening set	2064 Mar 25	16:06	17°♈37'25		
inferior conj	2064 Apr 01	23:51	13°♈02'49	2°48'34	
minimum elong	2064 Apr 02	03:40	12°♈54'59	2°47'42	
min. Earth dist.	2064 Apr 05	10:25	10°♈15'02	0.58719 AU	
morning rise	2064 Apr 09	12:28	7°♈32'12		
desc. node	2064 Apr 13	03:58	6°♈10'02		
direct	2064 Apr 15	15:17	5°♈53'55		
morning max el	2064 Apr 30	00:23	13°♈36'40	27°00'06	
	2064 May 13	01:00	0°♉		
	2064 May 29	16:36	0°♊		
morning set	2064 May 30	05:16	1°♊06'01		
asc. node	2064 Jun 01	21:13	6°♊46'06		
superior conj	2064 Jun 06	06:43	16°♊22'40	0°45'00	
minimum elong	2064 Jun 06	04:54	16°♊12'37	0°44'37	
max. Earth dist.	2064 Jun 06	03:12	16°♊03'16	1.32190 AU	
	2064 Jun 12	12:57	0°♋		
evening rise	2064 Jun 13	03:50	1°♋18'42		
	2064 Jun 28	17:47	0°♌		
desc. node	2064 Jul 10	03:17	14°♌59'54		
evening max el	2064 Jul 12	11:27	17°♌21'42	26°26'23	
retrograde	2064 Jul 26	10:57	24°♌33'48		
evening set	2064 Aug 02	01:42	22°♌44'24		
min. Earth dist.	2064 Aug 06	00:37	20°♌08'30	0.59686 AU	
inferior conj	2064 Aug 09	08:03	17°♌32'56	-4°47'43	
minimum elong	2064 Aug 09	11:32	17°♌26'05	4°47'21	
morning rise	2064 Aug 16	23:26	12°♌57'53		
direct	2064 Aug 19	10:06	12°♌36'31		
morning max el	2064 Aug 27	01:51	16°♌18'54	18°18'18	
asc. node	2064 Aug 28	20:24	18°♌11'34		
	2064 Sep 05	17:19	0°♍		
morning set	2064 Sep 12	00:47	11°♍41'28		
superior conj	2064 Sep 21	07:28	29°♍07'27	1°29'23	
minimum elong	2064 Sep 21	11:02	29°♍23'48	1°29'04	
	2064 Sep 21	18:59	0°♎		
max. Earth dist.	2064 Sep 28	21:01	12°♎30'14	1.40771 AU	
evening rise	2064 Oct 03	13:28	20°♎21'13		
desc. node	2064 Oct 06	02:35	24°♎29'27		
	2064 Oct 09	14:01	0°♏		
	2064 Oct 30	13:54	0°♐		
evening max el	2064 Nov 06	21:08	8°♐23'05	23°17'15	
retrograde	2064 Nov 17	06:38	14°♐32'40		
evening set	2064 Nov 22	04:55	12°♐30'35		
asc. node	2064 Nov 24	19:38	9°♐47'10		
min. Earth dist.	2064 Nov 27	04:33	6°♐39'55	0.67804 AU	
inferior conj	2064 Nov 27	14:01	6°♐07'24	0°56'16	
minimum elong	2064 Nov 27	12:44	6°♐11'48	0°55'44	
morning rise	2064 Dec 02	20:30	29°♏59'15		
	2064 Dec 02	20:08	30°℞♏		
direct	2064 Dec 07	02:21	28°♏19'12		
	2064 Dec 11	18:46	0°♐		
morning max el	2064 Dec 15	17:01	3°♐20'23	21°17'48	
desc. node	2065 Jan 02	01:48	26°♐08'37		
	2065 Jan 04	16:19	0°♑		
morning set	2065 Jan 15	17:13	16°♑55'27		
max. Earth dist.	2065 Jan 23	01:03	28°♑42'04	1.42249 AU	
	2065 Jan 23	20:00	0°♒		
superior conj	2065 Jan 30	09:10	11°♒01'40	-2°05'06	
minimum elong	2065 Jan 30	09:03	11°♒01'11	2°05'05	
	2065 Feb 10	02:01	0°♓		
evening rise	2065 Feb 10	15:38	1°♓01'42		
asc. node	2065 Feb 20	18:58	18°♓44'19		
evening max el	2065 Feb 27	06:34	27°♓17'45	18°08'21	
	2065 Mar 02	22:46	0°♈		
retrograde	2065 Mar 05	23:40	0°♈43'00		
evening set	2065 Mar 08	15:19	0°♈11'16		
	2065 Mar 09	02:01	30°℞♓		
inferior conj	2065 Mar 15	07:20	25°♓16'00	3°28'46	
minimum elong	2065 Mar 15	09:33	25°♓10'43	3°28'30	
min. Earth dist.	2065 Mar 18	12:41	22°♓13'48	0.60866 AU	
morning rise	2065 Mar 22	01:53	19°♓25'22		
direct	2065 Mar 28	19:40	17°♓11'24		
desc. node	2065 Mar 31	00:59	17°♓25'09		

morning max el	2065 Apr 12 01:29	25°♓04'55	27°42'19
	2065 Apr 16 13:56	0°♈	
	2065 May 06 09:40	0°♉	
morning set	2065 May 14 11:18	15°♉41'07	
asc. node	2065 May 19 18:17	26°♉55'00	
max. Earth dist.	2065 May 20 14:35	28°♉45'32	1.32274 AU
	2065 May 21 04:13	0°♊	
superior conj	2065 May 21 17:49	1°♊14'28	0°20'49
minimum elong	2065 May 21 16:53	1°♊09'20	0°20'37
evening rise	2065 May 28 14:40	16°♊10'34	
	2065 Jun 04 11:29	0°♋	
evening max el	2065 Jun 24 05:23	28°♋28'31	25°11'17
	2065 Jun 25 21:36	0°♌	
desc. node	2065 Jun 27 00:17	0°♌55'20	
retrograde	2065 Jul 08 05:27	5°♌35'34	
evening set	2065 Jul 13 18:05	4°♌25'03	
min. Earth dist.	2065 Jul 18 17:09	1°♌40'41	0.57671 AU
	2065 Jul 21 04:30	30°℞♋	
inferior conj	2065 Jul 21 18:59	29°♋35'07	-4°58'06
minimum elong	2065 Jul 21 18:06	29°♋36'38	4°58'05
morning rise	2065 Jul 29 20:42	25°♋22'16	
direct	2065 Aug 01 10:05	25°♋02'50	
morning max el	2065 Aug 10 04:37	29°♋10'04	19°01'39
	2065 Aug 11 00:55	0°♌	
asc. node	2065 Aug 15 17:27	5°♌52'13	
morning set	2065 Aug 26 22:19	25°♌54'15	
	2065 Aug 28 23:59	0°♍	
superior conj	2065 Sep 04 06:56	12°♍19'45	1°42'09
minimum elong	2065 Sep 04 08:40	12°♍28'02	1°42'05
max. Earth dist.	2065 Sep 11 00:47	24°♍53'21	1.38723 AU
	2065 Sep 13 21:59	0°♎	
evening rise	2065 Sep 14 21:06	1°♎40'23	
desc. node	2065 Sep 22 23:37	15°♎06'17	
	2065 Oct 02 20:01	0°♏	
evening max el	2065 Oct 20 09:44	22°♏00'32	24°36'22
retrograde	2065 Oct 31 20:53	28°♏41'59	
evening set	2065 Nov 06 09:03	26°♏23'31	
min. Earth dist.	2065 Nov 11 00:14	21°♏06'26	0.67497 AU
inferior conj	2065 Nov 11 20:12	19°♏59'52	0°03'04
minimum elong	2065 Nov 11 20:07	20°♏00'08	0°03'01
transit middle	2065 Nov 11 20:07	20°♏00'08	0°03'01
transit begin	2065 Nov 11 17:25	20°♏09'08	
transit end	2065 Nov 11 22:49	19°♏51'08	
asc. node	2065 Nov 11 16:39	20°♏11'44	
morning rise	2065 Nov 17 07:16	13°♏57'29	
direct	2065 Nov 21 00:11	12°♏38'37	
morning max el	2065 Nov 28 15:51	17°♏01'13	20°05'09
	2065 Dec 08 21:22	0°♐	
desc. node	2065 Dec 19 22:50	16°♐25'47	
morning set	2065 Dec 25 13:37	25°♐02'39	
	2065 Dec 28 18:15	0°♑	
max. Earth dist.	2066 Jan 05 10:00	12°♑04'38	1.43863 AU
superior conj	2066 Jan 10 22:13	20°♑59'05	-1°56'09
minimum elong	2066 Jan 10 16:41	20°♑36'24	1°55'51
	2066 Jan 16 08:49	0°♒	
evening rise	2066 Jan 23 22:05	12°♒52'03	
	2066 Feb 03 00:40	0°♓	
asc. node	2066 Feb 07 15:59	6°♓51'42	
evening max el	2066 Feb 10 19:04	10°♓31'50	18°11'30
retrograde	2066 Feb 17 06:01	13°♓56'59	
evening set	2066 Feb 20 02:56	13°♓14'39	
inferior conj	2066 Feb 26 06:59	7°♓59'20	3°42'58
minimum elong	2066 Feb 26 07:13	7°♓58'41	3°42'58
min. Earth dist.	2066 Feb 28 23:29	5°♓06'55	0.62922 AU
morning rise	2066 Mar 04 10:28	1°♓57'16	
	2066 Mar 07 18:38	30°℞♒	
direct	2066 Mar 11 09:19	29°♒17'29	
	2066 Mar 15 04:35	0°♓	
desc. node	2066 Mar 17 22:01	1°♓16'56	
morning max el	2066 Mar 25 07:48	7°♓13'27	27°47'14
	2066 Apr 11 17:56	0°♈	
morning set	2066 Apr 28 11:28	29°♈55'24	
	2066 Apr 28 12:23	0°♉	
max. Earth dist.	2066 May 03 21:22	11°♉09'47	1.32767 AU
superior conj	2066 May 06 02:28	15°♉54'52	-0°05'39
minimum elong	2066 May 06 02:44	15°♉56'19	0°05'35
behind sun begin	2066 May 05 21:49	15°♉29'42	
behind sun end	2066 May 06 07:40	16°♉22'57	
asc. node	2066 May 06 15:18	17°♉04'16	
	2066 May 12 14:54	0°♊	
evening rise	2066 May 13 02:31	1°♊01'38	
	2066 May 29 04:33	0°♋	
evening max el	2066 Jun 05 19:19	9°♋03'38	23°38'26
desc. node	2066 Jun 13 21:18	14°♋43'37	
retrograde	2066 Jun 19 11:28	15°♋54'33	
evening set	2066 Jun 23 12:48	15°♋18'26	
min. Earth dist.	2066 Jun 30 05:42	12°♋10'25	0.56015 AU
inferior conj	2066 Jul 02 09:45	10°♋52'17	-4°28'48
minimum elong	2066 Jul 02 03:35	11°♋01'35	4°27'45
morning rise	2066 Jul 10 20:59	6°♋55'58	
direct	2066 Jul 13 15:00	6°♋37'00	
morning max el	2066 Jul 23 20:56	11°♋21'57	20°06'24
asc. node	2066 Aug 02 14:31	24°♋19'02	
	2066 Aug 05 18:54	0°♌	
morning set	2066 Aug 11 02:38	10°♌27'21	
superior conj	2066 Aug 18 20:10	26°♌13'09	1°45'41
minimum elong	2066 Aug 18 20:06	26°♌12'51	1°45'41
	2066 Aug 20 17:41	0°♍	
max. Earth dist.	2066 Aug 24 06:02	6°♍49'24	1.36758 AU
evening rise	2066 Aug 28 03:02	14°♍02'34	
	2066 Sep 06 09:30	0°♎	
desc. node	2066 Sep 09 20:38	5°♎30'50	
	2066 Sep 27 15:10	0°♏	
evening max el	2066 Oct 02 21:48	5°♏40'45	25°48'03
retrograde	2066 Oct 15 06:22	12°♏43'51	
evening set	2066 Oct 21 08:49	10°♏11'15	
min. Earth dist.	2066 Oct 25 16:24	5°♏29'33	0.66856 AU
inferior conj	2066 Oct 26 23:18	3°♏51'41	-0°53'35
minimum elong	2066 Oct 27 00:42	3°♏47'15	0°52'59
asc. node	2066 Oct 29 13:41	0°♏43'25	
	2066 Oct 30 06:03	30°℞♎	
morning rise	2066 Nov 01 16:52	27°♎57'49	
direct	2066 Nov 04 22:48	26°♎57'06	
	2066 Nov 11 00:55	0°♏	
morning max el	2066 Nov 11 22:15	0°♏51'18	19°06'52
	2066 Dec 02 09:06	0°♐	
morning set	2066 Dec 04 18:13	3°♐42'36	
desc. node	2066 Dec 06 19:53	6°♐56'25	
max. Earth dist.	2066 Dec 19 01:33	26°♐06'28	1.44865 AU
superior conj	2066 Dec 21 10:47	29°♐52'24	-1°28'12
minimum elong	2066 Dec 21 01:55	29°♐17'21	1°27'19
	2066 Dec 21 12:42	0°♑	
evening rise	2067 Jan 05 06:51	23°♑46'20	
	2067 Jan 09 01:50	0°♒	
evening max el	2067 Jan 25 07:09	23°♒55'39	18°33'12
asc. node	2067 Jan 25 13:00	24°♒10'20	
retrograde	2067 Jan 31 20:54	27°♒33'12	
evening set	2067 Feb 03 23:22	26°♒39'19	

inferior conj	2067 Feb 09	18:51	21°♒05'25	3°37'55
minimum elong	2067 Feb 09	17:31	21°♒09'22	3°37'47
min. Earth dist.	2067 Feb 11	19:48	18°♒40'29	0.64682 AU
morning rise	2067 Feb 15	11:10	14°♒57'00	
direct	2067 Feb 22	06:15	12°♒05'53	
desc. node	2067 Mar 04	19:03	17°♒11'43	
morning max el	2067 Mar 07	17:06	19°♒55'20	27°17'03
	2067 Mar 16	08:28	0°♓	
	2067 Apr 04	18:35	0°♈	
morning set	2067 Apr 12	03:00	13°♈40'26	
max. Earth dist.	2067 Apr 16	19:56	23°♈05'59	1.33697 AU
superior conj	2067 Apr 20	06:46	0°♉17'47	-0°33'25
minimum elong	2067 Apr 20	08:27	0°♉26'40	0°33'04
	2067 Apr 20	03:24	0°♉	
asc. node	2067 Apr 23	12:21	7°♉10'07	
evening rise	2067 Apr 27	13:34	15°♉45'51	
	2067 May 04	17:40	0°♊	
evening max el	2067 May 18	11:57	19°♊35'48	22°03'00
retrograde	2067 May 31	05:17	25°♊52'13	
desc. node	2067 May 31	18:18	25°♊51'33	
evening set	2067 Jun 02	23:15	25°♊35'26	
min. Earth dist.	2067 Jun 11	17:12	21°♊51'15	0.55053 AU
inferior conj	2067 Jun 12	08:22	21°♊29'58	-3°11'17
minimum elong	2067 Jun 12	00:36	21°♊40'52	3°08'59
morning rise	2067 Jun 21	03:31	17°♊37'14	
direct	2067 Jun 24	04:49	17°♊16'29	
morning max el	2067 Jul 06	01:45	22°♊49'38	21°31'04
	2067 Jul 12	07:08	0°♋	
asc. node	2067 Jul 20	11:36	13°♋20'54	
morning set	2067 Jul 26	11:21	25°♋14'09	
	2067 Jul 28	18:02	0°♌	
superior conj	2067 Aug 02	19:03	10°♌35'45	1°41'44
minimum elong	2067 Aug 02	17:39	10°♌28'32	1°41'39
max. Earth dist.	2067 Aug 06	18:06	18°♌42'44	1.35065 AU
evening rise	2067 Aug 11	02:52	27°♌16'16	
	2067 Aug 12	13:30	0°♍	
desc. node	2067 Aug 27	17:39	25°♍37'06	
	2067 Aug 30	16:54	0°♎	
evening max el	2067 Sep 15	10:06	19°♎17'44	26°44'36
retrograde	2067 Sep 28	10:35	26°♎32'23	
evening set	2067 Oct 05	02:11	23°♎50'27	
min. Earth dist.	2067 Oct 09	02:36	19°♎45'24	0.65870 AU
inferior conj	2067 Oct 10	21:22	17°♎39'16	-1°52'03
minimum elong	2067 Oct 11	00:22	17°♎30'25	1°50'51
asc. node	2067 Oct 16	10:46	12°♎14'53	
morning rise	2067 Oct 16	23:10	11°♎57'05	
direct	2067 Oct 19	20:19	11°♎10'55	
morning max el	2067 Oct 26	10:37	14°♎46'56	18°24'35
	2067 Nov 06	11:50	0°♏	
morning set	2067 Nov 15	01:04	13°♏43'48	
desc. node	2067 Nov 23	16:55	27°♏36'01	
	2067 Nov 25	05:13	0°♐	
superior conj	2067 Nov 30	12:01	8°♐20'09	-0°44'29
minimum elong	2067 Nov 30	06:18	7°♐57'42	0°43'44
max. Earth dist.	2067 Dec 01	20:37	10°♐28'16	1.45149 AU
	2067 Dec 14	07:18	0°♑	
evening rise	2067 Dec 16	16:13	3°♑43'47	
greatest brilliancy	2067 Dec 26	22:28	19°♑49'35	-0.8m
	2068 Jan 02	18:03	0°♒	
evening max el	2068 Jan 08	16:21	7°♒23'17	19°12'20
asc. node	2068 Jan 12	10:03	10°♒25'57	
retrograde	2068 Jan 15	16:41	11°♒23'51	
evening set	2068 Jan 19	01:40	10°♒17'26	
inferior conj	2068 Jan 24	15:24	4°♒27'10	3°18'36
minimum elong	2068 Jan 24	13:07	4°♒34'28	3°18'12
min. Earth dist.	2068 Jan 26	01:08	2°♒39'18	0.66055 AU
	2068 Jan 28	06:28	30°℞♑	
morning rise	2068 Jan 30	00:18	28°♑15'14	
direct	2068 Feb 05	09:29	25°♑26'35	
	2068 Feb 14	22:16	0°♒	
morning max el	2068 Feb 18	02:52	2°♒58'09	26°18'08
desc. node	2068 Feb 19	16:06	4°♒35'00	
	2068 Mar 09	14:37	0°♓	
morning set	2068 Mar 25	06:05	26°♓43'52	
	2068 Mar 26	23:36	0°♈	
max. Earth dist.	2068 Mar 29	07:18	4°♈29'06	1.35080 AU
superior conj	2068 Apr 03	04:17	14°♈15'04	-1°01'16
minimum elong	2068 Apr 03	07:22	14°♈30'53	1°00'43
asc. node	2068 Apr 09	09:23	27°♈07'32	
evening rise	2068 Apr 10	21:45	0°♉15'38	
	2068 Apr 10	18:43	0°♉	
	2068 Apr 29	00:35	0°♊	
evening max el	2068 Apr 29	13:53	0°♊33'00	20°38'01
retrograde	2068 May 10	18:24	5°♊59'19	
evening set	2068 May 12	20:34	5°♊48'42	
desc. node	2068 May 17	15:20	4°♊14'24	
inferior conj	2068 May 22	02:17	1°♊50'53	-1°17'52
minimum elong	2068 May 21	22:36	1°♊56'11	1°16'32
min. Earth dist.	2068 May 23	05:38	1°♊11'33	0.55006 AU
	2068 May 25	09:09	30°℞♉	
morning rise	2068 May 30	23:55	27°♉41'53	
direct	2068 Jun 03	14:39	27°♉13'46	
	2068 Jun 12	06:15	0°♊	
morning max el	2068 Jun 16	21:02	3°♊38'01	23°09'54
	2068 Jul 04	22:20	0°♋	
asc. node	2068 Jul 06	08:40	2°♋48'27	
morning set	2068 Jul 09	22:29	10°♋08'24	
superior conj	2068 Jul 17	00:25	25°♋17'39	1°31'43
minimum elong	2068 Jul 16	22:15	25°♋06'04	1°31'29
	2068 Jul 19	05:33	0°♌	
max. Earth dist.	2068 Jul 19	15:13	0°♌50'52	1.33741 AU
evening rise	2068 Jul 24	16:02	11°♌08'58	
	2068 Aug 03	21:17	0°♍	
desc. node	2068 Aug 13	14:41	15°♍17'04	
	2068 Aug 25	06:07	0°♎	
evening max el	2068 Aug 27	21:57	2°♎41'24	27°18'50
retrograde	2068 Sep 10	09:13	9°♎59'58	
evening set	2068 Sep 17	10:36	7°♎16'54	
min. Earth dist.	2068 Sep 21	04:41	3°♎47'32	0.64520 AU
inferior conj	2068 Sep 23	12:06	1°♎18'14	-2°50'08
minimum elong	2068 Sep 23	16:35	1°♎06'09	2°48'33
	2068 Sep 24	17:31	30°℞♍	
morning rise	2068 Sep 29	23:33	25°♍50'51	
asc. node	2068 Oct 02	07:51	25°♍15'58	
direct	2068 Oct 02	14:16	25°♍15'35	
morning max el	2068 Oct 09	02:21	28°♍42'37	17°59'14
	2068 Oct 10	07:21	0°♎	
morning set	2068 Oct 26	12:41	25°♎09'42	
	2068 Oct 29	09:39	0°♏	
superior conj	2068 Nov 08	23:41	17°♏24'04	0°04'02
minimum elong	2068 Nov 09	00:09	17°♏26'00	0°03'58
behind sun begin	2068 Nov 08	14:01	16°♏45'12	
behind sun end	2068 Nov 09	10:17	18°♏06'44	
desc. node	2068 Nov 09	13:57	18°♏21'26	
max. Earth dist.	2068 Nov 13	15:27	24°♏49'56	1.44692 AU
	2068 Nov 16	22:10	0°♐	
evening rise	2068 Nov 25	06:39	12°♐58'41	
	2068 Dec 06	10:41	0°♑	

greatest brilliancy	2068 Dec 09 14:01	4°♑40'12	-0.6m
evening max el	2068 Dec 21 20:56	20°♑52'44	20°07'04
asc. node	2068 Dec 29 07:06	25°♑24'16	
retrograde	2068 Dec 29 14:32	25°♑24'48	
evening set	2069 Jan 02 07:33	24°♑04'34	
inferior conj	2069 Jan 07 17:48	18°♑00'47	2°48'33
minimum elong	2069 Jan 07 15:11	18°♑09'37	2°47'51
min. Earth dist.	2069 Jan 08 13:49	16°♑53'28	0.67028 AU
morning rise	2069 Jan 12 22:36	11°♑47'23	
direct	2069 Jan 18 18:25	9°♑11'42	
morning max el	2069 Jan 30 11:41	16°♑11'21	24°59'38
desc. node	2069 Feb 05 13:09	23°♑01'36	
	2069 Feb 10 22:16	0°♒	
	2069 Mar 02 13:16	0°♓	
morning set	2069 Mar 07 15:44	8°♓51'55	
max. Earth dist.	2069 Mar 11 07:30	15°♓30'40	1.36887 AU
superior conj	2069 Mar 17 16:04	27°♓38'58	-1°27'24
minimum elong	2069 Mar 17 20:11	27°♓59'14	1°26'50
	2069 Mar 18 20:40	0°♈	
evening rise	2069 Mar 26 00:52	14°♈24'31	
asc. node	2069 Mar 27 06:25	16°♈52'11	
	2069 Apr 03 06:13	0°♉	
evening max el	2069 Apr 12 03:41	12°♉09'36	19°30'34
retrograde	2069 Apr 21 14:55	16°♉44'05	
evening set	2069 Apr 23 16:04	16°♉32'11	
inferior conj	2069 May 02 06:08	12°♉26'59	0°38'54
minimum elong	2069 May 02 07:46	12°♉24'21	0°38'19
desc. node	2069 May 04 12:21	10°♉59'57	
min. Earth dist.	2069 May 04 20:08	10°♉47'45	0.55904 AU
morning rise	2069 May 10 20:41	7°♉46'00	
direct	2069 May 15 09:42	6°♉59'21	
morning max el	2069 May 29 11:40	14°♉05'51	24°51'23
	2069 Jun 10 23:27	0°♊	
asc. node	2069 Jun 23 05:42	22°♊34'36	
morning set	2069 Jun 24 10:20	25°♊04'35	
	2069 Jun 26 17:37	0°♋	
superior conj	2069 Jul 01 09:48	10°♋10'46	1°16'44
minimum elong	2069 Jul 01 07:24	9°♋57'39	1°16'22
max. Earth dist.	2069 Jul 02 20:26	13°♋18'52	1.32827 AU
evening rise	2069 Jul 08 14:46	25°♋29'41	
	2069 Jul 10 20:26	0°♌	
	2069 Jul 28 09:00	0°♍	
desc. node	2069 Jul 31 11:43	4°♍19'07	
evening max el	2069 Aug 10 07:35	15°♍39'01	27°24'20
retrograde	2069 Aug 24 01:43	22°♍56'19	
evening set	2069 Aug 31 06:41	20°♍23'55	
min. Earth dist.	2069 Sep 03 20:58	17°♍24'51	0.62829 AU
inferior conj	2069 Sep 06 16:40	14°♍41'20	-3°44'26
minimum elong	2069 Sep 06 22:00	14°♍28'24	3°42'58
morning rise	2069 Sep 13 14:45	9°♍31'57	
direct	2069 Sep 16 01:40	9°♍04'11	
asc. node	2069 Sep 19 04:54	9°♍50'37	
morning max el	2069 Sep 22 18:25	12°♍30'31	17°51'35
	2069 Oct 04 14:46	0°♎	
morning set	2069 Oct 08 23:38	7°♎42'31	
superior conj	2069 Oct 20 12:03	27°♎41'36	0°46'16
minimum elong	2069 Oct 20 16:09	27°♎58'50	0°45'43
	2069 Oct 21 21:06	0°♏	
desc. node	2069 Oct 27 11:00	9°♏08'56	
max. Earth dist.	2069 Oct 27 06:59	8°♏52'40	1.43560 AU
evening rise	2069 Nov 04 15:11	22°♏03'56	
	2069 Nov 09 19:23	0°♐	
	2069 Nov 30 22:54	0°♑	
evening max el	2069 Dec 04 19:58	4°♑23'08	21°14'43
retrograde	2069 Dec 13 12:07	9°♑32'06	
asc. node	2069 Dec 16 04:08	8°♑52'37	
evening set	2069 Dec 17 15:03	7°♑56'36	
inferior conj	2069 Dec 22 23:40	1°♑42'34	2°10'05
minimum elong	2069 Dec 22 21:14	1°♑51'00	2°09'15
min. Earth dist.	2069 Dec 23 07:31	1°♑15'31	0.67617 AU
	2069 Dec 24 05:35	30°℞♐	
morning rise	2069 Dec 28 03:14	25°♐29'37	
direct	2070 Jan 02 08:13	23°♐13'35	
morning max el	2070 Jan 12 20:19	29°♐28'57	23°31'53
	2070 Jan 13 08:28	0°♑	
desc. node	2070 Jan 23 10:11	12°♑13'05	
	2070 Feb 04 18:16	0°♒	
morning set	2070 Feb 17 01:44	19°♒47'45	
max. Earth dist.	2070 Feb 21 02:06	26°♒42'57	1.38987 AU
	2070 Feb 22 22:40	0°♓	
superior conj	2070 Feb 28 14:18	10°♓19'43	-1°49'08
minimum elong	2070 Feb 28 18:26	10°♓39'04	1°48'46
evening rise	2070 Mar 09 20:12	28°♓05'11	
	2070 Mar 10 19:55	0°♈	
asc. node	2070 Mar 14 03:27	6°♈18'52	
evening max el	2070 Mar 26 03:53	24°♈24'17	18°42'56
retrograde	2070 Apr 03 04:11	28°♈18'46	
evening set	2070 Apr 05 10:49	28°♈01'02	
inferior conj	2070 Apr 13 05:16	23°♈38'35	2°10'57
minimum elong	2070 Apr 13 09:13	23°♈31'11	2°09'50
min. Earth dist.	2070 Apr 16 13:22	21°♈10'01	0.57554 AU
morning rise	2070 Apr 21 04:29	18°♈24'12	
desc. node	2070 Apr 21 09:22	18°♈18'46	
direct	2070 Apr 26 18:58	17°♈06'37	
morning max el	2070 May 11 03:30	24°♈39'48	26°20'24
	2070 May 16 01:05	0°♉	
	2070 Jun 03 23:36	0°♊	
morning set	2070 Jun 08 21:18	9°♊57'33	
asc. node	2070 Jun 10 02:44	12°♊33'38	
superior conj	2070 Jun 15 21:15	25°♊08'30	0°57'37
minimum elong	2070 Jun 15 19:05	24°♊56'35	0°57'13
max. Earth dist.	2070 Jun 16 07:02	26°♊02'21	1.32310 AU
	2070 Jun 18 02:23	0°♋	
evening rise	2070 Jun 22 20:04	10°♋09'15	
	2070 Jul 03 03:17	0°♌	
desc. node	2070 Jul 18 08:43	22°♌27'41	
evening max el	2070 Jul 23 12:38	27°♌59'02	26°57'05
	2070 Jul 25 19:03	0°♍	
retrograde	2070 Aug 06 10:49	5°♍12'35	
evening set	2070 Aug 13 10:06	3°♍04'17	
min. Earth dist.	2070 Aug 17 02:51	0°♍24'21	0.60877 AU
	2070 Aug 17 14:40	30°℞♌	
inferior conj	2070 Aug 20 07:48	27°♌40'52	-4°29'24
minimum elong	2070 Aug 20 12:36	27°♌30'36	4°28'33
morning rise	2070 Aug 27 16:54	22°♌52'18	
direct	2070 Aug 30 02:50	22°♌29'11	
asc. node	2070 Sep 06 01:56	25°♌49'14	
morning max el	2070 Sep 06 07:45	26°♌03'09	18°02'44
	2070 Sep 09 17:17	0°♍	
morning set	2070 Sep 22 03:46	21°♍04'35	
	2070 Sep 26 23:34	0°♎	
superior conj	2070 Oct 02 03:04	9°♎17'16	1°17'05
minimum elong	2070 Oct 02 07:25	9°♎36'30	1°16'36
max. Earth dist.	2070 Oct 09 17:48	22°♎23'04	1.41900 AU
desc. node	2070 Oct 14 08:03	29°♎55'07	
	2070 Oct 14 09:15	0°♏	
evening rise	2070 Oct 15 10:51	1°♏42'43	
	2070 Nov 03 06:51	0°♐	

evening max el	2070 Nov 17 13:46	17°♐55'30	22°31'17
retrograde	2070 Nov 27 07:44	23°♐43'00	
evening set	2070 Dec 01 22:30	21°♐50'53	
asc. node	2070 Dec 03 01:09	20°♐49'46	
inferior conj	2070 Dec 07 07:04	15°♐30'07	1°24'52
minimum elong	2070 Dec 07 05:15	15°♐36'25	1°24'08
min. Earth dist.	2070 Dec 07 03:46	15°♐41'32	0.67843 AU
morning rise	2070 Dec 12 11:50	9°♐19'41	
direct	2070 Dec 17 01:59	7°♐26'18	
morning max el	2070 Dec 26 08:06	12°♐53'01	22°04'37
	2071 Jan 08 22:20	0°♑	
desc. node	2071 Jan 10 07:14	1°♑56'51	
morning set	2071 Jan 28 06:56	29°♑19'45	
	2071 Jan 28 16:54	0°♒	
max. Earth dist.	2071 Feb 02 23:44	8°♒41'46	1.41128 AU
superior conj	2071 Feb 10 18:09	22°♒05'32	-2°02'46
minimum elong	2071 Feb 10 20:21	22°♒15'15	2°02'41
	2071 Feb 15 03:34	0°♓	
evening rise	2071 Feb 21 04:26	11°♓09'41	
asc. node	2071 Mar 01 00:28	25°♓21'04	
	2071 Mar 03 21:13	0°♈	
evening max el	2071 Mar 09 11:20	7°♈08'30	18°15'17
retrograde	2071 Mar 16 12:19	10°♈39'41	
evening set	2071 Mar 19 01:00	10°♈13'23	
inferior conj	2071 Mar 26 01:33	5°♈29'57	3°09'18
minimum elong	2071 Mar 26 04:50	5°♈22'47	3°08'41
min. Earth dist.	2071 Mar 29 11:14	2°♈33'03	0.59626 AU
	2071 Apr 01 23:32	30°♓℞	
morning rise	2071 Apr 02 06:18	29°♓49'58	
desc. node	2071 Apr 08 06:23	27°♓56'24	
direct	2071 Apr 08 16:53	27°♓55'52	
	2071 Apr 15 17:39	0°♈	
morning max el	2071 Apr 23 00:42	5°♈43'29	27°22'37
	2071 May 11 02:09	0°♉	
morning set	2071 May 24 05:39	24°♉40'24	
	2071 May 26 18:07	0°♊	
asc. node	2071 May 27 23:46	2°♊39'43	
superior conj	2071 May 31 08:54	10°♊03'30	0°35'04
minimum elong	2071 May 31 07:25	9°♊55'16	0°34'46
max. Earth dist.	2071 May 30 19:19	8°♊48'48	1.32177 AU
evening rise	2071 Jun 07 05:28	24°♊58'16	
	2071 Jun 09 15:27	0°♋	
	2071 Jun 27 05:00	0°♌	
desc. node	2071 Jul 05 05:42	9°♌19'44	
evening max el	2071 Jul 05 10:44	9°♌31'47	25°57'34
retrograde	2071 Jul 19 10:44	16°♌41'26	
evening set	2071 Jul 25 16:06	15°♌08'23	
min. Earth dist.	2071 Jul 29 23:13	12°♌31'07	0.58814 AU
inferior conj	2071 Aug 02 05:53	10°♌06'10	-4°56'04
minimum elong	2071 Aug 02 07:48	10°♌02'36	4°55'58
morning rise	2071 Aug 10 01:42	5°♌40'30	
direct	2071 Aug 12 13:26	5°♌19'59	
morning max el	2071 Aug 20 15:10	9°♌11'19	18°34'04
asc. node	2071 Aug 23 22:59	12°♌56'26	
	2071 Sep 03 05:09	0°♍	
morning set	2071 Sep 05 20:02	5°♍01'41	
superior conj	2071 Sep 14 16:19	21°♍58'33	1°36'02
minimum elong	2071 Sep 14 19:08	22°♍11'45	1°35'50
	2071 Sep 19 01:25	0°♎	
max. Earth dist.	2071 Sep 21 23:50	5°♎11'46	1.39915 AU
evening rise	2071 Sep 26 04:28	12°♎22'18	
desc. node	2071 Oct 01 05:04	20°♎36'18	
	2071 Oct 07 05:43	0°♏	
	2071 Oct 29 16:25	0°♐	
evening max el	2071 Oct 31 03:41	1°♐30'51	23°51'19
retrograde	2071 Nov 11 00:09	7°♐54'16	
evening set	2071 Nov 16 04:20	5°♐45'00	
asc. node	2071 Nov 19 22:11	1°♐35'49	
min. Earth dist.	2071 Nov 21 00:16	0°♐08'38	0.67722 AU
	2071 Nov 21 02:49	30°℞♏	
inferior conj	2071 Nov 21 14:11	29°♏21'20	0°34'12
minimum elong	2071 Nov 21 13:23	29°♏24'05	0°33'51
morning rise	2071 Nov 26 22:24	23°♏15'33	
direct	2071 Nov 30 22:36	21°♏44'45	
morning max el	2071 Dec 09 02:31	26°♏27'44	20°45'18
	2071 Dec 12 07:18	0°♐	
desc. node	2071 Dec 28 04:17	22°♐03'55	
	2072 Jan 02 10:23	0°♑	
morning set	2072 Jan 07 10:36	7°♑43'19	
max. Earth dist.	2072 Jan 16 05:01	21°♑38'25	1.43005 AU
	2072 Jan 21 07:07	0°♒	
superior conj	2072 Jan 22 22:27	2°♒44'37	-2°03'30
minimum elong	2072 Jan 22 20:08	2°♒34'53	2°03'27
evening rise	2072 Feb 03 21:37	23°♒30'09	
	2072 Feb 07 13:37	0°♓	
asc. node	2072 Feb 15 21:30	13°♓51'25	
evening max el	2072 Feb 20 22:51	20°♓13'55	18°07'18
retrograde	2072 Feb 27 12:06	23°♓37'35	
evening set	2072 Mar 01 06:02	23°♓01'23	
inferior conj	2072 Mar 07 16:27	17°♓57'04	3°37'33
minimum elong	2072 Mar 07 17:49	17°♓53'38	3°37'26
min. Earth dist.	2072 Mar 10 16:46	14°♓56'42	0.61767 AU
morning rise	2072 Mar 14 04:09	12°♓00'45	
direct	2072 Mar 21 01:10	9°♓34'35	
desc. node	2072 Mar 25 03:25	10°♓21'29	
morning max el	2072 Apr 04 04:22	17°♓29'28	27°49'05
	2072 Apr 14 14:27	0°♈	
	2072 May 02 18:53	0°♉	
morning set	2072 May 07 09:29	9°♉07'06	
max. Earth dist.	2072 May 13 05:25	21°♉25'20	1.32436 AU
asc. node	2072 May 13 20:48	22°♉48'48	
superior conj	2072 May 14 19:09	24°♉50'25	0°09'50
minimum elong	2072 May 14 18:42	24°♉47'55	0°09'44
behind sun begin	2072 May 14 14:37	24°♉25'43	
behind sun end	2072 May 14 22:46	25°♉10'09	
	2072 May 17 03:49	0°♊	
evening rise	2072 May 21 16:58	9°♊50'06	
	2072 Jun 01 02:06	0°♋	
evening max el	2072 Jun 16 02:09	20°♋20'57	24°32'59
desc. node	2072 Jun 21 02:42	24°♋25'02	
retrograde	2072 Jun 29 23:53	27°♋23'00	
evening set	2072 Jul 04 22:22	26°♋28'12	
min. Earth dist.	2072 Jul 10 13:11	23°♋35'36	0.56905 AU
inferior conj	2072 Jul 13 08:03	21°♋48'22	-4°51'20
minimum elong	2072 Jul 13 04:48	21°♋53'36	4°51'03
morning rise	2072 Jul 21 13:57	17°♋43'59	
direct	2072 Jul 24 05:18	17°♋24'51	
morning max el	2072 Aug 02 13:43	21°♋46'00	19°26'41
	2072 Aug 09 05:08	0°♌	
asc. node	2072 Aug 09 20:02	0°♌57'35	
morning set	2072 Aug 19 20:46	19°♌23'39	
	2072 Aug 25 03:33	0°♍	
superior conj	2072 Aug 27 22:12	5°♍29'46	1°44'40
minimum elong	2072 Aug 27 23:07	5°♍34'19	1°44'39
max. Earth dist.	2072 Sep 03 03:40	17°♍21'05	1.37862 AU
evening rise	2072 Sep 06 21:57	24°♍08'34	
	2072 Sep 10 07:00	0°♎	
desc. node	2072 Sep 17 02:04	11°♎08'15	

	2072 Sep 29 22:43	0°♏	
evening max el	2072 Oct 12 15:43	15°♏09'09	25°08'09
retrograde	2072 Oct 24 12:27	22°♏01'14	
evening set	2072 Oct 30 06:52	19°♏36'01	
min. Earth dist.	2072 Nov 03 18:38	14°♏34'04	0.67268 AU
inferior conj	2072 Nov 04 19:17	13°♏13'32	-0°20'40
minimum elong	2072 Nov 04 19:48	13°♏11'50	0°20'26
asc. node	2072 Nov 05 19:15	11°♏55'53	
morning rise	2072 Nov 10 08:55	7°♏14'43	
direct	2072 Nov 13 20:51	6°♏04'09	
morning max el	2072 Nov 21 04:49	10°♏13'15	19°38'30
greatest brilliancy	2072 Dec 04 10:58	27°♏50'45	-0.7m
	2072 Dec 05 21:28	0°♐	
desc. node	2072 Dec 14 01:18	12°♐27'08	
morning set	2072 Dec 16 07:22	15°♐55'41	
	2072 Dec 25 08:07	0°♑	
max. Earth dist.	2072 Dec 28 17:17	5°♑20'26	1.44372 AU
superior conj	2073 Jan 02 00:15	12°♑11'36	-1°46'37
minimum elong	2073 Jan 01 16:40	11°♑41'08	1°46'03
	2073 Jan 12 20:33	0°♒	
evening rise	2073 Jan 15 19:18	4°♒57'18	
	2073 Jan 31 10:48	0°♓	
asc. node	2073 Feb 01 18:33	1°♓39'24	
evening max el	2073 Feb 03 11:25	3°♓32'13	18°18'27
retrograde	2073 Feb 09 22:42	7°♓01'38	
evening set	2073 Feb 12 21:49	6°♓14'35	
inferior conj	2073 Feb 18 21:49	0°♓51'00	3°42'48
minimum elong	2073 Feb 18 21:20	0°♓52'24	3°42'48
	2073 Feb 19 15:52	30°♓℞	
min. Earth dist.	2073 Feb 21 07:47	28°♒08'31	0.63713 AU
morning rise	2073 Feb 24 20:03	24°♒45'25	
direct	2073 Mar 03 18:01	21°♒59'05	
desc. node	2073 Mar 12 00:28	25°♒09'37	
morning max el	2073 Mar 17 12:33	29°♒54'09	27°38'22
	2073 Mar 17 14:53	0°♓	
	2073 Apr 08 13:38	0°♈	
morning set	2073 Apr 21 06:22	23°♈09'52	
	2073 Apr 24 15:16	0°♉	
max. Earth dist.	2073 Apr 26 09:12	3°♉38'32	1.33106 AU
superior conj	2073 Apr 29 02:11	9°♉23'34	-0°17'20
minimum elong	2073 Apr 29 03:03	9°♉28'09	0°17'09
asc. node	2073 Apr 30 17:52	12°♉56'45	
evening rise	2073 May 06 04:42	24°♉38'23	
	2073 May 08 18:34	0°♊	
	2073 May 27 20:04	0°♋	
evening max el	2073 May 28 16:03	0°♋49'44	22°57'13
desc. node	2073 Jun 07 23:42	7°♋08'06	
retrograde	2073 Jun 11 00:53	7°♋29'20	
evening set	2073 Jun 14 11:19	7°♋03'25	
min. Earth dist.	2073 Jun 22 01:01	3°♋41'28	0.55494 AU
inferior conj	2073 Jun 23 14:58	2°♋46'34	-4°01'41
minimum elong	2073 Jun 23 07:24	2°♋57'33	3°59'59
	2073 Jun 28 21:50	30°♋℞♊	
morning rise	2073 Jul 02 05:56	28°♊54'05	
direct	2073 Jul 05 02:18	28°♊34'57	
	2073 Jul 10 21:41	0°♋	
morning max el	2073 Jul 16 01:15	3°♋39'34	20°40'23
asc. node	2073 Jul 27 17:07	19°♋40'19	
	2073 Aug 02 03:20	0°♌	
morning set	2073 Aug 04 03:13	4°♌03'15	
superior conj	2073 Aug 11 16:01	19°♌37'17	1°44'51
minimum elong	2073 Aug 11 15:20	19°♌33'46	1°44'49
max. Earth dist.	2073 Aug 16 10:58	29°♌11'44	1.35985 AU
	2073 Aug 16 20:53	0°♍	
evening rise	2073 Aug 20 12:06	6°♍54'23	
	2073 Sep 03 00:54	0°♎	
desc. node	2073 Sep 03 23:05	1°♎26'00	
evening max el	2073 Sep 25 03:43	28°♎48'45	26°14'23
	2073 Sep 26 10:02	0°♏	
retrograde	2073 Oct 07 20:01	5°♏58'51	
evening set	2073 Oct 14 04:14	3°♏21'19	
	2073 Oct 17 10:57	30°♏℞♎	
min. Earth dist.	2073 Oct 18 08:37	28°♎55'09	0.66476 AU
inferior conj	2073 Oct 19 20:31	27°♎04'29	-1°18'16
minimum elong	2073 Oct 19 22:36	26°♎58'06	1°17'24
asc. node	2073 Oct 23 16:18	22°♎48'04	
morning rise	2073 Oct 25 17:25	21°♎15'15	
direct	2073 Oct 28 19:12	20°♎21'22	
morning max el	2073 Nov 04 14:07	24°♎07'01	18°46'51
	2073 Nov 09 11:25	0°♏	
morning set	2073 Nov 25 21:54	25°♏07'13	
	2073 Nov 29 00:07	0°♐	
desc. node	2073 Nov 30 22:22	3°♐02'12	
max. Earth dist.	2073 Dec 11 10:13	19°♐31'16	1.45079 AU
superior conj	2073 Dec 12 05:42	20°♐47'51	-1°11'04
minimum elong	2073 Dec 11 21:24	20°♐15'13	1°10'06
	2073 Dec 18 01:48	0°♑	
evening rise	2073 Dec 27 18:05	15°♑26'45	
	2074 Jan 05 19:28	0°♒	
evening max el	2074 Jan 17 22:32	16°♒57'58	18°47'47
asc. node	2074 Jan 19 15:35	18°♒32'58	
retrograde	2074 Jan 24 16:03	20°♒44'17	
evening set	2074 Jan 27 21:02	19°♒45'24	
inferior conj	2074 Feb 02 13:47	14°♒04'25	3°31'10
minimum elong	2074 Feb 02 11:59	14°♒09'59	3°30'57
min. Earth dist.	2074 Feb 04 08:15	11°♒54'08	0.65321 AU
morning rise	2074 Feb 08 02:31	7°♒54'02	
direct	2074 Feb 14 18:01	5°♒02'05	
desc. node	2074 Feb 26 21:32	11°♒45'25	
morning max el	2074 Feb 27 22:18	12°♒46'18	26°54'48
	2074 Mar 13 19:12	0°♓	
	2074 Apr 01 04:08	0°♈	
morning set	2074 Apr 04 17:08	6°♈38'43	
max. Earth dist.	2074 Apr 09 02:54	15°♈18'43	1.34226 AU
superior conj	2074 Apr 13 03:55	23°♈36'23	-0°45'20
minimum elong	2074 Apr 13 06:13	23°♈48'21	0°44'53
	2074 Apr 16 04:58	0°♉	
asc. node	2074 Apr 17 14:55	2°♉59'20	
evening rise	2074 Apr 20 14:45	9°♉16'50	
	2074 May 01 14:43	0°♊	
evening max el	2074 May 10 12:08	11°♊30'03	21°25'04
retrograde	2074 May 22 15:25	17°♊26'14	
evening set	2074 May 25 00:11	17°♊13'27	
desc. node	2074 May 25 20:44	17°♊02'48	
inferior conj	2074 Jun 03 09:51	13°♊13'34	-2°25'53
minimum elong	2074 Jun 03 03:17	13°♊22'47	2°23'42
min. Earth dist.	2074 Jun 03 13:08	13°♊08'58	0.54906 AU
morning rise	2074 Jun 12 06:56	9°♊15'57	
direct	2074 Jun 15 12:50	8°♊53'00	
morning max el	2074 Jun 28 01:35	14°♊49'08	22°12'00
	2074 Jul 09 15:40	0°♋	
asc. node	2074 Jul 14 14:10	8°♋53'49	
morning set	2074 Jul 19 13:10	18°♋53'27	
	2074 Jul 24 19:00	0°♌	
superior conj	2074 Jul 26 17:59	4°♌08'54	1°38'10
minimum elong	2074 Jul 26 16:12	3°♌59'30	1°38'01
max. Earth dist.	2074 Jul 30 02:34	11°♌08'39	1.34447 AU
evening rise	2074 Aug 03 18:07	20°♌26'12	

	2074 Aug 08	20:27	0°♍	
desc. node	2074 Aug 21	20:07	21°♍22'02	
	2074 Aug 27	23:28	0°♎	
evening max el	2074 Sep 07	16:04	12°♎21'42	27°02'26
retrograde	2074 Sep 20	22:02	19°♎39'06	
evening set	2074 Sep 27	18:09	16°♎55'45	
min. Earth dist.	2074 Oct 01	15:46	13°♎05'54	0.65334 AU
inferior conj	2074 Oct 03	15:46	10°♎49'11	-2°16'53
minimum elong	2074 Oct 03	19:26	10°♎38'44	2°15'29
morning rise	2074 Oct 09	21:30	5°♎12'37	
asc. node	2074 Oct 10	13:21	4°♎55'22	
direct	2074 Oct 12	15:33	4°♎31'33	
morning max el	2074 Oct 19	04:11	8°♎03'00	18°11'39
	2074 Nov 03	05:12	0°♏	
morning set	2074 Nov 06	17:25	5°♏46'03	
desc. node	2074 Nov 17	19:26	23°♏44'42	
superior conj	2074 Nov 21	08:53	29°♏24'24	-0°23'46
minimum elong	2074 Nov 21	05:50	29°♏12'20	0°23'21
	2074 Nov 21	17:53	0°♐	
max. Earth dist.	2074 Nov 24	05:15	3°♐54'12	1.45047 AU
evening rise	2074 Dec 07	18:20	25°♐03'19	
	2074 Dec 10	22:42	0°♑	
greatest brilliancy	2074 Dec 20	02:03	14°♑03'54	-0.7m
	2074 Dec 31	19:35	0°♒	
evening max el	2075 Jan 01	06:02	0°♒27'25	19°33'52
asc. node	2075 Jan 06	12:37	4°♒17'55	
retrograde	2075 Jan 08	12:53	4°♒40'07	
evening set	2075 Jan 12	01:07	3°♒28'01	
	2075 Jan 15	14:35	30°℞♑	
inferior conj	2075 Jan 17	13:09	27°♑31'57	3°07'00
minimum elong	2075 Jan 17	10:39	27°♑40'06	3°06'27
min. Earth dist.	2075 Jan 18	16:56	26°♑01'00	0.66526 AU
morning rise	2075 Jan 22	19:57	21°♑19'18	
direct	2075 Jan 28	23:54	18°♑34'51	
morning max el	2075 Feb 10	07:30	25°♑54'09	25°46'25
desc. node	2075 Feb 13	18:36	29°♑38'34	
	2075 Feb 14	02:03	0°♒	
	2075 Mar 07	08:18	0°♓	
morning set	2075 Mar 18	13:32	19°♓21'01	
max. Earth dist.	2075 Mar 22	09:02	26°♓29'40	1.35803 AU
	2075 Mar 24	04:38	0°♈	
superior conj	2075 Mar 27	21:46	7°♈21'27	-1°12'42
minimum elong	2075 Mar 28	01:23	7°♈39'35	1°12'07
asc. node	2075 Apr 04	11:57	22°♈52'21	
evening rise	2075 Apr 04	21:07	23°♈39'08	
	2075 Apr 08	00:59	0°♉	
evening max el	2075 Apr 22	19:16	22°♉44'23	20°06'58
retrograde	2075 May 03	05:40	27°♉47'16	
evening set	2075 May 05	06:17	27°♉36'42	
desc. node	2075 May 12	17:45	24°♉31'41	
inferior conj	2075 May 14	06:24	23°♉37'40	-0°26'44
minimum elong	2075 May 14	05:09	23°♉39'31	0°26'15
min. Earth dist.	2075 May 16	02:18	22°♉32'15	0.55284 AU
morning rise	2075 May 23	02:17	19°♉16'29	
direct	2075 May 27	01:56	18°♉41'51	
morning max el	2075 Jun 09	17:59	25°♉25'27	23°53'32
	2075 Jun 14	00:47	0°♊	
asc. node	2075 Jul 01	11:14	28°♊30'15	
	2075 Jul 02	04:47	0°♋	
morning set	2075 Jul 04	00:47	3°♋49'07	
superior conj	2075 Jul 11	01:18	18°♋56'12	1°25'54
minimum elong	2075 Jul 10	22:58	18°♋43'37	1°25'37
max. Earth dist.	2075 Jul 13	03:35	23°♋26'07	1.33308 AU
	2075 Jul 16	06:29	0°♌	
evening rise	2075 Jul 18	11:47	4°♌32'07	
	2075 Aug 01	13:09	0°♍	
desc. node	2075 Aug 08	17:06	10°♍47'05	
evening max el	2075 Aug 21	03:28	25°♍36'18	27°25'03
	2075 Aug 26	13:23	0°♎	
retrograde	2075 Sep 03	17:53	2°♎53'51	
evening set	2075 Sep 10	21:42	0°♎14'04	
	2075 Sep 11	05:08	30°℞♍	
min. Earth dist.	2075 Sep 14	13:52	26°♍58'22	0.63841 AU
inferior conj	2075 Sep 17	02:31	24°♍22'01	-3°13'53
minimum elong	2075 Sep 17	07:28	24°♍09'12	3°12'18
morning rise	2075 Sep 23	18:23	19°♍01'37	
direct	2075 Sep 26	07:14	18°♍29'47	
asc. node	2075 Sep 27	10:25	18°♍36'14	
morning max el	2075 Oct 02	20:18	21°♍55'24	17°53'45
	2075 Oct 09	01:33	0°♎	
morning set	2075 Oct 19	15:43	17°♎42'41	
	2075 Oct 26	20:38	0°♏	
superior conj	2075 Nov 01	05:56	8°♏56'14	0°23'11
minimum elong	2075 Nov 01	08:25	9°♏06'24	0°22'49
desc. node	2075 Nov 04	16:27	14°♏31'06	
max. Earth dist.	2075 Nov 06	23:27	18°♏11'27	1.44289 AU
	2075 Nov 14	11:44	0°♐	
evening rise	2075 Nov 17	04:12	4°♐09'06	
	2075 Dec 04	10:43	0°♑	
evening max el	2075 Dec 15	08:22	13°♑57'39	20°34'30
retrograde	2075 Dec 23	10:47	18°♑44'26	
asc. node	2075 Dec 24	09:39	18°♑39'22	
evening set	2075 Dec 27	07:54	17°♑17'43	
inferior conj	2076 Jan 01	17:15	11°♑09'12	2°33'10
minimum elong	2076 Jan 01	14:39	11°♑18'05	2°32'23
min. Earth dist.	2076 Jan 02	07:52	10°♑19'24	0.67328 AU
morning rise	2076 Jan 06	21:14	4°♑56'03	
direct	2076 Jan 12	10:53	2°♑28'16	
morning max el	2076 Jan 23	15:55	9°♑09'25	24°22'54
desc. node	2076 Jan 31	15:39	18°♑26'08	
	2076 Feb 09	02:25	0°♒	
	2076 Feb 28	00:01	0°♓	
morning set	2076 Feb 28	13:51	1°♓00'14	
max. Earth dist.	2076 Mar 03	06:20	7°♓33'17	1.37765 AU
superior conj	2076 Mar 10	04:19	20°♓28'35	-1°37'21
minimum elong	2076 Mar 10	08:37	20°♓49'18	1°36'50
	2076 Mar 15	01:08	0°♈	
evening rise	2076 Mar 18	21:17	7°♈37'19	
asc. node	2076 Mar 21	08:58	12°♈30'16	
	2076 Mar 31	14:39	0°♉	
evening max el	2076 Apr 04	13:45	4°♉37'37	19°07'43
retrograde	2076 Apr 13	08:45	8°♉53'19	
evening set	2076 Apr 15	12:00	8°♉39'17	
inferior conj	2076 Apr 23	17:43	4°♉27'05	1°21'58
minimum elong	2076 Apr 23	20:47	4°♉21'49	1°20'57
min. Earth dist.	2076 Apr 26	17:25	2°♉25'14	0.56538 AU
desc. node	2076 Apr 28	14:47	1°♉14'23	
	2076 Apr 30	23:27	30°℞♈	
morning rise	2076 May 02	02:34	29°♈31'36	
direct	2076 May 07	02:29	28°♈33'22	
	2076 May 13	05:29	0°♉	
morning max el	2076 May 21	08:26	5°♉52'09	25°31'45
	2076 Jun 07	21:25	0°♊	
asc. node	2076 Jun 17	08:16	18°♊22'28	
morning set	2076 Jun 17	12:27	18°♊44'34	
	2076 Jun 22	17:29	0°♋	
superior conj	2076 Jun 24	11:45	3°♋51'40	1°09'03
minimum elong	2076 Jun 24	09:24	3°♋38'44	1°08'41

max. Earth dist.	2076 Jun	25	11:40	6°♋02'26	1.32563 AU				2077 Jun	14	02:26	0°♋	
evening rise	2076 Jul	01	13:37	19°♋01'33			evening rise		2077 Jun	15	20:56	3°♋45'48	
	2076 Jul	07	02:15	0°♌					2077 Jun	29	21:52	0°♌	
desc. node	2076 Jul	25	14:06	29°♌28'26			desc. node		2077 Jul	12	11:06	17°♌07'39	
	2076 Jul	26	00:02	0°♍			evening max el		2077 Jul	15	13:23	20°♌18'17	26°35'22
evening max el	2076 Aug	02	11:24	8°♍18'54	27°16'48		retrograde		2077 Jul	29	12:45	27°♌31'07	
retrograde	2076 Aug	16	07:05	15°♍34'16			evening set		2077 Aug	05	06:06	25°♌36'26	
evening set	2076 Aug	23	11:13	13°♍10'18			min. Earth dist.		2077 Aug	09	02:53	23°♌00'06	0.59993 AU
min. Earth dist.	2076 Aug	27	01:28	10°♍21'24	0.62025 AU		inferior conj		2077 Aug	12	10:02	20°♌21'43	-4°43'43
inferior conj	2076 Aug	30	01:46	7°♍35'56	-4°05'06		minimum elong		2077 Aug	12	13:56	20°♌13'51	4°43'12
minimum elong	2076 Aug	30	07:07	7°♍23'39	4°03'51		morning rise		2077 Aug	19	23:49	15°♌43'15	
morning rise	2076 Sep	06	04:33	2°♍35'14			direct		2077 Aug	22	10:09	15°♌21'32	
direct	2076 Sep	08	14:49	2°♍09'40			morning max el		2077 Aug	29	22:52	19°♌01'29	18°13'37
asc. node	2076 Sep	13	07:28	3°♍48'17			asc. node		2077 Aug	31	04:31	20°♌18'03	
morning max el	2076 Sep	15	11:35	5°♍37'44	17°54'02				2077 Sep	07	00:08	0°♍	
morning set	2076 Oct	01	10:39	0°♎38'25			morning set		2077 Sep	14	20:27	14°♍16'32	
	2076 Oct	01	02:10	0°♎					2077 Sep	23	06:08	0°♎	
superior conj	2076 Oct	12	05:58	19°♎48'08	1°00'50		superior conj		2077 Sep	24	07:09	1°♎53'51	1°26'30
minimum elong	2076 Oct	12	10:30	20°♎07'37	1°00'17		minimum elong		2077 Sep	24	10:58	2°♎11'09	1°26'09
	2076 Oct	18	07:23	0°♏			max. Earth dist.		2077 Oct	01	21:44	15°♎15'17	1.41070 AU
max. Earth dist.	2076 Oct	19	13:31	2°♏03'41	1.42902 AU		evening rise		2077 Oct	06	19:41	23°♎25'53	
desc. node	2076 Oct	21	13:27	5°♏18'26			desc. node		2077 Oct	08	10:28	26°♎02'51	
evening rise	2076 Oct	26	15:32	13°♏23'45					2077 Oct	10	22:00	0°♏	
	2076 Nov	06	13:11	0°♐					2077 Oct	31	12:54	0°♐	
evening max el	2076 Nov	27	05:00	27°♐28'41	21°46'27		evening max el		2077 Nov	09	20:45	11°♐01'25	23°05'18
	2076 Nov	29	22:29	0°♑			retrograde		2077 Nov	20	02:21	17°♐05'38	
retrograde	2076 Dec	06	07:48	2°♑54'17			evening set		2077 Nov	24	22:35	15°♐06'13	
asc. node	2076 Dec	10	06:40	1°♑28'45			asc. node		2077 Nov	27	03:43	12°♐51'38	
evening set	2076 Dec	10	15:37	1°♑11'37			inferior conj		2077 Nov	30	07:30	8°♐43'27	1°03'58
	2076 Dec	11	22:53	30°℞♐			minimum elong		2077 Nov	30	06:04	8°♐48'24	1°03'23
inferior conj	2076 Dec	16	00:00	24°♐54'04	1°51'41		min. Earth dist.		2077 Nov	29	23:38	9°♐10'33	0.67824 AU
minimum elong	2076 Dec	15	21:46	25°♐01'47	1°50'51		morning rise		2077 Dec	05	13:27	2°♐34'33	
min. Earth dist.	2076 Dec	16	02:54	24°♐43'59	0.67751 AU		direct		2077 Dec	09	21:24	0°♐51'03	
morning rise	2076 Dec	21	03:48	18°♐42'02			morning max el		2077 Dec	18	15:58	5°♐58'49	21°29'35
direct	2076 Dec	26	02:18	16°♐35'45			desc. node		2078 Jan	04	09:43	27°♐47'22	
morning max el	2077 Jan	05	01:38	22°♐30'26	22°54'20				2078 Jan	05	21:54	0°♑	
	2077 Jan	11	14:08	0°♑			morning set		2078 Jan	19	05:12	20°♑20'36	
desc. node	2077 Jan	17	12:41	7°♑52'54					2078 Jan	25	05:00	0°♒	
	2077 Feb	01	10:54	0°♒			max. Earth dist.		2078 Jan	26	01:48	1°♒25'32	1.41968 AU
morning set	2077 Feb	08	12:03	11°♒21'42									
max. Earth dist.	2077 Feb	13	01:43	19°♒04'06	1.39913 AU		superior conj		2078 Feb	02	13:46	14°♒06'14	-2°04'57
	2077 Feb	19	06:31	0°♓			minimum elong		2078 Feb	02	14:21	14°♒08'44	2°04'58
									2078 Feb	11	12:02	0°♓	
superior conj	2077 Feb	20	19:22	2°♓47'36	-1°56'10		evening rise		2078 Feb	13	14:44	3°♓51'08	
minimum elong	2077 Feb	20	22:58	3°♓04'08	1°55'56		asc. node		2078 Feb	23	03:00	20°♓37'52	
evening rise	2077 Mar	02	12:23	21°♓04'13			evening max el		2078 Mar	02	02:57	0°♈00'37	18°09'33
	2077 Mar	07	06:18	0°♈					2078 Mar	02	02:42	0°♈	
asc. node	2077 Mar	08	05:58	1°♈47'43			retrograde		2078 Mar	08	21:44	3°♈26'49	
evening max el	2077 Mar	18	17:21	17°♈05'46	18°28'37		evening set		2078 Mar	11	12:38	2°♈56'34	
retrograde	2077 Mar	26	06:29	20°♈48'42					2078 Mar	16	03:08	30°℞♓	
evening set	2077 Mar	28	15:35	20°♈27'41			inferior conj		2078 Mar	18	06:45	28°♓04'28	3°24'29
inferior conj	2077 Apr	05	02:02	15°♈56'19	2°39'47		minimum elong		2078 Mar	18	09:16	27°♓58'37	3°24'08
minimum elong	2077 Apr	05	05:57	15°♈48'26	2°38'48		min. Earth dist.		2078 Mar	21	13:34	25°♓02'46	0.60544 AU
min. Earth dist.	2077 Apr	08	12:27	13°♈12'37	0.58408 AU		morning rise		2078 Mar	25	03:52	22°♓16'21	
morning rise	2077 Apr	12	17:25	10°♈29'25			direct		2078 Mar	31	20:11	20°♓07'09	
desc. node	2077 Apr	15	11:49	9°♈23'38			desc. node		2078 Apr	02	08:52	20°♓13'37	
direct	2077 Apr	18	17:13	8°♈56'33			morning max el		2078 Apr	15	02:35	27°♓59'32	27°38'23
morning max el	2077 May	03	02:29	16°♈37'26	26°50'49				2078 Apr	17	01:15	0°♈	
	2077 May	14	01:50	0°♉					2078 May	07	18:41	0°♉	
	2077 May	31	05:12	0°♊			morning set		2078 May	17	05:16	18°♉11'58	
morning set	2077 Jun	01	22:32	3°♊34'10			asc. node		2078 May	22	02:19	28°♉33'39	
asc. node	2077 Jun	04	05:17	8°♊25'07					2078 May	22	18:11	0°♊	
							max. Earth dist.		2078 May	23	11:08	1°♊32'32	1.32235 AU
superior conj	2077 Jun	08	23:30	18°♊49'00	0°48'25								
minimum elong	2077 Jun	08	21:34	18°♊38'23	0°48'03		superior conj		2078 May	24	10:51	3°♊42'25	0°24'40
max. Earth dist.	2077 Jun	08	23:24	18°♊48'28	1.32205 AU		minimum elong		2078 May	24	09:45	3°♊36'24	0°24'26

evening rise	2078 May 31 07:30	18°♊37'43	
	2078 Jun 05 21:37	0°♋	
	2078 Jun 25 19:31	0°♌	
evening max el	2078 Jun 27 08:26	1°♌32'07	25°23'59
desc. node	2078 Jun 29 08:07	3°♌19'26	
retrograde	2078 Jul 11 08:47	8°♌40'00	
evening set	2078 Jul 17 02:03	7°♌23'45	
min. Earth dist.	2078 Jul 21 20:27	4°♌41'40	0.57960 AU
inferior conj	2078 Jul 24 23:57	2°♌30'33	-4°58'51
minimum elong	2078 Jul 24 23:52	2°♌30'42	4°58'50
	2078 Jul 28 20:34	30°℞♋	
morning rise	2078 Aug 02 00:09	28°♋14'21	
direct	2078 Aug 04 13:01	27°♋54'42	
	2078 Aug 10 17:09	0°♌	
morning max el	2078 Aug 13 02:57	1°♌57'33	18°53'47
asc. node	2078 Aug 18 01:34	7°♌50'31	
morning set	2078 Aug 29 16:45	28°♌25'39	
	2078 Aug 30 11:57	0°♍	
superior conj	2078 Sep 07 04:10	14°♍58'35	1°40'51
minimum elong	2078 Sep 07 06:10	15°♍08'12	1°40'44
max. Earth dist.	2078 Sep 14 01:55	27°♍44'27	1.39035 AU
	2078 Sep 15 08:29	0°♎	
evening rise	2078 Sep 17 23:46	4°♎34'58	
desc. node	2078 Sep 25 07:28	16°♎40'49	
	2078 Oct 04 00:53	0°♏	
evening max el	2078 Oct 23 09:40	24°♏38'17	24°24'54
	2078 Oct 30 05:42	0°♐	
retrograde	2078 Nov 03 17:08	1°♐15'14	
	2078 Nov 07 18:32	30°℞♏	
evening set	2078 Nov 09 03:12	28°♏59'12	
min. Earth dist.	2078 Nov 13 19:38	23°♏37'01	0.67567 AU
asc. node	2078 Nov 14 00:47	23°♏19'45	
inferior conj	2078 Nov 14 13:59	22°♏35'29	0°11'21
minimum elong	2078 Nov 14 13:42	22°♏36'25	0°11'14
transit middle	2078 Nov 14 13:42	22°♏36'25	0°11'14
transit begin	2078 Nov 14 11:44	22°♏43'04	
transit end	2078 Nov 14 15:41	22°♏29'48	
morning rise	2078 Nov 20 00:14	16°♏32'04	
direct	2078 Nov 23 19:00	15°♏10'07	
morning max el	2078 Dec 01 13:35	19°♏37'37	20°15'04
	2078 Dec 09 23:29	0°♐	
desc. node	2078 Dec 22 06:45	18°♐01'51	
morning set	2078 Dec 29 02:39	28°♐29'14	
	2078 Dec 30 02:05	0°♑	
max. Earth dist.	2079 Jan 08 09:49	14°♑41'35	1.43657 AU
superior conj	2079 Jan 14 06:48	24°♑14'21	-1°58'43
minimum elong	2079 Jan 14 02:05	23°♑54'55	1°58'29
	2079 Jan 17 18:02	0°♒	
evening rise	2079 Jan 27 00:05	15°♒49'17	
	2079 Feb 04 05:57	0°♓	
asc. node	2079 Feb 10 00:04	8°♓51'46	
evening max el	2079 Feb 13 15:20	13°♓12'53	18°09'52
retrograde	2079 Feb 20 02:31	16°♓37'08	
evening set	2079 Feb 22 22:43	15°♓56'21	
inferior conj	2079 Mar 01 04:17	10°♓43'52	3°42'09
minimum elong	2079 Mar 01 04:49	10°♓42'28	3°42'08
min. Earth dist.	2079 Mar 03 22:55	7°♓48'51	0.62629 AU
morning rise	2079 Mar 07 09:48	4°♓43'13	
direct	2079 Mar 14 08:30	2°♓06'34	
desc. node	2079 Mar 20 05:56	3°♓43'54	
morning max el	2079 Mar 28 08:13	10°♓02'14	27°48'55
	2079 Apr 12 22:05	0°♈	
	2079 Apr 30 00:36	0°♉	
morning set	2079 May 01 06:29	2°♉29'48	
max. Earth dist.	2079 May 06 18:56	14°♉00'37	1.32669 AU
superior conj	2079 May 08 19:59	18°♉24'52	-0°01'29
minimum elong	2079 May 08 20:03	18°♉25'15	0°01'29
behind sun begin	2079 May 08 14:53	17°♉57'12	
behind sun end	2079 May 09 01:14	18°♉53'19	
asc. node	2079 May 08 23:21	18°♉43'06	
	2079 May 14 04:08	0°♊	
evening rise	2079 May 15 19:20	3°♊29'24	
	2079 May 30 03:47	0°♋	
evening max el	2079 Jun 08 22:36	12°♋10'13	23°52'45
desc. node	2079 Jun 16 05:09	17°♋29'21	
retrograde	2079 Jun 22 16:29	19°♋04'18	
evening set	2079 Jun 26 23:25	18°♋23'47	
min. Earth dist.	2079 Jul 03 09:14	15°♋20'12	0.56230 AU
inferior conj	2079 Jul 05 17:37	13°♋54'14	-4°36'18
minimum elong	2079 Jul 05 12:08	14°♋02'39	4°35'30
morning rise	2079 Jul 14 03:29	9°♋56'09	
direct	2079 Jul 16 20:52	9°♋37'07	
morning max el	2079 Jul 26 20:55	14°♋15'25	19°55'26
asc. node	2079 Aug 04 22:38	26°♋10'55	
	2079 Aug 07 03:34	0°♌	
morning set	2079 Aug 13 20:15	12°♌56'19	
superior conj	2079 Aug 21 15:38	28°♌46'41	1°45'40
minimum elong	2079 Aug 21 15:50	28°♌47'37	1°45'39
	2079 Aug 22 06:22	0°♍	
max. Earth dist.	2079 Aug 27 06:46	9°♍43'50	1.37040 AU
evening rise	2079 Aug 31 02:38	16°♍48'18	
	2079 Sep 07 18:00	0°♎	
desc. node	2079 Sep 12 04:30	7°♎07'40	
	2079 Sep 28 10:45	0°♏	
evening max el	2079 Oct 05 21:46	8°♏18'36	25°38'08
retrograde	2079 Oct 18 03:21	15°♏18'54	
evening set	2079 Oct 24 03:46	12°♏48'05	
min. Earth dist.	2079 Oct 28 12:26	8°♏01'10	0.66975 AU
inferior conj	2079 Oct 29 17:42	6°♏27'43	-0°44'52
minimum elong	2079 Oct 29 18:51	6°♏24'01	0°44'21
asc. node	2079 Oct 31 21:51	3°♏46'52	
morning rise	2079 Nov 04 10:12	0°♏32'33	
	2079 Nov 05 10:17	30°℞♎	
direct	2079 Nov 07 17:39	29°♎29'21	
	2079 Nov 10 02:52	0°♏	
morning max el	2079 Nov 14 19:00	3°♏26'55	19°14'34
	2079 Dec 03 16:11	0°♐	
morning set	2079 Dec 08 04:32	7°♐00'22	
desc. node	2079 Dec 09 03:47	8°♐30'49	
max. Earth dist.	2079 Dec 22 00:52	28°♐39'57	1.44760 AU
	2079 Dec 22 21:08	0°♑	
superior conj	2079 Dec 24 22:29	3°♑15'27	-1°33'38
minimum elong	2079 Dec 24 13:44	2°♑40'45	1°32'47
evening rise	2080 Jan 08 12:17	26°♑52'19	
	2080 Jan 10 09:42	0°♒	
asc. node	2080 Jan 27 21:08	26°♒18'40	
evening max el	2080 Jan 28 03:38	26°♒35'24	18°28'50
	2080 Feb 02 07:17	0°♓	
retrograde	2080 Feb 03 16:28	0°♓10'32	
	2080 Feb 05 01:25	30°℞♒	
evening set	2080 Feb 06 18:04	29°♒18'23	
inferior conj	2080 Feb 12 14:36	23°♒47'00	3°39'38
minimum elong	2080 Feb 12 13:28	23°♒50'18	3°39'34
min. Earth dist.	2080 Feb 14 17:51	21°♒17'15	0.64442 AU
morning rise	2080 Feb 18 08:20	17°♒39'13	
direct	2080 Feb 25 04:20	14°♒49'02	
desc. node	2080 Mar 06 02:58	19°♒22'19	
morning max el	2080 Mar 09 17:21	22°♒40'07	27°23'34
	2080 Mar 16 05:03	0°♓	
	2080 Apr 05 03:48	0°♈	

morning set	2080 Apr 13	23:30	16°♈19'34	
max. Earth dist.	2080 Apr 18	19:04	26°♈01'47	1.33532 AU
	2080 Apr 20	16:46	0°♉	
superior conj	2080 Apr 22	01:03	2°♉50'25	-0°29'09
minimum elong	2080 Apr 22	02:31	2°♉58'10	0°28'51
asc. node	2080 Apr 24	20:24	8°♉49'34	
evening rise	2080 Apr 29	06:37	18°♉14'48	
	2080 May 05	02:35	0°♊	
evening max el	2080 May 20	14:13	22°♊40'05	22°16'43
desc. node	2080 Jun 02	02:11	29°♊02'48	
retrograde	2080 Jun 02	12:01	29°♊03'11	
evening set	2080 Jun 05	09:51	28°♊44'27	
min. Earth dist.	2080 Jun 13	20:34	25°♊06'29	0.55142 AU
inferior conj	2080 Jun 14	18:01	24°♊36'15	-3°25'52
minimum elong	2080 Jun 14	10:05	24°♊47'26	3°23'41
morning rise	2080 Jun 23	12:13	20°♊44'21	
direct	2080 Jun 26	12:07	20°♊24'09	
morning max el	2080 Jul 08	03:24	25°♊49'31	21°17'27
	2080 Jul 12	00:50	0°♋	
asc. node	2080 Jul 21	19:40	15°♋07'48	
morning set	2080 Jul 28	04:25	27°♋41'20	
	2080 Jul 29	07:07	0°♌	
superior conj	2080 Aug 04	13:17	13°♌05'38	1°42'45
minimum elong	2080 Aug 04	12:04	12°♌59'20	1°42'42
max. Earth dist.	2080 Aug 08	17:31	21°♌35'55	1.35290 AU
evening rise	2080 Aug 13	00:04	29°♌54'57	
	2080 Aug 13	01:07	0°♍	
desc. node	2080 Aug 29	01:32	27°♍17'20	
	2080 Aug 30	20:56	0°♎	
evening max el	2080 Sep 17	09:57	21°♎56'24	26°37'26
retrograde	2080 Sep 30	08:24	29°♎10'13	
evening set	2080 Oct 06	22:14	26°♎29'05	
min. Earth dist.	2080 Oct 10	23:38	22°♎18'43	0.66038 AU
inferior conj	2080 Oct 12	16:38	20°♎16'20	-1°43'09
minimum elong	2080 Oct 12	19:24	20°♎08'06	1°42'02
asc. node	2080 Oct 17	18:54	15°♎06'55	
morning rise	2080 Oct 18	17:08	14°♎32'20	
direct	2080 Oct 21	15:23	13°♎44'20	
morning max el	2080 Oct 28	06:41	17°♎22'29	18°29'50
	2080 Nov 06	17:05	0°♏	
morning set	2080 Nov 17	06:59	16°♏48'29	
desc. node	2080 Nov 25	00:49	29°♏09'26	
	2080 Nov 25	13:35	0°♐	
superior conj	2080 Dec 03	00:06	11°♐43'29	-0°51'43
minimum elong	2080 Dec 02	17:33	11°♐17'45	0°50'53
max. Earth dist.	2080 Dec 03	19:32	12°♐59'48	1.45154 AU
	2080 Dec 14	15:14	0°♑	
evening rise	2080 Dec 19	01:04	6°♑57'54	
greatest brilliancy	2080 Dec 28	12:31	21°♑55'41	-0.8m
	2081 Jan 02	19:29	0°♒	
evening max el	2081 Jan 10	13:20	10°♒02'23	19°05'26
asc. node	2081 Jan 13	18:11	12°♒44'39	
retrograde	2081 Jan 17	11:44	13°♒59'07	
evening set	2081 Jan 20	19:37	12°♒54'43	
inferior conj	2081 Jan 26	10:02	7°♒06'43	3°22'16
minimum elong	2081 Jan 26	07:52	7°♒13'36	3°21'54
min. Earth dist.	2081 Jan 27	21:59	5°♒12'53	0.65877 AU
morning rise	2081 Jan 31	19:49	0°♒55'00	
	2081 Feb 01	22:53	30°℞♑	
direct	2081 Feb 07	06:42	28°♑05'11	
	2081 Feb 13	05:24	0°♒	
morning max el	2081 Feb 20	03:16	5°♒40'45	26°28'20
desc. node	2081 Feb 21	00:00	6°♒33'57	
	2081 Mar 10	20:11	0°♓	
morning set	2081 Mar 28	04:43	29°♓30'02	
	2081 Mar 28	11:04	0°♈	
max. Earth dist.	2081 Apr 01	08:03	7°♈28'56	1.34842 AU
superior conj	2081 Apr 05	23:43	16°♈51'52	-0°57'08
minimum elong	2081 Apr 06	02:36	17°♈06'44	0°56'35
asc. node	2081 Apr 11	17:28	28°♈48'37	
	2081 Apr 12	07:09	0°♉	
evening rise	2081 Apr 13	15:20	2°♉46'59	
	2081 Apr 29	09:12	0°♊	
evening max el	2081 May 02	14:29	3°♊32'30	20°49'43
retrograde	2081 May 14	01:20	9°♊06'59	
evening set	2081 May 16	04:33	8°♊56'06	
desc. node	2081 May 19	23:11	7°♊48'51	
inferior conj	2081 May 25	11:44	4°♊58'14	-1°36'11
minimum elong	2081 May 25	07:12	5°♊04'41	1°34'33
min. Earth dist.	2081 May 26	08:59	4°♊27'57	0.54944 AU
morning rise	2081 Jun 03	09:29	0°♊52'44	
direct	2081 Jun 06	21:31	0°♊26'19	
morning max el	2081 Jun 19	23:55	6°♊43'39	22°54'43
	2081 Jul 06	08:07	0°♋	
asc. node	2081 Jul 08	16:42	4°♋32'15	
morning set	2081 Jul 12	15:18	12°♋35'11	
superior conj	2081 Jul 19	17:52	27°♋45'44	1°33'35
minimum elong	2081 Jul 19	15:47	27°♋34'39	1°33'23
	2081 Jul 20	19:08	0°♌	
max. Earth dist.	2081 Jul 22	13:08	3°♌41'05	1.33909 AU
evening rise	2081 Jul 27	11:30	13°♌43'07	
	2081 Aug 05	06:04	0°♍	
desc. node	2081 Aug 15	22:32	17°♍02'12	
	2081 Aug 25	19:57	0°♎	
evening max el	2081 Aug 30	21:53	5°♎22'59	27°15'25
retrograde	2081 Sep 13	08:02	12°♎41'47	
evening set	2081 Sep 20	08:11	9°♎58'13	
min. Earth dist.	2081 Sep 24	03:05	6°♎23'40	0.64742 AU
inferior conj	2081 Sep 26	08:36	3°♎57'16	-2°41'27
minimum elong	2081 Sep 26	12:53	3°♎45'33	2°39'55
	2081 Sep 30	08:39	30°℞♍	
morning rise	2081 Oct 02	18:33	28°♍27'28	
asc. node	2081 Oct 04	15:55	27°♍53'52	
direct	2081 Oct 05	10:00	27°♍50'52	
	2081 Oct 10	11:25	0°♎	
morning max el	2081 Oct 11	22:04	1°♎18'52	18°01'53
morning set	2081 Oct 29	14:35	28°♎02'54	
	2081 Oct 30	18:33	0°♏	
desc. node	2081 Nov 11	21:52	19°♏54'29	
superior conj	2081 Nov 12	09:02	20°♏39'14	-0°03'09
minimum elong	2081 Nov 12	08:39	20°♏37'42	0°03'07
behind sun begin	2081 Nov 11	22:15	19°♏56'01	
behind sun end	2081 Nov 12	19:03	21°♏19'20	
max. Earth dist.	2081 Nov 16	14:17	27°♏21'44	1.44808 AU
	2081 Nov 18	06:26	0°♐	
evening rise	2081 Nov 28	17:42	16°♐17'38	
	2081 Dec 07	16:18	0°♑	
greatest brilliancy	2081 Dec 12	17:00	7°♑33'16	-0.6m
evening max el	2081 Dec 24	18:40	23°♑31'51	19°58'00
asc. node	2081 Dec 31	15:12	27°♑55'35	
retrograde	2082 Jan 01	09:21	27°♑58'46	
evening set	2082 Jan 05	01:03	26°♑40'46	
inferior conj	2082 Jan 10	11:42	20°♑38'55	2°53'42
minimum elong	2082 Jan 10	09:06	20°♑47'37	2°53'01
min. Earth dist.	2082 Jan 11	09:43	19°♑25'19	0.66913 AU
morning rise	2082 Jan 15	16:55	14°♑25'34	
direct	2082 Jan 21	14:54	11°♑47'15	
morning max el	2082 Feb 02	12:06	18°♑52'39	25°12'04

desc. node	2082 Feb 07 21:04	24°♑52'27	
	2082 Feb 11 22:29	0°♒	
	2082 Mar 03 22:08	0°♓	
morning set	2082 Mar 10 17:18	11°♓47'28	
max. Earth dist.	2082 Mar 14 09:28	18°♓31'13	1.36592 AU
	2082 Mar 20 08:49	0°♈	
superior conj	2082 Mar 20 13:09	0°♈21'27	-1°23'41
minimum elong	2082 Mar 20 17:10	0°♈41'18	1°23'05
evening rise	2082 Mar 28 19:21	16°♈59'23	
asc. node	2082 Mar 29 14:30	18°♈35'39	
	2082 Apr 04 12:50	0°♉	
evening max el	2082 Apr 15 02:35	15°♉03'21	19°39'26
retrograde	2082 Apr 24 19:42	19°♉44'51	
evening set	2082 Apr 26 20:25	19°♉33'28	
inferior conj	2082 May 05 13:18	15°♉30'26	0°22'20
minimum elong	2082 May 05 14:16	15°♉28'55	0°21'59
desc. node	2082 May 06 20:13	14°♉41'39	
min. Earth dist.	2082 May 07 23:12	13°♉59'38	0.55711 AU
morning rise	2082 May 14 05:30	10°♉54'43	
direct	2082 May 18 14:55	10°♉11'33	
morning max el	2082 Jun 01 14:47	17°♉12'53	24°36'41
	2082 Jun 12 01:03	0°♊	
asc. node	2082 Jun 25 13:44	24°♊16'10	
morning set	2082 Jun 27 03:07	27°♊31'33	
	2082 Jun 28 07:04	0°♋	
superior conj	2082 Jul 04 02:46	12°♋37'49	1°19'17
minimum elong	2082 Jul 04 00:22	12°♋24'45	1°18'57
max. Earth dist.	2082 Jul 05 17:17	16°♋06'31	1.32937 AU
evening rise	2082 Jul 11 09:00	28°♋00'37	
	2082 Jul 12 08:35	0°♌	
	2082 Jul 29 11:20	0°♍	
desc. node	2082 Aug 02 19:32	6°♍10'59	
evening max el	2082 Aug 13 08:05	18°♍25'51	27°25'33
retrograde	2082 Aug 27 01:27	25°♍43'18	
evening set	2082 Sep 03 06:18	23°♍08'38	
min. Earth dist.	2082 Sep 06 20:58	20°♍05'26	0.63103 AU
inferior conj	2082 Sep 09 14:51	17°♍23'25	-3°36'39
minimum elong	2082 Sep 09 20:08	17°♍10'24	3°35'08
morning rise	2082 Sep 16 11:19	12°♍10'57	
direct	2082 Sep 18 22:36	11°♍42'15	
asc. node	2082 Sep 21 12:57	12°♍14'42	
morning max el	2082 Sep 25 14:13	15°♍08'15	17°51'30
	2082 Oct 05 22:37	0°♎	
morning set	2082 Oct 11 22:27	10°♎27'03	
	2082 Oct 23 06:36	0°♏	
superior conj	2082 Oct 23 17:16	0°♏44'35	0°40'33
minimum elong	2082 Oct 23 21:04	1°♏00'26	0°40'02
desc. node	2082 Oct 29 18:53	10°♏41'53	
max. Earth dist.	2082 Oct 30 06:28	11°♏28'30	1.43770 AU
evening rise	2082 Nov 08 01:59	25°♏21'45	
	2082 Nov 11 02:24	0°♐	
	2082 Dec 01 19:23	0°♑	
evening max el	2082 Dec 07 18:36	7°♑02'45	21°04'01
retrograde	2082 Dec 16 07:03	12°♑05'44	
asc. node	2082 Dec 18 12:12	11°♑38'27	
evening set	2082 Dec 20 08:25	10°♑32'36	
inferior conj	2082 Dec 25 17:12	4°♑20'00	2°16'25
minimum elong	2082 Dec 25 14:41	4°♑28'36	2°15'34
min. Earth dist.	2082 Dec 26 02:46	3°♑47'02	0.67555 AU
	2082 Dec 29 00:53	30°℞♐	
morning rise	2082 Dec 30 20:46	28°♐06'58	
direct	2083 Jan 05 04:04	25°♐47'40	
	2083 Jan 13 13:40	0°♑	
morning max el	2083 Jan 15 20:32	2°♑09'50	23°45'09
desc. node	2083 Jan 25 18:08	13°♑58'33	
	2083 Feb 06 00:15	0°♒	
morning set	2083 Feb 20 07:14	22°♒55'31	
max. Earth dist.	2083 Feb 24 04:31	29°♒40'32	1.38667 AU
	2083 Feb 24 08:55	0°♓	
superior conj	2083 Mar 03 13:44	13°♓10'01	-1°46'16
minimum elong	2083 Mar 03 17:58	13°♓30'00	1°45'52
	2083 Mar 12 06:47	0°♈	
evening rise	2083 Mar 12 16:03	0°♈45'15	
asc. node	2083 Mar 16 11:32	8°♈05'47	
evening max el	2083 Mar 29 01:27	27°♈13'08	18°48'43
	2083 Apr 01 17:42	0°♉	
retrograde	2083 Apr 06 06:08	1°♉12'25	
evening set	2083 Apr 08 11:55	0°♉55'43	
	2083 Apr 11 00:51	30°℞♈	
inferior conj	2083 Apr 16 09:15	26°♈36'05	1°59'10
minimum elong	2083 Apr 16 13:05	26°♈29'04	1°58'01
min. Earth dist.	2083 Apr 19 15:45	24°♈13'53	0.57276 AU
desc. node	2083 Apr 23 17:15	21°♈47'03	
morning rise	2083 Apr 24 11:08	21°♈26'31	
direct	2083 Apr 29 22:04	20°♈14'11	
morning max el	2083 May 14 06:02	27°♈43'52	26°08'34
	2083 May 16 11:12	0°♉	
	2083 Jun 05 10:02	0°♊	
morning set	2083 Jun 11 14:19	12°♊25'11	
asc. node	2083 Jun 12 10:47	14°♊13'38	
superior conj	2083 Jun 18 14:00	27°♊35'00	1°00'45
minimum elong	2083 Jun 18 11:46	27°♊22'44	1°00'21
max. Earth dist.	2083 Jun 19 03:23	28°♊48'30	1.32364 AU
	2083 Jun 19 16:25	0°♋	
evening rise	2083 Jun 25 13:30	12°♋37'46	
	2083 Jul 04 11:45	0°♌	
desc. node	2083 Jul 20 16:31	24°♌28'41	
	2083 Jul 25 16:30	0°♍	
evening max el	2083 Jul 26 14:02	0°♍52'14	27°03'16
retrograde	2083 Aug 09 11:33	8°♍05'54	
evening set	2083 Aug 16 12:30	5°♍53'14	
min. Earth dist.	2083 Aug 20 04:20	3°♍11'26	0.61183 AU
inferior conj	2083 Aug 23 08:13	0°♍26'59	-4°23'35
minimum elong	2083 Aug 23 13:14	0°♍16'04	4°22'36
	2083 Aug 23 20:39	30°℞♌	
morning rise	2083 Aug 30 15:41	25°♌35'05	
direct	2083 Sep 02 01:39	25°♌11'22	
asc. node	2083 Sep 08 10:00	28°♌01'28	
morning max el	2083 Sep 09 04:07	28°♌43'28	17°59'48
	2083 Sep 10 09:23	0°♍	
morning set	2083 Sep 25 00:21	23°♍42'49	
	2083 Sep 28 10:19	0°♎	
superior conj	2083 Oct 05 04:29	12°♎09'05	1°13'12
minimum elong	2083 Oct 05 08:57	12°♎28'41	1°12'42
max. Earth dist.	2083 Oct 12 18:17	25°♎05'29	1.42175 AU
	2083 Oct 15 18:03	0°♏	
desc. node	2083 Oct 16 15:53	1°♏28'20	
evening rise	2083 Oct 18 19:02	4°♏53'11	
	2083 Nov 04 10:30	0°♐	
evening max el	2083 Nov 20 13:08	20°♐34'51	22°19'34
retrograde	2083 Nov 30 03:02	26°♐16'35	
evening set	2083 Dec 04 16:00	24°♐26'51	
asc. node	2083 Dec 05 09:15	23°♐48'54	
inferior conj	2083 Dec 10 00:28	18°♐06'53	1°32'06
minimum elong	2083 Dec 09 22:32	18°♐13'36	1°31'21
min. Earth dist.	2083 Dec 09 22:45	18°♐12'51	0.67830 AU
morning rise	2083 Dec 15 04:56	11°♐56'05	
direct	2083 Dec 19 21:14	9°♐59'20	

morning max el	2083 Dec 29 07:39	15°♐33'00	22°17'20
	2084 Jan 10 00:48	0°♑	
desc. node	2084 Jan 12 15:09	3°♑38'11	
	2084 Jan 30 01:07	0°♒	
morning set	2084 Jan 31 16:52	2°♒40'18	
max. Earth dist.	2084 Feb 06 01:35	11°♒32'32	1.40820 AU
superior conj	2084 Feb 13 20:40	25°♒05'04	-2°01'24
minimum elong	2084 Feb 13 23:19	25°♒16'55	2°01'19
	2084 Feb 16 14:00	0°♓	
evening rise	2084 Feb 24 02:13	13°♓56'09	
asc. node	2084 Mar 02 08:34	27°♓12'31	
	2084 Mar 04 00:13	0°♈	
evening max el	2084 Mar 11 08:01	9°♈53'37	18°18'05
retrograde	2084 Mar 18 11:46	13°♈27'24	
evening set	2084 Mar 20 23:33	13°♈02'30	
inferior conj	2084 Mar 28 02:32	8°♈22'03	3°02'29
minimum elong	2084 Mar 28 06:02	8°♈14'33	3°01'47
min. Earth dist.	2084 Mar 31 12:44	5°♈27'54	0.59308 AU
morning rise	2084 Apr 04 10:02	2°♈45'10	
desc. node	2084 Apr 09 14:19	1°♈00'13	
direct	2084 Apr 10 18:03	0°♈56'37	
morning max el	2084 Apr 25 02:24	8°♈42'28	27°15'29
	2084 May 11 07:21	0°♉	
morning set	2084 May 25 23:12	27°♉10'02	
	2084 May 27 07:30	0°♊	
asc. node	2084 May 29 07:51	4°♊19'00	
max. Earth dist.	2084 Jun 01 15:43	11°♊35'26	1.32174 AU
superior conj	2084 Jun 02 01:46	12°♊30'44	0°38'42
minimum elong	2084 Jun 02 00:09	12°♊21'49	0°38'21
evening rise	2084 Jun 08 22:27	27°♊25'48	
	2084 Jun 10 03:52	0°♋	
	2084 Jun 27 02:58	0°♌	
desc. node	2084 Jul 06 13:33	11°♌34'07	
evening max el	2084 Jul 07 13:11	12°♌31'55	26°08'15
retrograde	2084 Jul 21 12:59	19°♌42'25	
evening set	2084 Jul 27 21:59	18°♌03'29	
min. Earth dist.	2084 Aug 01 01:50	15°♌27'11	0.59116 AU
inferior conj	2084 Aug 04 09:04	12°♌58'06	-4°53'49
minimum elong	2084 Aug 04 11:35	12°♌53'19	4°53'36
morning rise	2084 Aug 12 03:21	8°♌29'13	
direct	2084 Aug 14 14:41	8°♌08'25	
morning max el	2084 Aug 22 12:41	11°♌56'18	18°28'08
asc. node	2084 Aug 25 07:04	14°♌59'34	
	2084 Sep 03 15:01	0°♍	
morning set	2084 Sep 07 15:08	7°♍35'56	
superior conj	2084 Sep 16 14:52	24°♍42'23	1°33'52
minimum elong	2084 Sep 16 17:59	24°♍56'47	1°33'37
	2084 Sep 19 12:16	0°♎	
max. Earth dist.	2084 Sep 24 01:03	8°♎01'25	1.40219 AU
evening rise	2084 Sep 28 09:09	15°♎23'21	
desc. node	2084 Oct 02 12:53	22°♎10'43	
	2084 Oct 07 12:27	0°♏	
	2084 Oct 29 07:09	0°♐	
evening max el	2084 Nov 02 03:27	4°♐09'46	23°39'22
retrograde	2084 Nov 12 20:05	10°♐28'26	
evening set	2084 Nov 17 22:12	8°♐21'37	
asc. node	2084 Nov 21 06:18	4°♐43'43	
inferior conj	2084 Nov 23 07:46	1°♐57'59	0°42'11
minimum elong	2084 Nov 23 06:47	2°♐01'20	0°41'46
min. Earth dist.	2084 Nov 22 19:22	2°♐40'16	0.67761 AU
	2084 Nov 24 18:53	30°℞♏	
morning rise	2084 Nov 28 15:20	25°♏51'24	
direct	2084 Dec 02 17:29	24°♏17'27	
morning max el	2084 Dec 11 01:02	29°♏06'31	20°56'24
	2084 Dec 11 21:42	0°♐	
desc. node	2084 Dec 29 12:11	23°♐42'09	
	2085 Jan 02 16:56	0°♑	
morning set	2085 Jan 09 23:33	11°♑11'33	
max. Earth dist.	2085 Jan 18 05:34	24°♑20'33	1.42751 AU
	2085 Jan 21 16:11	0°♒	
superior conj	2085 Jan 25 04:43	5°♒54'26	-2°04'26
minimum elong	2085 Jan 25 03:13	5°♒48'05	2°04'25
evening rise	2085 Feb 05 21:55	26°♒23'44	
	2085 Feb 07 22:19	0°♓	
asc. node	2085 Feb 17 05:38	15°♓48'22	
evening max el	2085 Feb 22 19:07	22°♓56'20	18°07'15
retrograde	2085 Mar 01 09:32	26°♓20'21	
evening set	2085 Mar 04 02:40	25°♓45'45	
inferior conj	2085 Mar 10 14:57	20°♓44'32	3°34'50
minimum elong	2085 Mar 10 16:37	20°♓40'25	3°34'41
min. Earth dist.	2085 Mar 13 17:08	17°♓43'01	0.61454 AU
morning rise	2085 Mar 17 04:58	14°♓49'56	
direct	2085 Mar 24 01:00	12°♓27'51	
desc. node	2085 Mar 27 11:22	13°♓00'47	
morning max el	2085 Apr 07 05:17	20°♓22'32	27°47'31
	2085 Apr 15 12:01	0°♈	
	2085 May 04 05:27	0°♉	
morning set	2085 May 10 03:52	11°♉39'54	
max. Earth dist.	2085 May 16 02:23	24°♉14'23	1.32370 AU
asc. node	2085 May 16 04:54	24°♉28'04	
superior conj	2085 May 17 12:22	27°♉19'30	0°13'49
minimum elong	2085 May 17 11:44	27°♉16'02	0°13'40
behind sun begin	2085 May 17 09:07	27°♉01'48	
behind sun end	2085 May 17 14:20	27°♉30'16	
	2085 May 18 17:42	0°♊	
evening rise	2085 May 24 09:47	12°♊17'46	
	2085 Jun 02 09:11	0°♋	
evening max el	2085 Jun 19 05:20	23°♋26'34	24°46'40
desc. node	2085 Jun 23 10:35	26°♋58'04	
	2085 Jun 29 12:37	0°♌	
retrograde	2085 Jul 03 04:07	0°♌30'49	
	2085 Jul 06 20:00	30°℞♋	
evening set	2085 Jul 08 07:43	29°♋30'37	
min. Earth dist.	2085 Jul 13 16:35	26°♋41'13	0.57160 AU
inferior conj	2085 Jul 16 14:17	24°♋47'12	-4°54'44
minimum elong	2085 Jul 16 11:53	24°♋51'09	4°54'35
morning rise	2085 Jul 24 18:45	20°♋40'06	
direct	2085 Jul 27 09:21	20°♋20'55	
morning max el	2085 Aug 05 12:48	24°♋36'56	19°17'33
	2085 Aug 10 04:21	0°♌	
asc. node	2085 Aug 12 04:08	2°♌53'33	
morning set	2085 Aug 22 14:50	21°♌54'51	
	2085 Aug 26 15:54	0°♍	
superior conj	2085 Aug 30 18:39	8°♍07'25	1°43'56
minimum elong	2085 Aug 30 19:52	8°♍13'18	1°43'54
max. Earth dist.	2085 Sep 06 04:43	20°♍15'00	1.38158 AU
evening rise	2085 Sep 09 23:16	27°♍00'19	
	2085 Sep 11 16:38	0°♎	
desc. node	2085 Sep 19 09:54	12°♎44'31	
	2085 Oct 01 00:40	0°♏	
evening max el	2085 Oct 15 15:36	17°♏47'45	24°57'10
retrograde	2085 Oct 27 09:09	24°♏36'31	
evening set	2085 Nov 02 01:21	22°♏13'34	
min. Earth dist.	2085 Nov 06 14:17	17°♏06'18	0.67357 AU
inferior conj	2085 Nov 07 13:18	15°♏50'31	-0°12'07
minimum elong	2085 Nov 07 13:36	15°♏49'31	0°11'59
transit middle	2085 Nov 07 13:36	15°♏49'31	0°11'59
transit begin	2085 Nov 07 11:44	15°♏55'40	

transit end	2085 Nov 07 15:28	15°♏43'23	
asc. node	2085 Nov 08 03:21	15°♏04'23	
morning rise	2085 Nov 13 02:00	9°♏50'23	
direct	2085 Nov 16 15:37	8°♏37'02	
morning max el	2085 Nov 24 02:10	12°♏50'43	19°47'29
	2085 Dec 07 02:16	0°♐	
greatest brilliancy	2085 Dec 07 13:04	0°♐40'03	-0.7m
desc. node	2085 Dec 16 09:12	14°♐03'13	
morning set	2085 Dec 19 19:38	19°♐20'32	
	2085 Dec 26 16:03	0°♑	
max. Earth dist.	2085 Dec 31 16:34	7°♑55'31	1.44208 AU
superior conj	2086 Jan 05 10:24	15°♑31'48	-1°50'26
minimum elong	2086 Jan 05 03:28	15°♑03'47	1°49'57
	2086 Jan 14 05:17	0°♒	
evening rise	2086 Jan 18 22:44	7°♒59'05	
	2086 Feb 01 08:30	0°♓	
asc. node	2086 Feb 04 02:40	3°♓43'38	
evening max el	2086 Feb 06 07:43	6°♓13'19	18°15'41
retrograde	2086 Feb 12 18:45	9°♓41'04	
evening set	2086 Feb 15 17:04	8°♓55'44	
inferior conj	2086 Feb 21 18:25	3°♓35'04	3°43'12
minimum elong	2086 Feb 21 18:10	3°♓35'45	3°43'11
min. Earth dist.	2086 Feb 24 06:44	0°♓48'41	0.63439 AU
	2086 Feb 25 01:17	30°♑℞♒	
morning rise	2086 Feb 27 18:24	27°♒30'35	
direct	2086 Mar 06 16:50	24°♒46'09	
desc. node	2086 Mar 14 08:25	27°♒29'44	
	2086 Mar 17 15:15	0°♓	
morning max el	2086 Mar 20 12:55	2°♓42'03	27°42'14
	2086 Apr 09 20:17	0°♈	
morning set	2086 Apr 24 02:00	25°♈47'24	
	2086 Apr 26 03:58	0°♉	
max. Earth dist.	2086 Apr 29 07:18	6°♉31'59	1.32974 AU
superior conj	2086 May 01 20:02	11°♉55'47	-0°13'07
minimum elong	2086 May 01 20:41	11°♉59'15	0°12'59
behind sun begin	2086 May 01 17:35	11°♉42'37	
behind sun end	2086 May 01 23:46	12°♉15'52	
asc. node	2086 May 03 01:58	14°♉36'57	
evening rise	2086 May 08 21:36	27°♉07'33	
	2086 May 10 06:29	0°♊	
	2086 May 28 03:20	0°♋	
evening max el	2086 May 31 19:07	3°♋57'23	23°11'39
desc. node	2086 Jun 10 07:38	10°♋05'31	
retrograde	2086 Jun 14 06:57	10°♋41'27	
evening set	2086 Jun 17 22:24	10°♋12'20	
min. Earth dist.	2086 Jun 25 04:45	6°♋55'27	0.55661 AU
inferior conj	2086 Jun 26 23:54	5°♋52'16	-4°12'27
minimum elong	2086 Jun 26 16:43	6°♋02'49	4°10'58
morning rise	2086 Jul 05 13:34	1°♋58'42	
direct	2086 Jul 08 09:01	1°♋39'42	
morning max el	2086 Jul 19 02:03	6°♋37'20	20°28'04
asc. node	2086 Jul 30 01:11	21°♋30'51	
	2086 Aug 03 14:29	0°♌	
morning set	2086 Aug 06 20:35	6°♌32'16	
superior conj	2086 Aug 14 10:56	22°♌10'10	1°45'16
minimum elong	2086 Aug 14 10:27	22°♌07'46	1°45'16
	2086 Aug 18 09:05	0°♍	
max. Earth dist.	2086 Aug 19 11:02	2°♍06'21	1.36250 AU
evening rise	2086 Aug 23 10:38	9°♍38'08	
	2086 Sep 04 07:47	0°♎	
desc. node	2086 Sep 06 06:56	3°♎04'49	
	2086 Sep 26 16:37	0°♏	
evening max el	2086 Sep 28 03:37	1°♏27'37	26°05'30
retrograde	2086 Oct 10 17:24	8°♏35'35	
evening set	2086 Oct 16 23:36	5°♏59'45	
min. Earth dist.	2086 Oct 21 05:07	1°♏28'03	0.66617 AU
	2086 Oct 22 09:24	30°♎℞♎	
inferior conj	2086 Oct 22 15:14	29°♎41'47	-1°09'24
minimum elong	2086 Oct 22 17:04	29°♎36'06	1°08'38
asc. node	2086 Oct 26 00:24	25°♎48'08	
morning rise	2086 Oct 28 10:55	23°♎50'49	
direct	2086 Oct 31 14:06	22°♎54'38	
morning max el	2086 Nov 07 10:28	26°♎43'06	18°53'27
	2086 Nov 10 08:04	0°♏	
morning set	2086 Nov 29 06:22	28°♏20'07	
	2086 Nov 30 07:47	0°♐	
desc. node	2086 Dec 03 06:13	4°♐36'35	
max. Earth dist.	2086 Dec 14 08:58	22°♐03'11	1.45021 AU
superior conj	2086 Dec 15 17:59	24°♐13'05	-1°17'28
minimum elong	2086 Dec 15 09:20	23°♐39'00	1°16'30
	2086 Dec 19 09:55	0°♑	
evening rise	2086 Dec 31 00:59	18°♑36'59	
	2087 Jan 07 01:34	0°♒	
evening max el	2087 Jan 20 19:11	19°♒38'25	18°42'21
asc. node	2087 Jan 21 23:42	20°♒46'21	
retrograde	2087 Jan 27 11:13	23°♒21'22	
evening set	2087 Jan 30 15:20	22°♒24'14	
inferior conj	2087 Feb 05 08:59	16°♒45'47	3°33'50
minimum elong	2087 Feb 05 07:20	16°♒50'48	3°33'38
min. Earth dist.	2087 Feb 07 05:44	14°♒30'07	0.65106 AU
morning rise	2087 Feb 10 22:54	10°♒36'04	
direct	2087 Feb 17 15:47	7°♒44'04	
desc. node	2087 Mar 01 05:27	13°♒51'19	
morning max el	2087 Mar 02 22:27	15°♒30'22	27°03'08
	2087 Mar 14 20:35	0°♓	
	2087 Apr 02 14:18	0°♈	
morning set	2087 Apr 07 14:27	9°♈21'46	
max. Earth dist.	2087 Apr 12 02:39	18°♈17'16	1.34028 AU
superior conj	2087 Apr 15 22:40	26°♈12'01	-0°41'05
minimum elong	2087 Apr 16 00:45	26°♈22'54	0°40'39
	2087 Apr 17 18:00	0°♉	
asc. node	2087 Apr 19 22:59	4°♉40'41	
evening rise	2087 Apr 23 08:00	11°♉47'49	
	2087 May 02 18:41	0°♊	
evening max el	2087 May 13 13:52	14°♊34'12	21°38'07
retrograde	2087 May 25 22:18	20°♊37'38	
evening set	2087 May 28 09:57	20°♊23'42	
desc. node	2087 May 28 04:40	20°♊26'01	
inferior conj	2087 Jun 06 19:48	16°♊22'16	-2°42'45
minimum elong	2087 Jun 06 12:40	16°♊32'14	2°40'28
min. Earth dist.	2087 Jun 06 16:35	16°♊26'46	0.54938 AU
morning rise	2087 Jun 15 16:18	12°♊26'46	
direct	2087 Jun 18 20:31	12°♊04'40	
morning max el	2087 Jul 01 03:50	17°♊52'46	21°57'22
	2087 Jul 10 19:22	0°♋	
asc. node	2087 Jul 16 22:13	10°♋40'11	
morning set	2087 Jul 22 06:05	21°♋21'07	
	2087 Jul 26 08:26	0°♌	
superior conj	2087 Jul 29 11:49	6°♌38'30	1°39'33
minimum elong	2087 Jul 29 10:10	6°♌29'49	1°39'26
max. Earth dist.	2087 Aug 02 01:23	14°♌01'39	1.34657 AU
evening rise	2087 Aug 06 14:32	23°♌03'36	
	2087 Aug 10 06:57	0°♍	
desc. node	2087 Aug 24 03:58	23°♍04'39	
	2087 Aug 28 23:44	0°♎	
evening max el	2087 Sep 10 16:02	15°♎02'23	26°56'43
retrograde	2087 Sep 23 20:10	22°♎18'48	
evening set	2087 Sep 30 14:45	19°♎35'51	

min. Earth dist.	2087 Oct 04 13:23	15°♎40'40	0.65528 AU
inferior conj	2087 Oct 06 11:30	13°♎27'38	-2°08'01
minimum elong	2087 Oct 06 14:56	13°♎17'44	2°06'41
morning rise	2087 Oct 12 15:49	7°♎48'58	
asc. node	2087 Oct 12 21:25	7°♎42'10	
direct	2087 Oct 15 10:55	7°♎06'09	
morning max el	2087 Oct 21 23:58	10°♎39'02	18°15'49
	2087 Nov 04 12:27	0°♏	
morning set	2087 Nov 09 21:31	8°♏46'17	
desc. node	2087 Nov 20 03:15	25°♏18'15	
	2087 Nov 23 02:10	0°♐	
superior conj	2087 Nov 24 20:04	2°♐45'38	-0°31'11
minimum elong	2087 Nov 24 16:02	2°♐29'44	0°30'38
max. Earth dist.	2087 Nov 27 04:16	6°♐26'59	1.45100 AU
evening rise	2087 Dec 11 04:21	28°♐20'59	
	2087 Dec 12 05:44	0°♑	
greatest brilliancy	2087 Dec 22 19:25	16°♑23'19	-0.7m
	2088 Jan 01 09:31	0°♒	
evening max el	2088 Jan 04 03:21	3°♒07'36	19°25'58
asc. node	2088 Jan 08 20:43	6°♒42'46	
retrograde	2088 Jan 11 07:44	7°♒15'45	
evening set	2088 Jan 14 18:49	6°♒05'37	
inferior conj	2088 Jan 20 07:23	0°♒11'30	3°11'20
minimum elong	2088 Jan 20 04:58	0°♒19'24	3°10'49
	2088 Jan 20 10:56	30°℞♑	
min. Earth dist.	2088 Jan 21 13:13	28°♑34'39	0.66374 AU
morning rise	2088 Jan 25 14:53	23°♑59'08	
direct	2088 Jan 31 20:44	21°♑13'03	
morning max el	2088 Feb 13 07:50	28°♑36'42	25°57'50
	2088 Feb 14 15:57	0°♒	
desc. node	2088 Feb 16 02:28	1°♒34'19	
	2088 Mar 07 15:20	0°♓	
morning set	2088 Mar 20 13:14	22°♓11'24	
max. Earth dist.	2088 Mar 24 10:33	29°♓31'49	1.35544 AU
	2088 Mar 24 16:23	0°♈	
superior conj	2088 Mar 29 17:49	10°♈01'15	-1°08'42
minimum elong	2088 Mar 29 21:15	10°♈18'37	1°08'06
asc. node	2088 Apr 05 20:01	24°♈35'17	
evening rise	2088 Apr 06 15:00	26°♈12'37	
	2088 Apr 08 11:49	0°♉	
evening max el	2088 Apr 24 19:06	25°♉41'52	20°17'26
	2088 May 01 01:12	0°♊	
retrograde	2088 May 05 11:49	0°♊52'52	
evening set	2088 May 07 12:44	0°♊42'23	
	2088 May 10 04:10	30°℞♉	
desc. node	2088 May 14 01:41	28°♉11'49	
inferior conj	2088 May 16 15:01	26°♉44'02	-0°44'48
minimum elong	2088 May 16 12:55	26°♉47'08	0°44'01
min. Earth dist.	2088 May 18 05:19	25°♉47'47	0.55167 AU
morning rise	2088 May 25 11:43	22°♉27'31	
direct	2088 May 29 08:08	21°♉55'24	
morning max el	2088 Jun 11 21:01	28°♉32'16	23°38'19
	2088 Jun 13 08:36	0°♊	
asc. node	2088 Jul 02 19:15	0°♋13'24	
	2088 Jul 02 16:36	0°♋	
morning set	2088 Jul 05 17:33	6°♋16'13	
superior conj	2088 Jul 12 18:28	21°♋23'47	1°28'05
minimum elong	2088 Jul 12 16:12	21°♋11'30	1°27'49
max. Earth dist.	2088 Jul 15 01:06	26°♋15'57	1.33451 AU
	2088 Jul 16 19:39	0°♌	
evening rise	2088 Jul 20 06:39	7°♌04'52	
	2088 Aug 01 19:49	0°♍	
desc. node	2088 Aug 10 01:00	12°♍35'13	
evening max el	2088 Aug 23 03:36	28°♍20'12	27°23'31
	2088 Aug 24 23:34	0°♎	
retrograde	2088 Sep 05 16:54	5°♎38'02	
evening set	2088 Sep 12 20:03	2°♎56'51	
	2088 Sep 16 03:33	30°℞♍	
min. Earth dist.	2088 Sep 16 12:50	29°♍36'32	0.64085 AU
inferior conj	2088 Sep 18 23:40	27°♍02'29	-3°05'32
minimum elong	2088 Sep 19 04:29	26°♍49'53	3°03'56
morning rise	2088 Sep 25 13:58	21°♍39'37	
direct	2088 Sep 28 03:27	21°♍06'37	
asc. node	2088 Sep 28 18:27	21°♍08'37	
morning max el	2088 Oct 04 15:59	24°♍32'27	17°55'19
	2088 Oct 09 02:48	0°♎	
morning set	2088 Oct 21 16:11	20°♎32'21	
	2088 Oct 27 05:50	0°♏	
superior conj	2088 Nov 03 13:34	12°♏06'49	0°16'31
minimum elong	2088 Nov 03 15:25	12°♏14'18	0°16'16
desc. node	2088 Nov 06 00:16	16°♏04'14	
max. Earth dist.	2088 Nov 08 22:48	20°♏46'16	1.44444 AU
	2088 Nov 14 19:32	0°♐	
evening rise	2088 Nov 19 15:30	7°♐29'03	
	2088 Dec 04 13:58	0°♑	
evening max el	2088 Dec 17 06:28	16°♑37'28	20°24'35
retrograde	2088 Dec 25 05:40	21°♑19'00	
asc. node	2088 Dec 25 17:44	21°♑17'36	
evening set	2088 Dec 29 01:20	19°♑54'32	
inferior conj	2089 Jan 03 10:57	13°♑47'33	2°38'48
minimum elong	2089 Jan 03 08:19	13°♑56'27	2°38'03
min. Earth dist.	2089 Jan 04 03:24	12°♑51'43	0.67234 AU
morning rise	2089 Jan 08 15:09	7°♑34'17	
direct	2089 Jan 14 06:57	5°♑03'41	
morning max el	2089 Jan 25 16:24	11°♑51'28	24°35'53
desc. node	2089 Feb 01 23:30	20°♑14'42	
	2089 Feb 09 05:43	0°♒	
	2089 Feb 28 09:30	0°♓	
morning set	2089 Mar 02 16:59	4°♓01'06	
max. Earth dist.	2089 Mar 06 08:49	10°♓34'23	1.37456 AU
superior conj	2089 Mar 13 02:17	23°♓14'23	-1°33'55
minimum elong	2089 Mar 13 06:33	23°♓35'06	1°33'23
	2089 Mar 16 12:58	0°♈	
evening rise	2089 Mar 21 16:17	10°♈14'45	
asc. node	2089 Mar 23 17:04	14°♈15'46	
	2089 Apr 01 12:52	0°♉	
evening max el	2089 Apr 07 11:56	7°♉29'04	19°15'15
retrograde	2089 Apr 16 12:30	11°♉51'12	
evening set	2089 Apr 18 14:52	11°♉38'01	
inferior conj	2089 Apr 26 23:33	7°♉28'23	1°07'15
minimum elong	2089 Apr 27 02:11	7°♉23'58	1°06'22
min. Earth dist.	2089 Apr 29 20:13	5°♉34'10	0.56298 AU
desc. node	2089 Apr 30 22:41	4°♉52'34	
morning rise	2089 May 05 10:32	2°♉37'56	
direct	2089 May 10 06:32	1°♉44'03	
morning max el	2089 May 24 11:28	8°♉58'56	25°18'05
	2089 Jun 09 03:59	0°♊	
asc. node	2089 Jun 19 16:19	20°♊03'51	
morning set	2089 Jun 20 05:20	21°♊12'20	
	2089 Jun 24 07:22	0°♋	
superior conj	2089 Jun 27 04:38	6°♋18'53	1°11'54
minimum elong	2089 Jun 27 02:14	6°♋05'50	1°11'31
max. Earth dist.	2089 Jun 28 08:16	8°♋49'46	1.32642 AU
evening rise	2089 Jul 04 07:29	21°♋31'37	
	2089 Jul 08 13:12	0°♌	
	2089 Jul 26 20:21	0°♍	
desc. node	2089 Jul 27 22:00	1°♍24'34	
evening max el	2089 Aug 05 12:10	11°♍08'28	27°20'08

retrograde	2089 Aug 19 07:20	18°♍24'39	
evening set	2089 Aug 26 12:00	15°♍57'19	
min. Earth dist.	2089 Aug 30 02:04	13°♍05'13	0.62312 AU
inferior conj	2089 Sep 02 00:52	10°♍20'02	-3°58'01
minimum elong	2089 Sep 02 06:16	10°♍07'26	3°56'40
morning rise	2089 Sep 09 02:02	5°♍16'18	
direct	2089 Sep 11 12:27	4°♍50'02	
asc. node	2089 Sep 15 15:30	6°♍07'46	
morning max el	2089 Sep 18 07:40	8°♍17'17	17°52'47
	2089 Oct 02 11:46	0°♎	
morning set	2089 Oct 04 08:28	3°♎20'28	
superior conj	2089 Oct 15 09:33	22°♎46'52	0°55'53
minimum elong	2089 Oct 15 14:00	23°♎05'48	0°55'19
	2089 Oct 19 16:37	0°♏	
max. Earth dist.	2089 Oct 22 13:22	4°♏42'16	1.43143 AU
desc. node	2089 Oct 23 21:18	6°♏51'39	
evening rise	2089 Oct 30 01:29	16°♏39'23	
	2089 Nov 07 19:08	0°♐	
evening max el	2089 Nov 30 03:55	0°♑08'02	21°35'11
	2089 Nov 30 00:47	0°♑	
retrograde	2089 Dec 09 02:58	5°♑27'57	
asc. node	2089 Dec 12 14:46	4°♑20'50	
evening set	2089 Dec 13 09:01	3°♑47'49	
	2089 Dec 16 21:38	30°℞♐	
inferior conj	2089 Dec 18 17:28	27°♐31'20	1°58'23
minimum elong	2089 Dec 18 15:09	27°♐39'21	1°57'34
min. Earth dist.	2089 Dec 18 22:04	27°♐15'24	0.67711 AU
morning rise	2089 Dec 23 21:07	21°♐18'54	
direct	2089 Dec 28 21:52	19°♐09'11	
morning max el	2090 Jan 08 01:43	25°♐11'19	23°07'24
	2090 Jan 12 09:58	0°♑	
desc. node	2090 Jan 19 20:32	9°♑36'09	
	2090 Feb 02 18:05	0°♒	
morning set	2090 Feb 11 19:27	14°♒34'59	
max. Earth dist.	2090 Feb 16 03:47	21°♒58'10	1.39590 AU
	2090 Feb 20 17:02	0°♓	
superior conj	2090 Feb 23 19:59	5°♓41'19	-1°53'51
minimum elong	2090 Feb 23 23:49	5°♓59'04	1°53'35
evening rise	2090 Mar 05 08:58	23°♓46'44	
	2090 Mar 08 15:23	0°♈	
asc. node	2090 Mar 10 14:06	3°♈36'43	
evening max el	2090 Mar 21 14:28	19°♈52'51	18°33'12
retrograde	2090 Mar 29 07:17	23°♈39'29	
evening set	2090 Mar 31 15:29	23°♈19'42	
inferior conj	2090 Apr 08 04:42	18°♈51'35	2°30'09
minimum elong	2090 Apr 08 08:41	18°♈43'46	2°29'07
min. Earth dist.	2090 Apr 11 14:40	16°♈12'37	0.58101 AU
morning rise	2090 Apr 15 22:50	13°♈28'46	
desc. node	2090 Apr 17 19:44	12°♈42'08	
direct	2090 Apr 21 19:31	12°♈01'17	
morning max el	2090 May 06 04:44	19°♈39'58	26°40'50
	2090 May 14 23:49	0°♉	
	2090 Jun 01 17:12	0°♊	
morning set	2090 Jun 04 15:46	6°♊03'06	
asc. node	2090 Jun 06 13:22	10°♊05'16	
superior conj	2090 Jun 11 16:19	21°♊16'23	0°51'48
minimum elong	2090 Jun 11 14:18	21°♊05'15	0°51'24
max. Earth dist.	2090 Jun 11 19:39	21°♊34'43	1.32229 AU
	2090 Jun 15 16:00	0°♋	
evening rise	2090 Jun 18 14:08	6°♋14'14	
	2090 Jul 01 03:17	0°♌	
desc. node	2090 Jul 14 19:02	19°♌14'44	
evening max el	2090 Jul 18 15:15	23°♌15'04	26°43'41
	2090 Jul 29 05:30	0°♍	
retrograde	2090 Aug 01 14:20	0°♍28'21	
	2090 Aug 04 21:39	30°℞♌	
evening set	2090 Aug 08 10:01	28°♌28'39	
min. Earth dist.	2090 Aug 12 05:05	25°♌51'25	0.60302 AU
inferior conj	2090 Aug 15 11:38	23°♌10'48	-4°39'08
minimum elong	2090 Aug 15 15:56	23°♌01'59	4°38'30
morning rise	2090 Aug 22 23:49	18°♌28'46	
direct	2090 Aug 25 09:54	18°♌06'39	
morning max el	2090 Sep 01 19:46	21°♌44'22	18°09'22
asc. node	2090 Sep 02 12:35	22°♌26'40	
	2090 Sep 08 04:39	0°♍	
morning set	2090 Sep 17 16:24	16°♍53'10	
	2090 Sep 24 17:08	0°♎	
superior conj	2090 Sep 27 07:18	4°♎42'19	1°23'22
minimum elong	2090 Sep 27 11:20	5°♎00'26	1°22'57
max. Earth dist.	2090 Oct 04 22:23	18°♎00'04	1.41367 AU
evening rise	2090 Oct 10 02:30	26°♎32'50	
desc. node	2090 Oct 10 18:20	27°♎36'43	
	2090 Oct 12 06:07	0°♏	
	2090 Nov 01 13:28	0°♐	
evening max el	2090 Nov 12 20:22	13°♐40'36	22°53'24
retrograde	2090 Nov 22 21:58	19°♐39'09	
evening set	2090 Nov 27 16:14	17°♐42'21	
asc. node	2090 Nov 29 11:49	15°♐55'29	
inferior conj	2090 Dec 03 00:59	11°♐20'13	1°11'34
minimum elong	2090 Dec 02 23:25	11°♐25'40	1°10'55
min. Earth dist.	2090 Dec 02 18:44	11°♐41'48	0.67835 AU
morning rise	2090 Dec 08 06:29	5°♐10'40	
direct	2090 Dec 12 16:35	3°♐23'40	
morning max el	2090 Dec 21 15:06	8°♐38'02	21°41'39
desc. node	2091 Jan 06 17:35	29°♐26'57	
	2091 Jan 07 02:42	0°♑	
morning set	2091 Jan 22 16:45	23°♑45'18	
	2091 Jan 26 13:44	0°♒	
max. Earth dist.	2091 Jan 29 02:51	4°♒11'20	1.41678 AU
superior conj	2091 Feb 05 17:51	17°♒10'05	-2°04'29
minimum elong	2091 Feb 05 19:04	17°♒15'23	2°04'28
	2091 Feb 12 22:09	0°♓	
evening rise	2091 Feb 16 13:31	6°♓40'18	
asc. node	2091 Feb 25 11:09	22°♓31'35	
	2091 Mar 02 12:50	0°♈	
evening max el	2091 Mar 04 23:29	2°♈44'46	18°11'10
retrograde	2091 Mar 11 20:11	6°♈12'18	
evening set	2091 Mar 14 10:19	5°♈43'27	
inferior conj	2091 Mar 21 06:37	0°♈54'26	3°19'33
minimum elong	2091 Mar 21 09:26	0°♈48'03	3°19'07
	2091 Mar 22 06:25	30°℞♓	
min. Earth dist.	2091 Mar 24 14:40	27°♓53'54	0.60225 AU
morning rise	2091 Mar 28 06:23	25°♓09'01	
direct	2091 Apr 03 20:58	23°♓04'54	
desc. node	2091 Apr 04 16:47	23°♓06'47	
	2091 Apr 17 04:41	0°♈	
morning max el	2091 Apr 18 03:49	0°♈55'41	27°33'34
	2091 May 09 02:46	0°♉	
morning set	2091 May 19 23:08	20°♉42'42	
asc. node	2091 May 24 10:26	0°♊13'06	
	2091 May 24 08:01	0°♊	
max. Earth dist.	2091 May 26 07:38	4°♊19'37	1.32210 AU
superior conj	2091 May 27 03:50	6°♊10'30	0°28'28
minimum elong	2091 May 27 02:36	6°♊03'39	0°28'12
evening rise	2091 Jun 03 00:23	21°♊05'16	
	2091 Jun 07 08:29	0°♋	
	2091 Jun 26 04:16	0°♌	
evening max el	2091 Jun 30 11:23	4°♌35'10	25°36'12

desc. node	2091 Jul	01	16:03	5°♌41'13	
retrograde	2091 Jul	14	11:45	11°♌43'38	
evening set	2091 Jul	20	09:29	10°♌21'35	
min. Earth dist.	2091 Jul	24	23:36	7°♌41'29	0.58254 AU
inferior conj	2091 Jul	28	04:27	5°♌25'14	-4°58'39
minimum elong	2091 Jul	28	05:07	5°♌24'02	4°58'39
morning rise	2091 Aug	05	03:08	1°♌05'41	
direct	2091 Aug	07	15:34	0°♌45'45	
morning max el	2091 Aug	16	01:03	4°♌44'25	18°46'26
asc. node	2091 Aug	20	09:39	9°♌50'05	
	2091 Aug	31	23:27	0°♍	
morning set	2091 Sep	01	11:22	0°♍58'06	
superior conj	2091 Sep	10	01:42	17°♍38'52	1°39'19
minimum elong	2091 Sep	10	04:01	17°♍49'47	1°39'11
	2091 Sep	16	19:05	0°♎	
max. Earth dist.	2091 Sep	17	03:09	0°♎35'45	1.39344 AU
evening rise	2091 Sep	21	02:56	7°♎31'31	
desc. node	2091 Sep	27	15:21	18°♎15'50	
	2091 Oct	05	06:17	0°♏	
evening max el	2091 Oct	26	09:38	27°♏16'58	24°13'17
	2091 Oct	29	09:03	0°♐	
retrograde	2091 Nov	06	13:18	3°♐49'12	
evening set	2091 Nov	11	21:18	1°♐35'34	
	2091 Nov	13	12:32	30°℞♏	
asc. node	2091 Nov	16	08:53	26°♏28'44	
min. Earth dist.	2091 Nov	16	14:57	26°♏08'23	0.67629 AU
inferior conj	2091 Nov	17	07:45	25°♏11'49	0°19'37
minimum elong	2091 Nov	17	07:16	25°♏13'26	0°19'25
morning rise	2091 Nov	22	17:14	19°♏07'31	
direct	2091 Nov	26	13:54	17°♏42'28	
morning max el	2091 Dec	04	11:32	22°♏15'02	20°25'20
	2091 Dec	10	23:40	0°♐	
desc. node	2091 Dec	24	14:36	19°♐38'37	
	2091 Dec	31	09:32	0°♑	
morning set	2092 Jan	01	15:50	1°♑57'06	
max. Earth dist.	2092 Jan	11	09:57	17°♑20'38	1.43440 AU
superior conj	2092 Jan	17	14:50	27°♑28'39	-2°00'50
minimum elong	2092 Jan	17	10:58	27°♑12'37	2°00'40
	2092 Jan	19	03:11	0°♒	
evening rise	2092 Jan	30	01:39	18°♒45'56	
	2092 Feb	05	12:32	0°♓	
asc. node	2092 Feb	12	08:12	10°♓51'15	
evening max el	2092 Feb	16	11:37	15°♓54'28	18°08'36
retrograde	2092 Feb	22	23:17	19°♓18'13	
evening set	2092 Feb	25	18:43	18°♓38'59	
inferior conj	2092 Mar	03	01:54	13°♓29'18	3°40'54
minimum elong	2092 Mar	03	02:43	13°♓27'09	3°40'51
min. Earth dist.	2092 Mar	05	22:35	10°♓32'04	0.62333 AU
morning rise	2092 Mar	09	09:30	7°♓30'06	
direct	2092 Mar	16	07:48	4°♓56'55	
desc. node	2092 Mar	21	13:48	6°♓14'09	
morning max el	2092 Mar	30	08:46	12°♓52'14	27°49'44
	2092 Apr	13	00:49	0°♈	
	2092 Apr	30	12:25	0°♉	
morning set	2092 May	03	01:18	5°♉03'40	
max. Earth dist.	2092 May	08	16:23	16°♉51'06	1.32583 AU
asc. node	2092 May	10	07:29	20°♉22'21	
superior conj	2092 May	10	13:25	20°♉54'32	0°02'37
minimum elong	2092 May	10	13:17	20°♉53'50	0°02'36
behind sun begin	2092 May	10	08:10	20°♉26'05	
behind sun end	2092 May	10	18:24	21°♉21'37	
	2092 May	14	17:38	0°♊	
evening rise	2092 May	17	12:09	5°♊57'07	
	2092 May	30	05:57	0°♋	
evening max el	2092 Jun	11	01:53	15°♋16'33	24°06'55
desc. node	2092 Jun	17	13:04	20°♋11'34	
retrograde	2092 Jun	24	21:16	22°♋13'34	
evening set	2092 Jun	29	09:45	21°♋28'18	
min. Earth dist.	2092 Jul	05	12:38	18°♋28'51	0.56456 AU
inferior conj	2092 Jul	08	01:03	16°♋55'16	-4°42'43
minimum elong	2092 Jul	07	20:19	17°♋02'38	4°42'08
morning rise	2092 Jul	16	09:32	12°♋55'12	
direct	2092 Jul	19	02:14	12°♋36'07	
morning max el	2092 Jul	28	20:37	17°♋08'05	19°44'59
asc. node	2092 Aug	06	06:42	28°♋03'47	
	2092 Aug	07	10:33	0°♌	
morning set	2092 Aug	15	13:57	15°♌25'57	
	2092 Aug	22	18:57	0°♍	
superior conj	2092 Aug	23	11:20	1°♍21'23	1°45'27
minimum elong	2092 Aug	23	11:46	1°♍23'36	1°45'28
max. Earth dist.	2092 Aug	29	07:41	12°♍38'53	1.37321 AU
evening rise	2092 Sep	02	02:38	19°♍35'40	
	2092 Sep	08	02:50	0°♎	
desc. node	2092 Sep	13	12:23	8°♎44'45	
	2092 Sep	28	08:39	0°♏	
evening max el	2092 Oct	07	21:42	10°♏56'52	25°27'52
retrograde	2092 Oct	20	00:13	17°♏54'21	
evening set	2092 Oct	25	22:34	15°♏25'24	
min. Earth dist.	2092 Oct	30	08:18	10°♏33'16	0.67087 AU
inferior conj	2092 Oct	31	11:57	9°♏04'14	-0°36'07
minimum elong	2092 Oct	31	12:53	9°♏01'15	0°35'43
asc. node	2092 Nov	02	05:54	6°♏52'21	
morning rise	2092 Nov	06	03:25	3°♏07'48	
direct	2092 Nov	09	12:26	2°♏02'05	
morning max el	2092 Nov	16	15:54	6°♏03'19	19°22'37
greatest brilliancy	2092 Nov	30	08:47	24°♏32'17	-0.7m
	2092 Dec	03	22:44	0°♐	
desc. node	2092 Dec	10	11:38	10°♐05'40	
morning set	2092 Dec	10	15:27	10°♐20'27	
	2092 Dec	23	05:27	0°♑	
max. Earth dist.	2092 Dec	24	00:15	1°♑14'12	1.44642 AU
superior conj	2092 Dec	27	09:52	6°♑38'06	-1°38'38
minimum elong	2092 Dec	27	01:24	6°♑04'23	1°37'54
evening rise	2093 Jan	10	17:13	29°♑57'20	
	2093 Jan	10	17:52	0°♒	
asc. node	2093 Jan	29	05:13	28°♒25'30	
evening max el	2093 Jan	29	24:00	29°♒15'07	18°24'48
	2093 Jan	30	18:33	0°♓	
retrograde	2093 Feb	05	12:07	2°♓48'02	
evening set	2093 Feb	08	12:50	1°♓57'42	
	2093 Feb	11	03:39	30°℞♒	
inferior conj	2093 Feb	14	10:30	26°♒28'54	3°41'04
minimum elong	2093 Feb	14	09:35	26°♒31'33	3°41'01
min. Earth dist.	2093 Feb	16	16:05	23°♒54'28	0.64194 AU
morning rise	2093 Feb	20	05:44	20°♒21'45	
direct	2093 Feb	27	02:31	17°♒32'43	
desc. node	2093 Mar	08	10:50	21°♒34'57	
morning max el	2093 Mar	12	17:39	25°♒25'26	27°29'26
	2093 Mar	16	22:35	0°♓	
	2093 Apr	06	12:27	0°♈	
morning set	2093 Apr	16	19:43	18°♈57'53	
max. Earth dist.	2093 Apr	21	17:51	28°♈56'31	1.33372 AU
	2093 Apr	22	06:02	0°♉	
superior conj	2093 Apr	24	19:10	5°♉22'30	-0°24'55
minimum elong	2093 Apr	24	20:24	5°♉29'07	0°24'39
asc. node	2093 Apr	27	04:31	10°♉29'14	
evening rise	2093 May	01	23:35	20°♉43'23	
	2093 May	06	12:36	0°♊	

evening max el	2093 May 23 16:40	25°♊45'05	22°30'43
	2093 May 29 03:21	0°♋	
desc. node	2093 Jun 04 10:05	2°♋10'18	
retrograde	2093 Jun 05 18:39	2°♋14'31	
evening set	2093 Jun 08 20:40	1°♋53'33	
	2093 Jun 13 22:42	30°℞♊	
min. Earth dist.	2093 Jun 17 00:02	28°♊21'30	0.55247 AU
inferior conj	2093 Jun 18 03:32	27°♊42'28	-3°39'38
minimum elong	2093 Jun 17 19:35	27°♊53'45	3°37'33
morning rise	2093 Jun 26 20:40	23°♊50'50	
direct	2093 Jun 29 19:13	23°♊31'07	
morning max el	2093 Jul 11 04:51	28°♊48'57	21°04'09
	2093 Jul 12 10:03	0°♋	
asc. node	2093 Jul 24 03:44	16°♋55'42	
morning set	2093 Jul 30 21:31	0°♌08'58	
	2093 Jul 30 19:47	0°♌	
superior conj	2093 Aug 07 07:40	15°♌36'21	1°43'37
minimum elong	2093 Aug 07 06:38	15°♌30'59	1°43'35
max. Earth dist.	2093 Aug 11 17:04	24°♌29'32	1.35524 AU
	2093 Aug 14 12:55	0°♍	
evening rise	2093 Aug 15 21:32	2°♍34'54	
desc. node	2093 Aug 31 09:24	28°♍57'19	
	2093 Sep 01 01:54	0°♎	
evening max el	2093 Sep 20 09:42	24°♎34'56	26°29'46
	2093 Sep 27 07:43	0°♏	
retrograde	2093 Oct 03 06:08	1°♏47'50	
	2093 Oct 08 14:34	30°℞♎	
evening set	2093 Oct 09 18:05	29°♎07'44	
min. Earth dist.	2093 Oct 13 20:28	24°♎51'54	0.66198 AU
inferior conj	2093 Oct 15 11:42	22°♎53'27	-1°34'15
minimum elong	2093 Oct 15 14:13	22°♎45'51	1°33'13
asc. node	2093 Oct 20 02:55	18°♎01'15	
morning rise	2093 Oct 21 10:55	17°♎07'38	
direct	2093 Oct 24 10:20	16°♎17'42	
morning max el	2093 Oct 31 02:47	19°♎58'16	18°35'27
	2093 Nov 07 20:52	0°♏	
morning set	2093 Nov 20 13:34	19°♏55'20	
	2093 Nov 26 21:47	0°♐	
desc. node	2093 Nov 27 08:40	0°♐43'02	
superior conj	2093 Dec 06 12:23	15°♐07'47	-0°58'48
minimum elong	2093 Dec 06 05:05	14°♐39'09	0°57'54
max. Earth dist.	2093 Dec 06 18:16	15°♐30'54	1.45144 AU
	2093 Dec 15 23:16	0°♑	
evening rise	2093 Dec 22 09:27	10°♑11'06	
greatest brilliancy	2093 Dec 31 00:47	23°♑54'56	-0.8m
	2094 Jan 03 22:44	0°♒	
evening max el	2094 Jan 13 10:10	12°♒41'33	18°58'54
asc. node	2094 Jan 16 02:13	15°♒01'29	
retrograde	2094 Jan 20 06:46	16°♒34'34	
evening set	2094 Jan 23 13:35	15°♒32'08	
inferior conj	2094 Jan 29 04:46	9°♒46'31	3°25'41
minimum elong	2094 Jan 29 02:43	9°♒52'59	3°25'21
min. Earth dist.	2094 Jan 30 19:00	7°♒46'45	0.65690 AU
morning rise	2094 Feb 03 15:30	3°♒35'09	
direct	2094 Feb 10 04:04	0°♒44'18	
morning max el	2094 Feb 23 03:34	8°♒23'25	26°38'06
desc. node	2094 Feb 23 07:52	8°♒34'18	
	2094 Mar 12 00:54	0°♓	
	2094 Mar 29 22:14	0°♈	
morning set	2094 Mar 31 02:58	2°♈15'11	
max. Earth dist.	2094 Apr 04 08:31	10°♈28'07	1.34611 AU
superior conj	2094 Apr 08 18:56	19°♈28'04	-0°52'56
minimum elong	2094 Apr 08 21:38	19°♈41'57	0°52'26
	2094 Apr 13 19:54	0°♉	

asc. node	2094 Apr 14 01:33	0°♉29'37	
evening rise	2094 Apr 16 08:48	5°♉17'54	
	2094 Apr 30 02:39	0°♊	
evening max el	2094 May 05 15:24	6°♊33'05	21°01'50
retrograde	2094 May 17 08:18	12°♊15'29	
evening set	2094 May 19 13:02	12°♊04'09	
desc. node	2094 May 22 07:06	11°♊20'27	
inferior conj	2094 May 28 21:25	8°♊05'55	-1°54'15
minimum elong	2094 May 28 16:05	8°♊13'28	1°52'23
min. Earth dist.	2094 May 29 12:25	7°♊44'41	0.54908 AU
morning rise	2094 Jun 06 19:04	4°♊03'32	
direct	2094 Jun 10 04:43	3°♊38'32	
morning max el	2094 Jun 23 02:41	9°♊48'42	22°39'33
	2094 Jul 07 16:47	0°♋	
asc. node	2094 Jul 11 00:47	6°♋16'33	
morning set	2094 Jul 15 08:06	15°♋01'45	
superior conj	2094 Jul 22 11:23	0°♌13'49	1°35'20
minimum elong	2094 Jul 22 09:24	0°♌03'16	1°35'09
	2094 Jul 22 08:47	0°♌	
max. Earth dist.	2094 Jul 25 11:13	6°♌31'24	1.34091 AU
evening rise	2094 Jul 30 07:10	16°♌17'43	
	2094 Aug 06 15:30	0°♍	
desc. node	2094 Aug 18 06:26	18°♍46'18	
	2094 Aug 26 13:57	0°♎	
evening max el	2094 Sep 02 21:48	8°♎03'44	27°11'23
retrograde	2094 Sep 16 06:40	15°♎22'17	
evening set	2094 Sep 23 05:27	12°♎38'36	
min. Earth dist.	2094 Sep 27 01:16	8°♎58'42	0.64958 AU
inferior conj	2094 Sep 29 04:51	6°♎35'29	-2°32'47
minimum elong	2094 Sep 29 08:55	6°♎24'11	2°31'16
morning rise	2094 Oct 05 13:19	1°♎03'15	
asc. node	2094 Oct 06 23:57	0°♎33'21	
direct	2094 Oct 08 05:35	0°♎25'12	
morning max el	2094 Oct 14 17:45	3°♎54'19	18°04'53
	2094 Nov 01 03:14	0°♏	
morning set	2094 Nov 01 16:57	0°♏57'03	
desc. node	2094 Nov 14 05:42	21°♏26'57	
superior conj	2094 Nov 15 18:50	23°♏55'20	-0°10'25
minimum elong	2094 Nov 15 17:32	23°♏50'09	0°10'14
behind sun begin	2094 Nov 15 09:08	23°♏16'40	
behind sun end	2094 Nov 16 01:56	24°♏23'37	
max. Earth dist.	2094 Nov 19 12:59	29°♏52'40	1.44906 AU
	2094 Nov 19 14:51	0°♐	
evening rise	2094 Dec 02 04:28	19°♐35'40	
	2094 Dec 08 22:32	0°♑	
greatest brilliancy	2094 Dec 15 15:52	10°♑11'28	-0.7m
evening max el	2094 Dec 27 16:18	26°♑10'59	19°49'18
	2095 Jan 01 16:53	0°♒	
asc. node	2095 Jan 02 23:15	0°♒24'45	
retrograde	2095 Jan 04 04:09	0°♒32'46	
	2095 Jan 06 13:06	30°℞♑	
evening set	2095 Jan 07 18:35	29°♑16'56	
inferior conj	2095 Jan 13 05:41	23°♑17'05	2°58'36
minimum elong	2095 Jan 13 03:06	23°♑25'38	2°57'59
min. Earth dist.	2095 Jan 14 05:42	21°♑57'19	0.66786 AU
morning rise	2095 Jan 18 11:23	17°♑03'55	
direct	2095 Jan 24 11:32	14°♑23'12	
morning max el	2095 Feb 05 12:29	21°♑33'52	25°24'19
desc. node	2095 Feb 10 04:54	26°♑44'02	
	2095 Feb 12 20:52	0°♒	
	2095 Mar 05 06:39	0°♓	
morning set	2095 Mar 13 18:23	14°♓41'21	
max. Earth dist.	2095 Mar 17 11:22	21°♓32'08	1.36308 AU
	2095 Mar 21 20:57	0°♈	

superior conj	2095 Mar 23	09:59	3°♈03'00	-1°19'50
minimum elong	2095 Mar 23	13:52	3°♈22'21	1°19'15
evening rise	2095 Mar 31	13:40	19°♈33'33	
asc. node	2095 Mar 31	22:35	20°♈18'37	
	2095 Apr 05	21:11	0°♉	
evening max el	2095 Apr 18	01:46	17°♉57'47	19°48'41
retrograde	2095 Apr 28	00:50	22°♉46'29	
evening set	2095 Apr 30	01:20	22°♉35'29	
inferior conj	2095 May 08	20:53	18°♉34'13	0°05'15
minimum elong	2095 May 08	21:07	18°♉33'52	0°05'10
transit middle	2095 May 08	21:07	18°♉33'52	0°05'10
transit begin	2095 May 08	17:22	18°♉39'38	
transit end	2095 May 09	00:52	18°♉28'05	
desc. node	2095 May 09	04:08	18°♉23'02	
min. Earth dist.	2095 May 11	02:15	17°♉12'09	0.55542 AU
morning rise	2095 May 17	14:34	14°♉03'44	
direct	2095 May 21	20:30	13°♉23'46	
morning max el	2095 Jun 04	17:53	20°♉19'17	24°21'45
	2095 Jun 12	23:52	0°♊	
asc. node	2095 Jun 27	21:51	25°♊57'44	
morning set	2095 Jun 29	19:54	29°♊57'44	
	2095 Jun 29	20:20	0°♋	
superior conj	2095 Jul 06	19:48	15°♋04'12	1°21'46
minimum elong	2095 Jul 06	17:25	14°♋51'15	1°21'26
max. Earth dist.	2095 Jul 08	14:19	18°♋53'56	1.33059 AU
	2095 Jul 13	21:16	0°♌	
evening rise	2095 Jul 14	03:25	0°♌31'17	
	2095 Jul 30	15:23	0°♍	
desc. node	2095 Aug 05	03:27	8°♍01'08	
evening max el	2095 Aug 16	08:32	21°♍11'11	27°26'02
retrograde	2095 Aug 30	00:58	28°♍28'37	
evening set	2095 Sep 06	05:35	25°♍51'59	
min. Earth dist.	2095 Sep 09	20:44	22°♍44'29	0.63368 AU
inferior conj	2095 Sep 12	12:47	20°♍04'18	-3°28'45
minimum elong	2095 Sep 12	17:58	19°♍51'16	3°27'11
morning rise	2095 Sep 19	07:37	14°♍48'53	
direct	2095 Sep 21	19:23	14°♍19'10	
asc. node	2095 Sep 23	21:01	14°♍40'06	
morning max el	2095 Sep 28	09:58	17°♍44'54	17°51'52
	2095 Oct 07	05:29	0°♎	
morning set	2095 Oct 14	21:39	13°♎12'09	
	2095 Oct 24	16:14	0°♏	
superior conj	2095 Oct 26	23:05	3°♏48'43	0°34'35
minimum elong	2095 Oct 27	02:29	4°♏02'50	0°34'07
desc. node	2095 Nov 01	02:44	12°♏14'07	
max. Earth dist.	2095 Nov 02	05:58	14°♏03'36	1.43965 AU
evening rise	2095 Nov 11	12:59	28°♏39'39	
	2095 Nov 12	09:51	0°♐	
	2095 Dec 02	18:46	0°♑	
evening max el	2095 Dec 10	17:08	9°♑41'55	20°53'30
retrograde	2095 Dec 19	01:57	14°♑39'04	
asc. node	2095 Dec 20	20:17	14°♑21'44	
evening set	2095 Dec 23	01:49	13°♑08'11	
inferior conj	2095 Dec 28	10:45	6°♑57'02	2°22'31
minimum elong	2095 Dec 28	08:12	7°♑05'46	2°21'43
min. Earth dist.	2095 Dec 28	22:04	6°♑18'12	0.67485 AU
morning rise	2096 Jan 02	14:25	0°♑43'59	
	2096 Jan 03	11:52	30°℞♐	
direct	2096 Jan 07	23:58	28°♐21'34	
	2096 Jan 13	00:37	0°♑	
morning max el	2096 Jan 18	20:49	4°♑50'22	23°58'24
desc. node	2096 Jan 28	01:57	15°♑43'51	
	2096 Feb 07	05:46	0°♒	
morning set	2096 Feb 23	12:06	26°♒00'44	
	2096 Feb 25	19:09	0°♓	
max. Earth dist.	2096 Feb 27	07:05	2°♓38'54	1.38352 AU
superior conj	2096 Mar 05	12:47	15°♓58'31	-1°43'14
minimum elong	2096 Mar 05	17:04	16°♓18'56	1°42'48
	2096 Mar 12	18:09	0°♈	
evening rise	2096 Mar 14	11:42	3°♈24'02	
asc. node	2096 Mar 17	19:38	9°♈51'42	
	2096 Mar 30	22:25	0°♉	
evening max el	2096 Mar 30	23:11	0°♉01'51	18°54'54
retrograde	2096 Apr 08	08:34	4°♉06'27	
evening set	2096 Apr 10	13:28	3°♉50'43	
	2096 Apr 17	22:54	30°℞♈	
inferior conj	2096 Apr 18	13:43	29°♈33'43	1°46'35
minimum elong	2096 Apr 18	17:21	29°♈27'14	1°45'27
min. Earth dist.	2096 Apr 21	18:12	27°♈18'19	0.57010 AU
desc. node	2096 Apr 25	01:09	25°♈17'25	
morning rise	2096 Apr 26	18:08	24°♈29'02	
direct	2096 May 02	01:21	23°♈21'49	
	2096 May 15	12:27	0°♉	
morning max el	2096 May 16	08:41	0°♉47'43	25°56'14
	2096 Jun 05	19:50	0°♊	
morning set	2096 Jun 13	07:19	14°♊51'54	
asc. node	2096 Jun 13	18:55	15°♊53'16	
superior conj	2096 Jun 20	06:49	0°♋00'40	1°03'49
minimum elong	2096 Jun 20	04:32	29°♊48'07	1°03'24
	2096 Jun 20	06:42	0°♋	
max. Earth dist.	2096 Jun 20	23:49	1°♋33'56	1.32425 AU
evening rise	2096 Jun 27	07:03	15°♋05'44	
	2096 Jul 04	21:16	0°♌	
desc. node	2096 Jul 22	00:29	26°♌27'38	
	2096 Jul 25	00:42	0°♍	
evening max el	2096 Jul 28	15:18	3°♍43'34	27°08'43
retrograde	2096 Aug 11	12:07	10°♍57'37	
evening set	2096 Aug 18	14:27	8°♍40'48	
min. Earth dist.	2096 Aug 22	05:33	5°♍56'51	0.61480 AU
inferior conj	2096 Aug 25	08:18	3°♍11'45	-4°17'22
minimum elong	2096 Aug 25	13:28	3°♍00'16	4°16'17
	2096 Aug 29	06:44	30°℞♌	
morning rise	2096 Sep 01	14:07	28°♌16'42	
direct	2096 Sep 04	00:11	27°♌52'21	
	2096 Sep 09	10:39	0°♍	
asc. node	2096 Sep 09	18:06	0°♍14'49	
morning max el	2096 Sep 11	00:26	1°♍22'48	17°57'23
morning set	2096 Sep 26	21:18	26°♍21'32	
	2096 Sep 28	21:02	0°♎	
superior conj	2096 Oct 07	06:30	15°♎02'11	1°09'02
minimum elong	2096 Oct 07	11:02	15°♎21'56	1°08'30
max. Earth dist.	2096 Oct 14	18:48	27°♎46'56	1.42439 AU
	2096 Oct 16	03:12	0°♏	
desc. node	2096 Oct 17	23:46	3°♏01'01	
evening rise	2096 Oct 21	03:47	8°♏04'39	
	2096 Nov 04	15:06	0°♐	
evening max el	2096 Nov 22	12:24	23°♐13'37	22°07'52
retrograde	2096 Dec 01	22:20	28°♐49'38	
evening set	2096 Dec 06	09:30	27°♐02'20	
asc. node	2096 Dec 06	17:20	26°♐45'49	
inferior conj	2096 Dec 11	17:55	20°♐43'07	1°39'12
minimum elong	2096 Dec 11	15:52	20°♐50'13	1°38'26
min. Earth dist.	2096 Dec 11	17:46	20°♐43'36	0.67812 AU
morning rise	2096 Dec 16	22:05	14°♐31'56	
direct	2096 Dec 21	16:33	12°♐31'53	
morning max el	2096 Dec 31	07:24	18°♐12'42	22°30'08
	2097 Jan 10	02:16	0°♑	
desc. node	2097 Jan 13	22:59	5°♑18'54	
	2097 Jan 30	09:17	0°♒	

morning set	2097 Feb 03 02:10	5°♒58'14	
max. Earth dist.	2097 Feb 08 03:34	14°♒23'38	1.40508 AU
superior conj	2097 Feb 15 22:39	28°♒02'06	-1°59'48
minimum elong	2097 Feb 16 01:42	28°♒15'51	1°59'38
	2097 Feb 17 00:42	0°♓	
evening rise	2097 Feb 25 23:39	16°♓40'43	
asc. node	2097 Mar 04 16:41	29°♓02'26	
	2097 Mar 05 05:53	0°♈	
evening max el	2097 Mar 14 04:47	12°♈38'11	18°21'20
retrograde	2097 Mar 21 11:35	16°♈14'55	
evening set	2097 Mar 23 22:25	15°♈51'25	
inferior conj	2097 Mar 31 03:56	11°♈14'04	2°55'00
minimum elong	2097 Mar 31 07:37	11°♈06'21	2°54'12
min. Earth dist.	2097 Apr 03 14:27	8°♈23'05	0.58988 AU
morning rise	2097 Apr 07 14:11	5°♈40'26	
desc. node	2097 Apr 11 22:10	4°♈06'55	
direct	2097 Apr 13 19:27	3°♈57'26	
morning max el	2097 Apr 28 04:18	11°♈41'42	27°07'39
	2097 May 12 11:18	0°♉	
morning set	2097 May 28 16:41	29°♉38'51	
	2097 May 28 20:44	0°♊	
asc. node	2097 May 31 15:59	5°♊58'03	
superior conj	2097 Jun 04 18:38	14°♊57'19	0°42'14
minimum elong	2097 Jun 04 16:53	14°♊47'44	0°41'54
max. Earth dist.	2097 Jun 04 12:06	14°♊21'23	1.32173 AU
evening rise	2097 Jun 11 15:30	29°♊52'50	
	2097 Jun 11 16:51	0°♋	
	2097 Jun 28 03:48	0°♌	
desc. node	2097 Jul 08 21:30	13°♌45'54	
evening max el	2097 Jul 10 15:28	15°♌30'29	26°18'22
retrograde	2097 Jul 24 15:07	22°♌41'52	
evening set	2097 Jul 31 03:23	20°♌57'08	
min. Earth dist.	2097 Aug 04 04:21	18°♌21'20	0.59420 AU
inferior conj	2097 Aug 07 11:50	15°♌48'33	-4°50'49
minimum elong	2097 Aug 07 14:55	15°♌42'35	4°50'32
morning rise	2097 Aug 15 04:35	11°♌16'23	
direct	2097 Aug 17 15:31	10°♌55'18	
morning max el	2097 Aug 25 10:04	14°♌40'06	18°22'39
asc. node	2097 Aug 27 15:11	17°♌03'26	
	2097 Sep 05 00:06	0°♍	
morning set	2097 Sep 10 10:27	10°♍10'00	
superior conj	2097 Sep 19 13:50	27°♍26'42	1°31'26
minimum elong	2097 Sep 19 17:13	27°♍42'12	1°31'09
	2097 Sep 20 23:23	0°♎	
max. Earth dist.	2097 Sep 27 02:09	10°♎49'02	1.40521 AU
evening rise	2097 Oct 01 14:23	18°♎25'10	
desc. node	2097 Oct 04 20:49	23°♎44'34	
	2097 Oct 08 19:52	0°♏	
	2097 Oct 30 02:09	0°♐	
evening max el	2097 Nov 05 03:09	6°♐47'46	23°27'25
retrograde	2097 Nov 15 15:57	13°♐01'36	
evening set	2097 Nov 20 16:01	10°♐57'18	
asc. node	2097 Nov 23 14:22	7°♐50'09	
min. Earth dist.	2097 Nov 25 14:29	5°♐10'57	0.67794 AU
inferior conj	2097 Nov 26 01:19	4°♐33'49	0°50'05
minimum elong	2097 Nov 26 00:10	4°♐37'45	0°49'36
	2097 Nov 29 16:02	30°℞♏	
morning rise	2097 Dec 01 08:17	28°♏26'22	
direct	2097 Dec 05 12:24	26°♏49'11	
	2097 Dec 12 03:03	0°♐	
morning max el	2097 Dec 13 23:43	1°♐44'38	21°07'41
desc. node	2097 Dec 31 20:01	25°♐19'37	
	2098 Jan 03 23:21	0°♑	
morning set	2098 Jan 13 12:11	14°♑38'05	
max. Earth dist.	2098 Jan 21 06:06	27°♑02'07	1.42487 AU
	2098 Jan 23 01:24	0°♒	
superior conj	2098 Jan 28 10:21	9°♒01'33	-2°04'59
minimum elong	2098 Jan 28 09:38	8°♒58'30	2°04'58
evening rise	2098 Feb 08 21:44	29°♒15'04	
	2098 Feb 09 07:43	0°♓	
asc. node	2098 Feb 19 13:42	17°♓43'28	
evening max el	2098 Feb 25 15:23	25°♓38'10	18°07'41
retrograde	2098 Mar 04 07:11	29°♓02'45	
evening set	2098 Mar 06 23:30	28°♓29'44	
inferior conj	2098 Mar 13 13:44	23°♓31'44	3°31'38
minimum elong	2098 Mar 13 15:43	23°♓26'57	3°31'24
min. Earth dist.	2098 Mar 16 17:41	20°♓29'36	0.61135 AU
morning rise	2098 Mar 20 06:10	17°♓39'08	
direct	2098 Mar 27 01:03	15°♓21'20	
desc. node	2098 Mar 29 19:12	15°♓42'33	
morning max el	2098 Apr 10 06:16	23°♓15'39	27°45'09
	2098 Apr 16 06:47	0°♈	
	2098 May 05 15:33	0°♉	
morning set	2098 May 12 22:05	14°♉11'39	
asc. node	2098 May 18 13:01	26°♉07'03	
max. Earth dist.	2098 May 18 23:10	27°♉02'15	1.32311 AU
superior conj	2098 May 20 05:29	29°♉47'49	0°17'45
minimum elong	2098 May 20 04:41	29°♉43'24	0°17'35
	2098 May 20 07:43	0°♊	
evening rise	2098 May 27 02:34	14°♊44'48	
	2098 Jun 03 17:41	0°♋	
evening max el	2098 Jun 22 08:30	26°♋31'17	25°00'07
desc. node	2098 Jun 25 18:31	29°♋27'33	
	2098 Jun 26 12:12	0°♌	
retrograde	2098 Jul 06 08:03	3°♌37'15	
evening set	2098 Jul 11 16:40	2°♌31'30	
	2098 Jul 16 10:39	30°℞♋	
min. Earth dist.	2098 Jul 16 20:02	29°♋44'58	0.57430 AU
inferior conj	2098 Jul 19 20:07	27°♋44'33	-4°57'09
minimum elong	2098 Jul 19 18:34	27°♋47'10	4°57'05
morning rise	2098 Jul 27 23:06	23°♋34'27	
direct	2098 Jul 30 13:01	23°♋15'10	
morning max el	2098 Aug 08 11:37	27°♋26'21	19°08'48
	2098 Aug 10 21:40	0°♌	
asc. node	2098 Aug 14 12:13	4°♌49'58	
morning set	2098 Aug 25 09:00	24°♌25'33	
	2098 Aug 28 04:15	0°♍	
superior conj	2098 Sep 02 15:20	10°♍44'54	1°43'00
minimum elong	2098 Sep 02 16:50	10°♍52'07	1°42'56
max. Earth dist.	2098 Sep 09 05:42	23°♍07'05	1.38462 AU
evening rise	2098 Sep 13 01:01	29°♍52'31	
	2098 Sep 13 02:44	0°♎	
desc. node	2098 Sep 21 17:51	14°♎20'06	
	2098 Oct 02 04:01	0°♏	
evening max el	2098 Oct 18 15:30	20°♏25'30	24°46'01
retrograde	2098 Oct 30 05:41	27°♏10'31	
evening set	2098 Nov 04 19:42	24°♏49'59	
min. Earth dist.	2098 Nov 09 09:51	19°♏37'23	0.67437 AU
inferior conj	2098 Nov 10 07:13	18°♏26'31	-0°03'36
minimum elong	2098 Nov 10 07:18	18°♏26'14	0°03'35
transit middle	2098 Nov 10 07:18	18°♏26'14	0°03'35
transit begin	2098 Nov 10 04:37	18°♏35'09	
transit end	2098 Nov 10 10:00	18°♏17'19	
asc. node	2098 Nov 10 11:24	18°♏12'39	
morning rise	2098 Nov 15 19:01	12°♏25'08	
direct	2098 Nov 19 10:23	11°♏08'52	
morning max el	2098 Nov 26 23:38	15°♏27'15	19°56'48
	2098 Dec 08 06:20	0°♐	

desc. node	2098 Dec 18 17:05	15°♐38'52	
morning set	2098 Dec 23 08:15	22°♐45'53	
	2098 Dec 28 00:03	0°♑	
max. Earth dist.	2099 Jan 03 15:57	10°♑30'37	1.44028 AU
superior conj	2099 Jan 08 20:03	18°♑50'10	-1°53'48
minimum elong	2099 Jan 08 13:51	18°♑24'57	1°53'26
	2099 Jan 15 14:17	0°♒	
evening rise	2099 Jan 22 01:39	10°♒59'00	
	2099 Feb 02 10:08	0°♓	
asc. node	2099 Feb 06 10:43	5°♓45'54	
evening max el	2099 Feb 09 03:59	8°♓54'04	18°13'16
retrograde	2099 Feb 15 14:54	12°♓20'19	
evening set	2099 Feb 18 12:26	11°♓36'37	
inferior conj	2099 Feb 24 15:12	6°♓18'51	3°43'09
minimum elong	2099 Feb 24 15:14	6°♓18'48	3°43'09
min. Earth dist.	2099 Feb 27 05:50	3°♓29'00	0.63163 AU
morning rise	2099 Mar 02 17:03	0°♓15'37	
	2099 Mar 03 01:17	30°♓℞	
direct	2099 Mar 09 15:46	27°♒33'32	
desc. node	2099 Mar 16 16:13	29°♒51'34	
	2099 Mar 16 21:39	0°♓	
morning max el	2099 Mar 23 13:12	5°♓29'39	27°45'16
	2099 Apr 11 02:10	0°♈	
morning set	2099 Apr 26 21:19	28°♈23'04	
	2099 Apr 27 16:34	0°♉	
max. Earth dist.	2099 May 02 05:06	9°♉23'39	1.32858 AU
superior conj	2099 May 04 13:42	14°♉26'32	-0°08'56
minimum elong	2099 May 04 14:08	14°♉28'51	0°08'50
behind sun begin	2099 May 04 09:43	14°♉05'06	
behind sun end	2099 May 04 18:32	14°♉52'38	
asc. node	2099 May 05 10:02	16°♉16'20	
evening rise	2099 May 11 14:24	29°♉35'27	
	2099 May 11 19:03	0°♊	
	2099 May 28 18:58	0°♋	
evening max el	2099 Jun 03 22:14	7°♋04'00	23°26'03
desc. node	2099 Jun 12 15:29	12°♋57'49	
retrograde	2099 Jun 17 12:34	13°♋51'53	
evening set	2099 Jun 21 09:17	13°♋19'10	
min. Earth dist.	2099 Jun 28 08:21	10°♋07'08	0.55847 AU
inferior conj	2099 Jun 30 08:24	8°♋55'51	-4°22'04
minimum elong	2099 Jun 30 01:44	9°♋05'48	4°20'49
morning rise	2099 Jul 08 20:45	5°♋00'54	
direct	2099 Jul 11 15:27	4°♋41'54	
morning max el	2099 Jul 22 02:29	9°♋32'41	20°16'13
asc. node	2099 Aug 01 09:16	23°♋21'23	
	2099 Aug 05 00:57	0°♌	
morning set	2099 Aug 09 13:57	9°♌00'22	
superior conj	2099 Aug 17 05:57	24°♌42'24	1°45'33
minimum elong	2099 Aug 17 05:43	24°♌41'10	1°45'33
	2099 Aug 19 21:35	0°♍	
max. Earth dist.	2099 Aug 22 11:17	5°♍00'08	1.36520 AU
evening rise	2099 Aug 26 09:27	12°♍21'45	
	2099 Sep 05 15:28	0°♎	
desc. node	2099 Sep 08 14:52	4°♎42'42	
	2099 Sep 27 05:58	0°♏	
evening max el	2099 Oct 01 03:33	4°♏05'43	25°56'18
retrograde	2099 Oct 13 14:37	11°♏11'09	
evening set	2099 Oct 19 18:46	8°♏37'05	
min. Earth dist.	2099 Oct 24 01:24	3°♏59'59	0.66747 AU
inferior conj	2099 Oct 25 09:47	2°♏18'11	-1°00'35
minimum elong	2099 Oct 25 11:22	2°♏13'12	0°59'55
	2099 Oct 27 06:59	30°♐℞	
asc. node	2099 Oct 28 08:26	28°♎49'13	
morning rise	2099 Oct 31 04:19	26°♎25'37	
direct	2099 Nov 03 08:57	25°♎27'01	
morning max el	2099 Nov 10 06:54	29°♎18'29	19°00'31
	2099 Nov 10 22:55	0°♏	
	2099 Dec 01 15:20	0°♐	
morning set	2099 Dec 02 15:32	1°♐34'40	
desc. node	2099 Dec 05 14:07	6°♐10'55	
max. Earth dist.	2099 Dec 17 08:00	24°♐35'46	1.44946 AU
superior conj	2099 Dec 19 06:11	27°♐37'44	-1°23'33
minimum elong	2099 Dec 18 21:20	27°♐02'49	1°22'37
	2099 Dec 20 18:12	0°♑	
evening rise	2100 Jan 03 07:25	21°♑45'45	
	2100 Jan 08 08:29	0°♒	
evening max el	2100 Jan 23 15:48	22°♒18'31	18°37'14
asc. node	2100 Jan 24 07:44	22°♒57'36	
retrograde	2100 Jan 30 06:29	25°♒58'21	
evening set	2100 Feb 02 09:43	25°♒02'58	
inferior conj	2100 Feb 08 04:20	19°♒26'59	3°36'08
minimum elong	2100 Feb 08 02:51	19°♒31'25	3°35'59
min. Earth dist.	2100 Feb 10 03:21	17°♒06'13	0.64885 AU
morning rise	2100 Feb 13 19:31	13°♒17'55	
direct	2100 Feb 20 13:39	10°♒26'18	
desc. node	2100 Mar 03 13:16	15°♒58'23	
morning max el	2100 Mar 05 22:36	18°♒14'22	27°10'50
	2100 Mar 15 20:32	0°♓	