

superior conj	14600 Jan 18 20:05	11° \approx 26'27	1°32'51	min. Earth dist.	14600 Nov 05 17:50	24° \mathbb{M} 44'47	0.55761 AU
minimum elong	14600 Jan 18 21:28	11° \approx 33'56	1°33'36	morning rise	14600 Nov 10 22:40	21° \mathbb{M} 56'28	
max. Earth dist.	14600 Jan 21 14:24	17° \approx 22'39	1.32896 AU	direct	14600 Nov 16 08:42	20° \mathbb{M} 49'40	
evening rise	14600 Jan 26 12:27	27° \approx 32'21		morning max el	14600 Nov 30 09:27	27° \mathbb{M} 54'54	25°29'18
	14600 Jan 27 18:14	0° \mathbb{H}			14600 Dec 02 11:03	0° \mathbb{Z}	
desc. node	14600 Feb 01 13:25	9° \mathbb{H} 06'14		asc. node	14600 Dec 17 20:29	22° \mathbb{Z} 07'10	
	14600 Feb 14 05:33	0° \mathbb{Y}			14600 Dec 22 01:00	0° \mathbb{Z}	
evening max el	14600 Mar 01 15:22	19° \mathbb{Y} 06'16	27°26'38	morning set	14600 Dec 27 11:23	11° \mathbb{Z} 13'50	
retrograde	14600 Mar 15 07:43	26° \mathbb{Y} 35'08					
evening set	14600 Mar 22 02:07	24° \mathbb{Y} 07'01		superior conj	14601 Jan 03 05:24	26° \mathbb{Z} 05'23	1°37'43
min. Earth dist.	14600 Mar 25 21:53	20° \mathbb{Y} 41'18	0.64281 AU	minimum elong	14601 Jan 03 05:43	26° \mathbb{Z} 07'09	1°38'41
inferior conj	14600 Mar 28 11:59	17° \mathbb{Y} 56'50	-0°06'36	max. Earth dist.	14601 Jan 04 17:29	29° \mathbb{Z} 24'29	1.31790 AU
minimum elong	14600 Mar 28 12:11	17° \mathbb{Y} 56'17	0°06'43		14601 Jan 04 23:57	0° \approx	
transit middle	14600 Mar 28 12:11	17° \mathbb{Y} 56'17	0°06'43	evening rise	14601 Jan 10 09:25	11° \approx 32'56	
transit begin	14600 Mar 28 09:23	18° \mathbb{Y} 03'46		desc. node	14601 Jan 19 10:06	28° \approx 59'31	
transit end	14600 Mar 28 15:00	17° \mathbb{Y} 48'49			14601 Jan 19 23:43	0° \mathbb{H}	
asc. node	14600 Mar 28 20:15	17° \mathbb{Y} 34'55			14601 Feb 10 02:05	0° \mathbb{Y}	
morning rise	14600 Apr 04 00:22	12° \mathbb{Y} 34'37		evening max el	14601 Feb 12 01:47	1° \mathbb{Y} 59'12	27°33'30
direct	14600 Apr 06 13:34	12° \mathbb{Y} 01'32		retrograde	14601 Feb 25 23:40	9° \mathbb{Y} 23'50	
morning max el	14600 Apr 12 22:09	15° \mathbb{Y} 17'44	17°50'09	evening set	14601 Mar 04 20:40	7° \mathbb{Y} 06'59	
	14600 Apr 23 11:19	0° \mathbb{B}		min. Earth dist.	14601 Mar 08 14:45	4° \mathbb{Y} 07'28	0.62222 AU
morning set	14600 Apr 29 22:58	10° \mathbb{B} 49'17		inferior conj	14601 Mar 11 14:39	1° \mathbb{Y} 18'02	-1°20'14
desc. node	14600 Apr 30 15:42	11° \mathbb{B} 59'34		minimum elong	14601 Mar 11 17:24	1° \mathbb{Y} 11'30	1°19'01
	14600 May 11 13:12	0° \mathbb{II}			14601 Mar 13 00:14	30° \mathbb{R} \mathbb{H}	
				asc. node	14601 Mar 15 17:43	27° \mathbb{H} 46'48	
superior conj	14600 May 13 08:28	2° \mathbb{II} 54'24	-1°29'07	morning rise	14601 Mar 18 17:03	26° \mathbb{H} 12'55	
minimum elong	14600 May 13 00:03	2° \mathbb{II} 20'36	1°29'02	direct	14601 Mar 20 22:56	25° \mathbb{H} 50'05	
max. Earth dist.	14600 May 18 06:31	10° \mathbb{II} 44'04	1.45262 AU	morning max el	14601 Mar 27 15:45	29° \mathbb{H} 13'34	17°47'18
evening rise	14600 May 29 02:43	27° \mathbb{II} 33'41			14601 Mar 28 09:55	0° \mathbb{Y}	
	14600 May 30 17:02	0° \mathbb{E}		morning set	14601 Apr 12 12:55	23° \mathbb{Y} 40'49	
greatest brilliancy	14600 Jun 12 21:54	19° \mathbb{E} 43'32	-0.6m		14601 Apr 16 03:03	0° \mathbb{B}	
	14600 Jun 20 08:41	0° \mathbb{Q}		desc. node	14601 Apr 17 12:20	2° \mathbb{B} 25'20	
asc. node	14600 Jun 24 18:00	5° \mathbb{Q} 10'00					
evening max el	14600 Jun 25 09:50	5° \mathbb{Q} 50'34	20°06'29	superior conj	14601 Apr 24 03:13	13° \mathbb{B} 45'03	-0°50'55
retrograde	14600 Jul 03 02:30	10° \mathbb{Q} 13'22		minimum elong	14601 Apr 23 22:20	13° \mathbb{B} 24'35	0°50'50
evening set	14600 Jul 07 01:22	8° \mathbb{Q} 43'26		max. Earth dist.	14601 Apr 30 23:28	24° \mathbb{B} 59'59	1.43968 AU
inferior conj	14600 Jul 12 08:11	2° \mathbb{Q} 41'54	3°09'10		14601 May 04 02:36	0° \mathbb{II}	
minimum elong	14600 Jul 12 08:43	2° \mathbb{Q} 40'04	3°08'13	evening rise	14601 May 08 16:13	7° \mathbb{II} 08'57	
min. Earth dist.	14600 Jul 13 05:45	1° \mathbb{Q} 28'36	0.68092 AU		14601 May 23 23:27	0° \mathbb{E}	
	14600 Jul 14 08:27	30° \mathbb{R} \mathbb{E}		evening max el	14601 Jun 08 08:04	19° \mathbb{E} 41'35	21°15'15
morning rise	14600 Jul 17 15:44	26° \mathbb{E} 18'45		asc. node	14601 Jun 11 14:59	22° \mathbb{E} 34'54	
direct	14600 Jul 23 06:50	23° \mathbb{E} 50'33		retrograde	14601 Jun 17 01:24	24° \mathbb{E} 45'59	
desc. node	14600 Jul 27 14:59	25° \mathbb{E} 02'08		evening set	14601 Jun 21 10:51	22° \mathbb{E} 59'12	
	14600 Aug 03 01:33	0° \mathbb{Q}		inferior conj	14601 Jun 26 16:35	16° \mathbb{E} 46'25	3°09'29
morning max el	14600 Aug 03 19:38	0° \mathbb{Q} 44'57	24°33'52	minimum elong	14601 Jun 26 16:08	16° \mathbb{E} 47'58	3°08'27
	14600 Aug 25 22:09	0° \mathbb{M}		min. Earth dist.	14601 Jun 27 00:38	16° \mathbb{E} 18'22	0.68801 AU
morning set	14600 Sep 08 11:00	22° \mathbb{M} 07'34		morning rise	14601 Jul 01 21:12	10° \mathbb{E} 28'05	
max. Earth dist.	14600 Sep 12 01:11	28° \mathbb{M} 30'44	1.37584 AU	direct	14601 Jul 07 00:02	8° \mathbb{E} 14'48	
	14600 Sep 12 20:50	0° \mathbb{Q}		desc. node	14601 Jul 14 12:19	11° \mathbb{E} 47'12	
				morning max el	14601 Jul 17 06:50	14° \mathbb{E} 21'15	23°04'24
superior conj	14600 Sep 19 01:51	11° \mathbb{Q} 41'20	-0°15'51		14601 Jul 29 23:48	0° \mathbb{Q}	
minimum elong	14600 Sep 19 02:54	11° \mathbb{Q} 46'26	0°15'33		14601 Aug 18 20:17	0° \mathbb{M}	
behind sun begin	14600 Sep 19 01:05	11° \mathbb{Q} 37'35		morning set	14601 Aug 20 15:53	2° \mathbb{M} 59'16	
behind sun end	14600 Sep 19 04:44	11° \mathbb{Q} 55'16		max. Earth dist.	14601 Aug 24 23:46	10° \mathbb{M} 17'14	1.39958 AU
asc. node	14600 Sep 20 19:29	15° \mathbb{Q} 04'19					
evening rise	14600 Sep 27 14:11	28° \mathbb{Q} 34'48		superior conj	14601 Sep 01 18:51	24° \mathbb{M} 07'45	-0°51'16
	14600 Sep 28 07:16	0° \mathbb{M}		minimum elong	14601 Sep 01 22:43	24° \mathbb{M} 25'29	0°50'49
evening max el	14600 Oct 14 08:08	26° \mathbb{M} 04'46	19°18'56		14601 Sep 04 22:45	0° \mathbb{Q}	
	14600 Oct 19 20:52	0° \mathbb{Z}		asc. node	14601 Sep 07 16:03	5° \mathbb{Q} 08'54	
desc. node	14600 Oct 23 11:11	0° \mathbb{Z} 46'26		evening rise	14601 Sep 11 09:33	12° \mathbb{Q} 17'12	
retrograde	14600 Oct 23 16:59	0° \mathbb{Z} 46'36			14601 Sep 21 04:37	0° \mathbb{M}	
evening set	14600 Oct 25 13:55	0° \mathbb{Z} 36'09		evening max el	14601 Sep 27 09:25	8° \mathbb{M} 09'58	18°33'05
	14600 Oct 27 17:42	30° \mathbb{R} \mathbb{M}		retrograde	14601 Oct 05 08:48	12° \mathbb{M} 11'51	
inferior conj	14600 Nov 03 03:47	26° \mathbb{M} 26'49	-3°20'04	evening set	14601 Oct 07 07:43	11° \mathbb{M} 58'04	
minimum elong	14600 Nov 02 19:27	26° \mathbb{M} 40'33	3°16'16	desc. node	14601 Oct 10 08:39	10° \mathbb{M} 47'10	

inferior conj	14601 Oct 15 05:18	7°♄28'56	-1°33'09	inferior conj	14602 Sep 27 04:18	19°♄17'46	0°01'26
minimum elong	14601 Oct 15 01:35	7°♄36'06	1°31'07	minimum elong	14602 Sep 27 04:21	19°♄17'39	0°01'38
min. Earth dist.	14601 Oct 18 10:02	5°♄02'05	0.57544 AU	transit middle	14602 Sep 27 04:21	19°♄17'39	0°01'38
morning rise	14601 Oct 22 15:58	2°♄20'59		transit begin	14602 Sep 27 01:00	19°♄25'09	
direct	14601 Oct 28 18:15	0°♄47'28		transit end	14602 Sep 27 07:42	19°♄10'07	
morning max el	14601 Nov 12 00:59	8°♄18'02	26°54'45	desc. node	14602 Sep 27 06:08	19°♄13'39	
	14601 Nov 28 09:28	0°♄		min. Earth dist.	14602 Sep 30 10:24	16°♄24'03	0.59735 AU
asc. node	14601 Dec 04 17:29	11°♄15'29		morning rise	14602 Oct 04 04:37	13°♄36'50	
morning set	14601 Dec 11 21:02	25°♄44'31		direct	14602 Oct 10 17:16	11°♄36'44	
	14601 Dec 13 20:13	0°♄		morning max el	14602 Oct 25 00:15	19°♄25'11	27°46'00
					14602 Nov 03 00:40	0°♄	
superior conj	14601 Dec 18 16:41	10°♄46'47	1°36'32		14602 Nov 21 04:40	0°♄	
minimum elong	14601 Dec 18 15:57	10°♄42'40	1°37'33	asc. node	14602 Nov 21 14:22	0°♄47'36	
max. Earth dist.	14601 Dec 19 00:39	11°♄31'19	1.31201 AU	morning set	14602 Nov 26 02:55	10°♄01'10	
evening rise	14601 Dec 25 12:57	25°♄48'39		max. Earth dist.	14602 Dec 02 08:30	23°♄36'07	1.31146 AU
	14601 Dec 27 12:56	0°♄					
desc. node	14602 Jan 06 06:53	18°♄27'19		superior conj	14602 Dec 03 04:05	25°♄25'20	1°29'27
	14602 Jan 13 14:16	0°♄		minimum elong	14602 Dec 03 02:28	25°♄16'17	1°30'20
evening max el	14602 Jan 25 06:59	14°♄07'44	27°06'34		14602 Dec 05 05:15	0°♄	
retrograde	14602 Feb 08 06:58	21°♄23'34		evening rise	14602 Dec 09 20:54	10°♄14'21	
evening set	14602 Feb 15 00:10	19°♄26'01			14602 Dec 19 19:57	0°♄	
min. Earth dist.	14602 Feb 18 21:22	16°♄43'54	0.60016 AU	desc. node	14602 Dec 24 03:45	7°♄20'01	
inferior conj	14602 Feb 22 02:07	14°♄05'24	-2°43'51	evening max el	14603 Jan 07 04:42	25°♄24'51	26°05'09
minimum elong	14602 Feb 22 08:10	13°♄52'53	2°41'11		14603 Jan 13 02:17	0°♄	
morning rise	14602 Mar 01 19:31	9°♄20'00		retrograde	14603 Jan 21 03:32	2°♄28'53	
asc. node	14602 Mar 02 15:12	9°♄09'41		evening set	14603 Jan 27 08:47	0°♄57'29	
direct	14602 Mar 03 20:27	9°♄03'51			14603 Jan 29 03:58	30°♄	
morning max el	14602 Mar 11 06:16	12°♄45'34	18°03'01	min. Earth dist.	14603 Jan 31 17:58	28°♄20'09	0.57871 AU
	14602 Mar 22 20:21	0°♄		inferior conj	14603 Feb 03 18:53	26°♄09'37	-4°10'07
morning set	14602 Mar 26 20:04	7°♄19'04		minimum elong	14603 Feb 04 03:38	25°♄53'53	4°06'44
desc. node	14602 Apr 04 08:53	22°♄57'02		morning rise	14603 Feb 12 01:30	21°♄45'34	
				direct	14603 Feb 14 01:58	21°♄32'19	
superior conj	14602 Apr 05 21:28	25°♄39'46	-0°12'18	asc. node	14603 Feb 17 12:38	22°♄13'04	
minimum elong	14602 Apr 05 20:26	25°♄35'09	0°12'28	morning max el	14603 Feb 22 13:46	25°♄42'35	18°38'58
behind sun begin	14602 Apr 05 15:29	25°♄13'15			14603 Feb 26 05:53	0°♄	
behind sun end	14602 Apr 06 01:22	25°♄57'01		morning set	14603 Mar 10 15:13	21°♄28'59	
	14602 Apr 08 08:53	0°♄			14603 Mar 15 00:45	0°♄	
max. Earth dist.	14602 Apr 13 11:34	8°♄41'26	1.42136 AU				
evening rise	14602 Apr 18 20:22	17°♄26'54		superior conj	14603 Mar 19 11:53	8°♄28'49	0°22'17
	14602 Apr 26 22:02	0°♄		minimum elong	14603 Mar 19 13:22	8°♄35'43	0°21'59
	14602 May 18 18:21	0°♄		desc. node	14603 Mar 22 05:24	13°♄31'10	
evening max el	14602 May 22 01:22	3°♄33'03	22°33'09	max. Earth dist.	14603 Mar 26 19:27	21°♄41'46	1.39968 AU
asc. node	14602 May 29 12:06	8°♄55'10		evening rise	14603 Mar 30 21:18	28°♄40'03	
retrograde	14602 May 31 22:43	9°♄21'49			14603 Mar 31 16:27	0°♄	
evening set	14602 Jun 05 19:21	7°♄19'29			14603 Apr 20 09:41	0°♄	
inferior conj	14602 Jun 11 02:21	0°♄57'35	2°59'03	evening max el	14603 May 04 15:50	17°♄26'14	23°54'28
minimum elong	14602 Jun 11 01:03	1°♄02'07	2°57'51	retrograde	14603 May 15 16:59	23°♄55'14	
min. Earth dist.	14602 Jun 10 21:24	1°♄14'48	0.69027 AU	asc. node	14603 May 16 09:18	23°♄53'12	
	14602 Jun 11 18:55	30°♄		evening set	14603 May 21 01:15	21°♄39'32	
morning rise	14602 Jun 16 06:35	24°♄45'59		min. Earth dist.	14603 May 25 17:51	16°♄11'42	0.68775 AU
direct	14602 Jun 20 20:55	22°♄51'11		inferior conj	14603 May 26 11:33	15°♄11'22	2°38'16
morning max el	14602 Jun 29 21:03	28°♄05'37	21°37'46	minimum elong	14603 May 26 09:38	15°♄17'55	2°36'54
desc. node	14602 Jul 01 09:31	29°♄40'48		morning rise	14603 May 31 18:02	9°♄07'54	
	14602 Jul 01 16:33	0°♄		direct	14603 Jun 04 20:06	7°♄33'19	
	14602 Jul 23 13:56	0°♄		morning max el	14603 Jun 12 17:12	12°♄00'22	20°20'44
morning set	14602 Jul 31 20:15	12°♄47'32		desc. node	14603 Jun 18 06:37	18°♄24'38	
max. Earth dist.	14602 Aug 07 02:37	22°♄54'42	1.42205 AU		14603 Jun 26 16:26	0°♄	
	14602 Aug 11 08:28	0°♄		morning set	14603 Jul 11 04:10	21°♄44'16	
					14603 Jul 16 11:31	0°♄	
superior conj	14602 Aug 14 16:34	5°♄43'12	-1°26'22	max. Earth dist.	14603 Jul 20 12:32	6°♄24'39	1.44067 AU
minimum elong	14602 Aug 14 23:13	6°♄12'05	1°26'01				
evening rise	14602 Aug 25 17:16	25°♄27'51		superior conj	14603 Jul 26 15:16	16°♄19'44	-1°55'46
asc. node	14602 Aug 25 12:37	25°♄06'38		minimum elong	14603 Jul 26 22:33	16°♄49'43	1°55'59
	14602 Aug 28 05:01	0°♄			14603 Aug 03 18:34	0°♄	
evening max el	14602 Sep 10 19:08	20°♄54'38	18°08'08	evening rise	14603 Aug 08 08:32	7°♄54'16	
retrograde	14602 Sep 17 19:08	24°♄29'12		asc. node	14603 Aug 12 09:13	14°♄52'51	
evening set	14602 Sep 20 00:46	24°♄07'46			14603 Aug 21 21:06	0°♄	

evening max el	14603 Aug 25 09:00	4°♌07'32	18°02'32		14604 Jul 26 12:35	0°♍	
retrograde	14603 Aug 31 20:21	7°♌29'03		asc. node	14604 Jul 29 05:53	4°♍23'01	
evening set	14603 Sep 03 10:10	6°♌56'17		evening max el	14604 Aug 07 23:29	17°♍40'02	18°15'17
inferior conj	14603 Sep 09 21:42	1°♌46'59	1°15'30	retrograde	14604 Aug 14 08:09	21°♍02'24	
minimum elong	14603 Sep 09 23:41	1°♌41'55	1°14'44	evening set	14604 Aug 17 06:32	20°♍15'36	
	14603 Sep 11 15:16	30°♋		inferior conj	14604 Aug 23 05:35	14°♍49'22	2°08'43
min. Earth dist.	14603 Sep 12 20:06	28°♍47'44	0.62030 AU	minimum elong	14604 Aug 23 08:00	14°♍42'26	2°07'42
desc. node	14603 Sep 14 03:39	27°♍33'26		min. Earth dist.	14604 Aug 25 15:36	12°♍03'54	0.64181 AU
morning rise	14603 Sep 16 10:43	25°♍42'18		morning rise	14604 Aug 29 07:52	8°♍30'30	
direct	14603 Sep 23 03:02	23°♍20'51		desc. node	14604 Aug 31 01:08	7°♍19'31	
	14603 Oct 05 21:10	0°♌		direct	14604 Sep 04 21:57	5°♍55'46	
morning max el	14603 Oct 07 06:03	1°♌19'10	27°58'15	morning max el	14604 Sep 18 16:05	13°♍54'33	27°33'38
	14603 Oct 28 06:40	0°♌			14604 Oct 01 16:57	0°♌	
asc. node	14603 Nov 08 11:10	20°♌36'01			14604 Oct 19 21:30	0°♌	
morning set	14603 Nov 10 02:56	23°♌57'56		morning set	14604 Oct 23 18:41	7°♌29'32	
	14603 Nov 13 00:10	0°♌		asc. node	14604 Oct 25 07:53	10°♌35'34	
max. Earth dist.	14603 Nov 15 13:17	5°♌29'21	1.31632 AU	max. Earth dist.	14604 Oct 28 11:16	17°♌03'36	1.32667 AU
superior conj	14603 Nov 17 13:40	9°♌54'49	1°16'30	superior conj	14604 Oct 31 19:28	24°♌10'07	0°57'42
minimum elong	14603 Nov 17 11:29	9°♌42'44	1°17'08	minimum elong	14604 Oct 31 17:11	23°♌57'52	0°58'05
evening rise	14603 Nov 24 07:16	24°♌44'14			14604 Nov 03 12:01	0°♌	
	14603 Nov 26 18:38	0°♌		evening rise	14604 Nov 07 18:15	9°♌13'50	
desc. node	14603 Dec 11 00:43	25°♌23'53			14604 Nov 18 09:09	0°♌	
	14603 Dec 14 10:51	0°♌		desc. node	14604 Nov 26 21:48	12°♌21'15	
evening max el	14603 Dec 19 18:14	5°♌52'26	24°35'46	evening max el	14604 Nov 30 03:50	15°♌51'35	22°53'18
retrograde	14604 Jan 02 11:14	12°♌42'37		retrograde	14604 Dec 13 06:13	22°♌21'28	
evening set	14604 Jan 07 18:47	11°♌40'26		evening set	14604 Dec 17 06:52	21°♌46'10	
min. Earth dist.	14604 Jan 13 06:01	8°♌51'35	0.56045 AU	min. Earth dist.	14604 Dec 24 12:51	18°♌26'22	0.54826 AU
inferior conj	14604 Jan 15 14:41	7°♌23'05	-5°23'15	inferior conj	14604 Dec 25 15:37	17°♌48'16	-5°59'01
minimum elong	14604 Jan 15 22:42	7°♌10'33	5°20'51	minimum elong	14604 Dec 25 16:48	17°♌46'34	5°57'58
morning rise	14604 Jan 24 04:40	3°♌19'55		morning rise	14605 Jan 03 04:09	13°♌59'33	
direct	14604 Jan 26 12:21	3°♌05'22		direct	14605 Jan 06 04:31	13°♌38'28	
asc. node	14604 Feb 04 10:00	6°♌57'29		morning max el	14605 Jan 17 16:11	19°♌08'55	20°58'50
morning max el	14604 Feb 05 10:07	7°♌53'02	19°37'17	asc. node	14605 Jan 21 07:21	23°♌08'44	
	14604 Feb 19 18:13	0°♌			14605 Jan 26 03:14	0°♌	
morning set	14604 Feb 22 18:27	5°♌59'04		morning set	14605 Feb 06 02:48	20°♌40'12	
					14605 Feb 10 13:53	0°♌	
superior conj	14604 Mar 01 18:00	22°♌00'11	0°50'42				
minimum elong	14604 Mar 01 20:33	22°♌12'43	0°50'32	superior conj	14605 Feb 13 11:41	6°♌02'07	1°12'19
	14604 Mar 05 21:32	0°♌		minimum elong	14605 Feb 13 14:15	6°♌15'17	1°12'30
max. Earth dist.	14604 Mar 08 01:56	4°♌04'25	1.37694 AU	max. Earth dist.	14605 Feb 18 11:00	16°♌01'18	1.35554 AU
desc. node	14604 Mar 08 01:55	4°♌04'17		evening rise	14605 Feb 22 09:56	23°♌34'27	
evening rise	14604 Mar 11 18:48	10°♌45'27		desc. node	14605 Feb 22 22:25	24°♌32'22	
	14604 Mar 23 09:41	0°♌			14605 Feb 25 22:39	0°♌	
	14604 Apr 14 21:44	0°♌			14605 Mar 17 01:31	0°♌	
evening max el	14604 Apr 16 05:24	1°♌20'14	25°12'27	evening max el	14605 Mar 29 18:57	15°♌09'23	26°19'50
retrograde	14604 Apr 28 07:11	8°♌20'38		retrograde	14605 Apr 11 16:25	22°♌30'09	
asc. node	14604 May 02 06:33	7°♌13'58		evening set	14605 Apr 17 22:46	19°♌58'25	
evening set	14604 May 04 02:58	5°♌54'39		asc. node	14605 Apr 19 03:55	18°♌53'16	
min. Earth dist.	14604 May 08 11:51	1°♌03'22	0.68057 AU	min. Earth dist.	14605 Apr 22 01:21	15°♌42'23	0.66897 AU
	14604 May 09 07:19	30°♋		inferior conj	14605 Apr 23 20:33	13°♌30'18	1°24'35
inferior conj	14604 May 09 18:19	29°♌24'01	2°07'00	minimum elong	14605 Apr 23 18:41	13°♌36'01	1°23'20
minimum elong	14604 May 09 16:09	29°♌31'05	2°05'33	morning rise	14605 Apr 29 15:32	7°♌47'12	
morning rise	14604 May 15 05:41	23°♌30'03		direct	14605 May 02 19:12	6°♌51'10	
direct	14604 May 18 20:08	22°♌15'33		morning max el	14605 May 09 07:31	10°♌18'57	18°30'18
morning max el	14604 May 25 20:55	26°♌06'23	19°17'34	desc. node	14605 May 22 00:26	27°♌32'38	
	14604 May 29 08:55	0°♌			14605 May 23 14:24	0°♌	
desc. node	14604 Jun 04 03:35	7°♌45'24		morning set	14605 May 30 03:05	10°♌15'04	
greatest brilliancy	14604 Jun 07 14:33	12°♌47'44	-0.7m		14605 Jun 11 17:26	0°♌	
	14604 Jun 18 22:32	0°♌					
morning set	14604 Jun 19 07:38	0°♌35'02		superior conj	14605 Jun 15 00:45	5°♌09'24	-2°09'55
max. Earth dist.	14604 Jul 02 04:42	20°♌35'11	1.45334 AU	minimum elong	14605 Jun 14 20:00	4°♌50'52	2°10'46
				max. Earth dist.	14605 Jun 14 23:59	5°♌06'25	1.45890 AU
superior conj	14604 Jul 05 15:11	26°♌00'35	-2°12'19	evening rise	14605 Jun 30 19:08	29°♌53'01	
minimum elong	14604 Jul 05 18:10	26°♌12'24	2°13'14		14605 Jun 30 20:54	0°♌	
	14604 Jul 08 03:24	0°♌		greatest brilliancy	14605 Jul 09 08:11	13°♌20'13	-0.8m
evening rise	14604 Jul 20 02:16	19°♌25'02		asc. node	14605 Jul 16 02:37	23°♌30'15	

	14605 Jul 21 03:49	0°♍				14606 Jun 04 10:35	0°♊	
evening max el	14605 Jul 22 11:32	1°♍23'44	18°45'41		evening rise	14606 Jun 10 14:33	9°♊30'38	
retrograde	14605 Jul 29 02:31	5°♍00'16			greatest brilliancy	14606 Jun 24 01:48	29°♊56'02	-0.7m
evening set	14605 Aug 01 09:53	3°♍57'32				14606 Jun 24 02:52	0°♊	
	14605 Aug 05 14:15	30°♋♊			asc. node	14606 Jul 02 23:27	12°♊06'28	
inferior conj	14605 Aug 07 00:04	28°♊16'30	2°43'49		evening max el	14606 Jul 05 19:00	15°♊13'01	19°32'43
minimum elong	14605 Aug 07 02:02	28°♊10'20	2°42'49		retrograde	14606 Jul 13 00:21	19°♊15'54	
min. Earth dist.	14605 Aug 08 20:02	25°♊59'34	0.66024 AU		evening set	14606 Jul 16 17:18	17°♊56'09	
morning rise	14605 Aug 12 17:16	21°♊51'34			inferior conj	14606 Jul 22 01:57	12°♊01'52	3°03'41
desc. node	14605 Aug 17 22:37	19°♊16'59			minimum elong	14606 Jul 22 03:04	11°♊58'11	3°02'44
direct	14605 Aug 19 00:39	19°♊12'34			min. Earth dist.	14606 Jul 23 07:41	10°♊23'21	0.67465 AU
morning max el	14605 Sep 01 03:31	26°♊59'00	26°38'57		morning rise	14606 Jul 27 12:19	5°♊36'49	
	14605 Sep 03 23:18	0°♍			direct	14606 Aug 02 10:00	3°♊02'17	
	14605 Sep 25 08:17	0°♊			desc. node	14606 Aug 04 20:05	3°♊24'35	
morning set	14605 Oct 06 23:11	20°♊29'06			morning max el	14606 Aug 14 14:26	10°♊20'21	25°23'07
max. Earth dist.	14605 Oct 10 23:39	28°♊17'13	1.34231 AU			14606 Aug 30 05:27	0°♍	
	14605 Oct 11 20:14	0°♌				14606 Sep 17 23:09	0°♊	
asc. node	14605 Oct 12 04:32	0°♌41'43			morning set	14606 Sep 19 12:36	2°♊47'09	
					max. Earth dist.	14606 Sep 23 02:30	9°♊21'33	1.36262 AU
superior conj	14605 Oct 15 19:08	8°♌05'25	0°33'09					
minimum elong	14605 Oct 15 17:28	7°♌56'41	0°33'23		superior conj	14606 Sep 29 09:48	21°♊33'15	0°03'21
evening rise	14605 Oct 23 03:59	23°♌38'26			minimum elong	14606 Sep 29 09:35	21°♊32'11	0°03'35
	14605 Oct 26 05:42	0°♌			behind sun begin	14606 Sep 29 03:23	21°♊01'17	
evening max el	14605 Nov 11 19:11	26°♌00'43	21°15'45		behind sun end	14606 Sep 29 15:48	22°♊03'08	
desc. node	14605 Nov 13 19:01	27°♌49'15			asc. node	14606 Sep 29 01:08	20°♊50'09	
	14605 Nov 16 21:50	0°♊				14606 Oct 03 14:04	0°♌	
retrograde	14605 Nov 23 17:20	1°♊55'37			evening rise	14606 Oct 07 10:16	7°♌52'04	
evening set	14605 Nov 26 11:01	1°♊38'12				14606 Oct 19 12:06	0°♌	
	14605 Dec 01 02:23	30°♋♌			evening max el	14606 Oct 24 23:47	6°♌50'07	19°55'25
inferior conj	14605 Dec 05 07:02	27°♌45'53	-5°36'44		desc. node	14606 Oct 31 16:20	11°♌21'08	
minimum elong	14605 Dec 04 23:31	27°♌56'29	5°34'32		retrograde	14606 Nov 04 07:05	11°♌58'15	
min. Earth dist.	14605 Dec 05 18:40	27°♌29'28	0.54455 AU		evening set	14606 Nov 06 07:15	11°♌47'28	
morning rise	14605 Dec 13 12:31	23°♌55'43			inferior conj	14606 Nov 15 03:12	7°♌47'54	-4°19'18
direct	14605 Dec 17 11:57	23°♌21'37			minimum elong	14606 Nov 14 17:14	8°♌03'06	4°15'21
morning max el	14605 Dec 30 08:45	29°♌34'37	22°40'02		min. Earth dist.	14606 Nov 17 02:23	6°♌35'56	0.55036 AU
	14605 Dec 30 19:18	0°♊			morning rise	14606 Nov 23 01:52	3°♌36'35	
asc. node	14606 Jan 08 04:37	10°♊28'59			direct	14606 Nov 28 00:34	2°♌42'58	
	14606 Jan 18 23:39	0°♋			morning max el	14606 Dec 11 18:10	9°♌31'40	24°29'28
morning set	14606 Jan 21 13:58	5°♋25'51			asc. node	14606 Dec 26 01:47	28°♌41'07	
						14606 Dec 26 20:04	0°♊	
superior conj	14606 Jan 28 13:34	20°♋25'13	1°27'12		morning set	14607 Jan 06 01:57	20°♊09'18	
minimum elong	14606 Jan 28 15:29	20°♋35'27	1°27'46			14607 Jan 10 14:11	0°♋	
max. Earth dist.	14606 Feb 01 02:31	27°♋51'43	1.33741 AU					
	14606 Feb 02 03:30	0°♌			superior conj	14607 Jan 12 20:50	5°♋00'18	1°35'39
evening rise	14606 Feb 05 15:15	6°♌58'30			minimum elong	14607 Jan 12 21:47	5°♋05'27	1°36'31
desc. node	14606 Feb 09 19:00	14°♌51'35			max. Earth dist.	14607 Jan 15 01:45	9°♋48'16	1.32366 AU
	14606 Feb 18 13:39	0°♍			evening rise	14607 Jan 20 07:21	20°♋48'06	
evening max el	14606 Mar 12 08:31	28°♍46'20	27°09'10			14607 Jan 24 23:44	0°♌	
	14606 Mar 13 15:58	0°♌			desc. node	14607 Jan 27 15:39	4°♌56'04	
retrograde	14606 Mar 25 19:54	6°♌15'48				14607 Feb 12 13:03	0°♍	
evening set	14606 Apr 01 10:41	3°♌44'19			evening max el	14607 Feb 22 20:50	11°♍59'28	27°33'26
	14606 Apr 05 08:48	30°♋♍			retrograde	14607 Mar 08 16:24	19°♍27'36	
min. Earth dist.	14606 Apr 05 08:23	0°♌01'10	0.65335 AU		evening set	14607 Mar 15 12:19	17°♍03'32	
asc. node	14606 Apr 06 01:19	29°♍14'13			min. Earth dist.	14607 Mar 19 07:04	13°♍49'27	0.63432 AU
inferior conj	14606 Apr 07 15:56	27°♍25'08	0°30'19		inferior conj	14607 Mar 22 01:37	11°♍01'07	-0°36'23
minimum elong	14606 Apr 07 15:07	27°♍27'27	0°29'37		minimum elong	14607 Mar 22 02:48	10°♍58'09	0°36'00
morning rise	14606 Apr 13 21:14	21°♍54'40			asc. node	14607 Mar 23 22:47	9°♍09'52	
direct	14606 Apr 16 15:14	21°♍14'16			morning rise	14607 Mar 28 19:45	5°♍45'39	
morning max el	14606 Apr 22 23:03	24°♍31'37	17°59'48		direct	14607 Mar 31 05:30	5°♍17'27	
	14606 Apr 27 13:13	0°♌			morning max el	14607 Apr 06 16:43	8°♍35'46	17°46'40
desc. node	14606 May 08 21:12	17°♌39'15				14607 Apr 21 02:01	0°♌	
morning set	14606 May 11 01:49	21°♌14'39			morning set	14607 Apr 23 03:05	3°♌30'24	
	14606 May 16 10:43	0°♌			desc. node	14607 Apr 25 17:53	7°♌59'22	
superior conj	14606 May 25 12:33	14°♌30'46	-1°48'06		superior conj	14607 May 05 17:45	24°♌43'02	-1°13'22
minimum elong	14606 May 25 03:40	13°♌55'40	1°48'17		minimum elong	14607 May 05 10:35	24°♌13'47	1°13'13
max. Earth dist.	14606 May 28 19:51	19°♌42'23	1.45699 AU			14607 May 08 23:57	0°♌	

max. Earth dist.	14607 May 11 14:25	4° Π 09'41	1.44787 AU	minimum elong	14608 Apr 15 19:29	5° \mathcal{B} 47'45	0°34'15
evening rise	14607 May 21 01:23	18° Π 54'35		max. Earth dist.	14608 Apr 23 05:46	18° \mathcal{B} 13'44	1.43249 AU
	14607 May 28 09:06	0° \mathfrak{E}		evening rise	14608 Apr 29 19:51	28° \mathcal{B} 45'25	
evening max el	14607 Jun 18 20:42	29° \mathfrak{E} 04'21	20°34'28		14608 Apr 30 14:57	0° Π	
asc. node	14607 Jun 19 20:22	0° Ω 01'20			14608 May 21 01:22	0° \mathfrak{E}	
	14607 Jun 19 19:47	0° Ω		evening max el	14608 May 31 16:42	12° \mathfrak{E} 55'44	21°47'39
retrograde	14607 Jun 26 23:17	3° Ω 43'54		asc. node	14608 Jun 05 17:23	17° \mathfrak{E} 00'52	
evening set	14607 Jul 01 02:33	2° Ω 06'50		retrograde	14608 Jun 09 21:31	18° \mathfrak{E} 18'29	
	14607 Jul 03 06:36	30° \mathcal{R} \mathfrak{E}		evening set	14608 Jun 14 11:46	16° \mathfrak{E} 24'45	
inferior conj	14607 Jul 06 08:36	26° \mathfrak{E} 00'36	3°10'41	inferior conj	14608 Jun 19 17:47	10° \mathfrak{E} 08'01	3°06'20
minimum elong	14607 Jul 06 08:43	26° \mathfrak{E} 00'12	3°09'42	minimum elong	14608 Jun 19 16:57	10° \mathfrak{E} 10'55	3°05'14
min. Earth dist.	14607 Jul 07 00:27	25° \mathfrak{E} 06'05	0.68450 AU	min. Earth dist.	14608 Jun 19 20:15	9° \mathfrak{E} 59'24	0.68958 AU
morning rise	14607 Jul 11 14:36	19° \mathfrak{E} 39'15		morning rise	14608 Jun 24 21:56	3° \mathfrak{E} 52'38	
direct	14607 Jul 17 00:42	17° \mathfrak{E} 16'32		direct	14608 Jun 29 19:31	1° \mathfrak{E} 46'52	
desc. node	14607 Jul 22 17:28	19° \mathfrak{E} 19'46		desc. node	14608 Jul 08 14:44	6° \mathfrak{E} 36'26	
morning max el	14607 Jul 28 00:52	23° \mathfrak{E} 51'27	23°56'00	morning max el	14608 Jul 09 12:51	7° \mathfrak{E} 30'27	22°26'49
	14607 Aug 02 12:05	0° Ω			14608 Jul 27 00:18	0° Ω	
	14607 Aug 23 14:40	0° \mathcal{M}		morning set	14608 Aug 12 00:58	24° Ω 37'22	
morning set	14607 Sep 01 06:34	14° \mathcal{M} 13'18			14608 Aug 15 07:31	0° \mathcal{M}	
max. Earth dist.	14607 Sep 05 00:44	20° \mathcal{M} 44'56	1.38588 AU	max. Earth dist.	14608 Aug 17 01:01	2° \mathcal{M} 53'40	1.40948 AU
	14607 Sep 10 03:17	0° \mathfrak{L}					
				superior conj	14608 Aug 24 21:14	16° \mathcal{M} 31'11	-1°06'27
superior conj	14607 Sep 12 11:57	4° \mathfrak{L} 25'31	-0°30'38	minimum elong	14608 Aug 25 02:22	16° \mathcal{M} 54'14	1°06'00
minimum elong	14607 Sep 12 14:07	4° \mathfrak{L} 35'47	0°30'16		14608 Sep 01 05:30	0° \mathfrak{L}	
asc. node	14607 Sep 15 21:43	10° \mathfrak{L} 57'34		asc. node	14608 Sep 01 18:15	0° \mathfrak{L} 59'41	
evening rise	14607 Sep 21 10:32	21° \mathfrak{L} 48'32		evening rise	14608 Sep 04 01:25	5° \mathfrak{L} 18'33	
	14607 Sep 25 16:03	0° \mathcal{M}			14608 Sep 19 03:54	0° \mathcal{M}	
evening max el	14607 Oct 07 18:26	18° \mathcal{M} 29'17	18°56'50	evening max el	14608 Sep 19 23:45	0° \mathcal{M} 51'54	18°19'59
retrograde	14607 Oct 16 11:41	22° \mathcal{M} 52'19		retrograde	14608 Sep 27 11:47	4° \mathcal{M} 40'38	
evening set	14607 Oct 18 08:46	22° \mathcal{M} 40'55		evening set	14608 Sep 29 13:19	4° \mathcal{M} 24'00	
desc. node	14607 Oct 18 13:43	22° \mathcal{M} 38'19		desc. node	14608 Oct 04 11:11	1° \mathcal{M} 50'45	
inferior conj	14607 Oct 26 16:18	18° \mathcal{M} 23'38	-2°34'17		14608 Oct 06 20:00	30° \mathcal{R} \mathfrak{L}	
minimum elong	14607 Oct 26 09:51	18° \mathcal{M} 34'57	2°31'05	inferior conj	14608 Oct 07 03:05	29° \mathfrak{L} 45'28	-0°50'47
min. Earth dist.	14607 Oct 29 14:28	16° \mathcal{M} 20'59	0.56455 AU	minimum elong	14608 Oct 07 01:10	29° \mathfrak{L} 49'23	0°49'36
morning rise	14607 Nov 03 08:01	13° \mathcal{M} 37'46		min. Earth dist.	14608 Oct 10 09:37	27° \mathfrak{L} 05'02	0.58446 AU
direct	14607 Nov 09 01:56	12° \mathcal{M} 19'44		morning rise	14608 Oct 14 09:34	24° \mathfrak{L} 22'41	
morning max el	14607 Nov 23 05:32	19° \mathcal{M} 35'55	26°09'01	direct	14608 Oct 20 16:57	22° \mathfrak{L} 37'54	
	14607 Dec 02 01:48	0° \mathcal{X}			14608 Nov 03 17:38	0° \mathcal{M}	
asc. node	14607 Dec 12 22:52	17° \mathcal{X} 32'17		morning max el	14608 Nov 04 00:19	0° \mathcal{M} 16'09	27°21'19
	14607 Dec 19 06:56	0° \mathfrak{Z}			14608 Nov 25 03:31	0° \mathcal{X}	
morning set	14607 Dec 21 12:57	4° \mathfrak{Z} 46'04		asc. node	14608 Nov 28 19:50	6° \mathcal{X} 51'51	
				morning set	14608 Dec 04 21:15	19° \mathcal{X} 11'35	
					14608 Dec 09 19:54	0° \mathfrak{Z}	
superior conj	14607 Dec 28 07:13	19° \mathfrak{Z} 41'04	1°37'55				
minimum elong	14607 Dec 28 07:05	19° \mathfrak{Z} 40'18	1°38'56	superior conj	14608 Dec 11 18:46	4° \mathfrak{Z} 21'50	1°34'15
max. Earth dist.	14607 Dec 29 07:03	21° \mathfrak{Z} 53'31	1.31486 AU	minimum elong	14608 Dec 11 17:38	4° \mathfrak{Z} 15'28	1°35'13
	14608 Jan 01 23:46	0° \approx		max. Earth dist.	14608 Dec 11 15:11	4° \mathfrak{Z} 01'50	1.31116 AU
evening rise	14608 Jan 04 07:25	4° \approx 56'15		evening rise	14608 Dec 18 13:04	19° \mathfrak{Z} 17'01	
desc. node	14608 Jan 14 12:22	24° \approx 39'40			14608 Dec 23 17:59	0° \approx	
	14608 Jan 17 15:28	0° \mathcal{H}		desc. node	14608 Dec 31 09:10	13° \approx 54'20	
evening max el	14608 Feb 05 05:35	24° \mathcal{H} 35'42	27°26'18		14609 Jan 11 11:10	0° \mathcal{H}	
	14608 Feb 12 08:48	0° \mathcal{Y}		evening max el	14609 Jan 17 07:55	6° \mathcal{H} 23'30	26°44'24
retrograde	14608 Feb 19 04:39	1° \mathcal{Y} 56'07		retrograde	14609 Jan 31 07:20	13° \mathcal{H} 33'56	
	14608 Feb 25 16:13	30° \mathcal{R} \mathcal{H}		evening set	14609 Feb 06 20:50	11° \mathcal{H} 46'41	
evening set	14608 Feb 26 00:50	29° \mathcal{H} 46'57		min. Earth dist.	14609 Feb 10 21:43	9° \mathcal{H} 08'42	0.59088 AU
min. Earth dist.	14608 Feb 29 19:42	26° \mathcal{H} 55'51	0.61296 AU	inferior conj	14609 Feb 14 02:14	6° \mathcal{H} 40'09	-3°20'48
inferior conj	14608 Mar 03 22:17	24° \mathcal{H} 09'23	-1°54'46	minimum elong	14609 Feb 14 09:38	6° \mathcal{H} 25'44	3°17'40
minimum elong	14608 Mar 04 02:23	24° \mathcal{H} 00'11	1°52'55	morning rise	14609 Feb 22 01:42	2° \mathcal{H} 03'47	
asc. node	14608 Mar 09 20:16	19° \mathcal{H} 46'09		direct	14609 Feb 24 01:54	1° \mathcal{H} 49'13	
morning rise	14608 Mar 11 07:02	19° \mathcal{H} 11'58		asc. node	14609 Feb 24 17:43	1° \mathcal{H} 50'50	
direct	14608 Mar 13 10:30	18° \mathcal{H} 52'20		morning max el	14609 Mar 03 21:24	5° \mathcal{H} 41'24	18°15'43
morning max el	14608 Mar 20 09:21	22° \mathcal{H} 22'18	17°51'34		14609 Mar 19 05:47	0° \mathcal{Y}	
	14608 Mar 26 07:40	0° \mathcal{Y}		morning set	14609 Mar 19 13:54	0° \mathcal{Y} 38'22	
morning set	14608 Apr 05 01:04	16° \mathcal{Y} 44'10					
desc. node	14608 Apr 11 14:29	28° \mathcal{Y} 28'13		superior conj	14609 Mar 29 02:05	18° \mathcal{Y} 21'36	0°03'03
	14608 Apr 12 11:21	0° \mathcal{B}		minimum elong	14609 Mar 29 02:17	18° \mathcal{Y} 22'32	0°02'48
superior conj	14608 Apr 15 22:37	6° \mathcal{B} 01'13	-0°34'14	behind sun begin	14609 Mar 28 18:56	17° \mathcal{Y} 49'13	

behind sun end	14609 Mar 29 09:39	18° Υ 55'46		minimum elong	14610 Mar 12 01:51	1° Υ 40'43	0°34'51
desc. node	14609 Mar 29 11:02	19° Υ 02'02		desc. node	14610 Mar 16 07:32	9° Υ 36'25	
	14609 Apr 04 16:46	0° B		max. Earth dist.	14610 Mar 18 23:00	14° Υ 23'20	1.38996 AU
max. Earth dist.	14609 Apr 05 16:28	1° B 40'55	1.41243 AU	evening rise	14610 Mar 22 18:33	21° Υ 03'24	
evening rise	14609 Apr 10 08:37	9° B 27'04			14610 Mar 28 03:16	0° B	
	14609 Apr 23 15:18	0° II			14610 Apr 17 16:05	0° II	
evening max el	14609 May 14 08:29	26° II 48'03	23°07'36	evening max el	14610 Apr 26 22:10	10° II 41'16	24°28'22
	14609 May 17 22:36	0° E		retrograde	14610 May 08 10:31	17° II 25'42	
asc. node	14609 May 23 14:30	2° E 48'59		asc. node	14610 May 10 11:44	17° II 07'24	
retrograde	14609 May 24 17:42	2° E 54'42		evening set	14610 May 13 23:42	15° II 05'01	
evening set	14609 May 29 19:22	0° E 46'05		min. Earth dist.	14610 May 18 12:46	9° II 52'46	0.68526 AU
	14609 May 30 15:12	30° R II		inferior conj	14610 May 19 11:56	8° II 34'59	2°26'17
min. Earth dist.	14609 Jun 03 17:03	24° II 57'18	0.68982 AU	minimum elong	14610 May 19 09:52	8° II 41'57	2°24'53
inferior conj	14609 Jun 04 03:32	24° II 21'01	2°51'29	morning rise	14610 May 24 20:10	2° II 35'22	
minimum elong	14609 Jun 04 01:55	24° II 26'34	2°50'12	direct	14610 May 28 17:05	1° II 09'39	
morning rise	14609 Jun 09 08:25	18° II 12'58		morning max el	14610 Jun 05 04:50	5° II 20'10	19°51'56
direct	14609 Jun 13 17:25	16° II 26'54		desc. node	14610 Jun 12 08:55	13° II 54'43	
morning max el	14609 Jun 22 05:27	21° II 19'58	21°03'33		14610 Jun 23 12:42	0° E	
desc. node	14609 Jun 25 11:53	24° II 53'40		morning set	14610 Jul 01 22:55	12° E 47'50	
	14609 Jun 29 14:07	0° E			14610 Jul 12 23:43	0° O	
	14609 Jul 20 05:28	0° O		max. Earth dist.	14610 Jul 12 19:23	29° E 42'47	1.44684 AU
morning set	14609 Jul 22 19:29	4° O 00'39					
max. Earth dist.	14609 Jul 30 07:07	15° O 55'35	1.43061 AU	superior conj	14610 Jul 17 21:55	7° O 52'56	-2°04'48
				minimum elong	14610 Jul 18 04:04	8° O 17'45	2°05'21
superior conj	14609 Aug 06 09:22	27° O 41'31	-1°39'55	evening rise	14610 Jul 31 09:27	0° O 16'10	
minimum elong	14609 Aug 06 16:44	28° O 12'45	1°39'46		14610 Jul 31 05:38	0° O	
	14609 Aug 07 17:55	0° O		asc. node	14610 Aug 06 11:26	10° O 33'18	
evening rise	14609 Aug 18 02:45	18° O 11'57		evening max el	14610 Aug 18 02:05	27° O 11'22	18°05'47
asc. node	14609 Aug 19 14:49	20° O 53'00			14610 Aug 21 23:53	0° O	
	14609 Aug 24 19:20	0° O		retrograde	14610 Aug 24 11:18	0° O 31'45	
evening max el	14609 Sep 03 11:35	13° O 48'59	18°03'24		14610 Aug 26 22:42	30° R O	
retrograde	14609 Sep 10 05:06	17° O 16'40		evening set	14610 Aug 27 04:36	29° O 53'28	
evening set	14609 Sep 12 14:00	16° O 50'54		inferior conj	14610 Sep 02 10:24	24° O 36'57	1°40'28
inferior conj	14609 Sep 19 10:20	11° O 52'18	0°35'29	minimum elong	14610 Sep 02 12:43	24° O 30'43	1°39'32
minimum elong	14609 Sep 19 11:26	11° O 49'42	0°35'11	min. Earth dist.	14610 Sep 05 04:01	21° O 41'04	0.62971 AU
desc. node	14609 Sep 21 08:40	10° O 01'29		desc. node	14610 Sep 08 06:09	18° O 49'04	
min. Earth dist.	14609 Sep 22 13:55	8° O 53'33	0.60710 AU	morning rise	14610 Sep 08 18:41	18° O 24'56	
morning rise	14609 Sep 26 05:49	5° O 59'39		direct	14610 Sep 15 10:43	15° O 56'23	
direct	14609 Oct 02 20:36	3° O 49'46		morning max el	14610 Sep 29 10:49	23° O 57'14	27°51'56
morning max el	14609 Oct 17 02:52	11° O 44'03	27°56'07		14610 Oct 04 21:34	0° O	
	14609 Oct 31 12:33	0° O			14610 Oct 24 21:13	0° O	
asc. node	14609 Nov 15 16:40	26° O 31'41		morning set	14610 Nov 02 21:45	17° O 07'44	
	14609 Nov 17 10:03	0° O		asc. node	14610 Nov 02 13:26	16° O 25'42	
morning set	14609 Nov 19 00:54	3° O 20'29		max. Earth dist.	14610 Nov 08 00:19	27° O 47'55	1.31995 AU
max. Earth dist.	14609 Nov 24 22:13	16° O 02'52	1.31278 AU		14610 Nov 09 00:49	0° O	
superior conj	14609 Nov 26 05:36	18° O 56'59	1°24'41	superior conj	14610 Nov 10 13:51	3° O 21'31	1°09'15
minimum elong	14609 Nov 26 03:41	18° O 46'21	1°25'28	minimum elong	14610 Nov 10 11:33	3° O 08'58	1°09'46
	14609 Dec 01 05:00	0° O		evening rise	14610 Nov 17 09:05	18° O 15'09	
evening rise	14609 Dec 02 22:14	3° O 44'44			14610 Nov 23 01:11	0° O	
	14609 Dec 16 16:24	0° O		desc. node	14610 Dec 05 03:06	20° O 06'51	
desc. node	14609 Dec 18 06:04	2° O 28'24		evening max el	14610 Dec 11 12:42	27° O 29'36	23°52'50
evening max el	14609 Dec 30 01:45	17° O 17'38	25°29'51		14610 Dec 14 10:01	0° O	
retrograde	14610 Jan 12 22:55	24° O 17'01		retrograde	14610 Dec 25 01:27	4° O 12'58	
evening set	14610 Jan 18 20:17	22° O 57'35		evening set	14610 Dec 29 20:22	3° O 23'07	
min. Earth dist.	14610 Jan 23 14:14	20° O 17'46	0.57034 AU	min. Earth dist.	14611 Jan 04 23:59	0° O 23'14	0.55429 AU
inferior conj	14610 Jan 26 10:11	18° O 23'18	-4°44'03		14611 Jan 05 15:38	30° R O	
minimum elong	14610 Jan 26 19:16	18° O 07'57	4°40'53	inferior conj	14611 Jan 06 21:22	29° O 15'29	-5°44'32
morning rise	14610 Feb 03 20:59	14° O 08'55		minimum elong	14611 Jan 07 03:12	29° O 06'46	5°42'53
direct	14610 Feb 05 23:17	13° O 55'46		morning rise	14611 Jan 15 11:46	25° O 19'31	
asc. node	14610 Feb 11 15:09	15° O 38'36		direct	14611 Jan 18 01:08	25° O 03'03	
morning max el	14610 Feb 15 00:46	18° O 20'44	19°00'59		14611 Jan 28 11:33	0° O	
	14610 Feb 23 13:06	0° O		morning max el	14611 Jan 28 15:23	0° O 09'10	20°09'09
morning set	14610 Mar 03 12:55	14° O 58'14		asc. node	14611 Jan 29 12:32	1° O 02'11	
	14610 Mar 11 04:49	0° O		morning set	14611 Feb 15 18:40	29° O 33'59	
					14611 Feb 15 23:46	0° O	
superior conj	14610 Mar 11 23:46	1° O 30'45	0°35'07				

superior conj	14611 Feb 23 11:17	15° X 16'35	1°00'40	morning set	14612 Jan 31 04:30	14° \approx 17'35	
minimum elong	14611 Feb 23 13:57	15° X 29'55	1°00'39				
max. Earth dist.	14611 Mar 01 05:38	26° X 31'13	1.36757 AU	superior conj	14612 Feb 07 08:49	29° \approx 28'09	1°19'26
desc. node	14611 Mar 03 04:03	0° Y 08'07		minimum elong	14612 Feb 07 11:10	29° \approx 40'25	1°19'46
	14611 Mar 03 02:18	0° Y			14612 Feb 07 14:55	0° X	
evening rise	14611 Mar 05 00:02	3° Y 29'00		max. Earth dist.	14612 Feb 11 17:17	8° X 23'46	1.34738 AU
	14611 Mar 21 03:41	0° X		evening rise	14612 Feb 15 21:38	16° X 34'02	
evening max el	14611 Apr 09 11:43	24° X 34'14	25°42'50	desc. node	14612 Feb 18 00:38	20° X 33'02	
	14611 Apr 16 07:03	0° II			14612 Feb 23 07:53	0° Y	
retrograde	14611 Apr 21 22:51	1° II 45'01			14612 Mar 14 13:38	0° X	
asc. node	14611 Apr 27 09:04	29° X 44'21		evening max el	14612 Mar 22 01:38	8° X 20'37	26°43'33
	14611 Apr 27 00:31	30° R X		retrograde	14612 Apr 04 05:39	15° X 45'41	
evening set	14611 Apr 27 23:08	29° X 16'12		evening set	14612 Apr 10 15:52	13° X 13'34	
min. Earth dist.	14611 May 02 05:14	24° X 39'48	0.67616 AU	asc. node	14612 Apr 13 06:26	10° X 46'18	
inferior conj	14611 May 03 17:04	22° X 45'43	1°50'24	min. Earth dist.	14612 Apr 14 16:20	9° X 11'43	0.66280 AU
minimum elong	14611 May 03 14:57	22° X 52'28	1°49'00	inferior conj	14612 Apr 16 16:46	6° X 48'34	1°03'07
morning rise	14611 May 09 07:20	16° X 55'55		minimum elong	14612 Apr 16 15:14	6° X 53'05	1°02'02
direct	14611 May 12 17:02	15° X 49'32		morning rise	14612 Apr 22 15:46	1° X 10'20	
morning max el	14611 May 19 11:35	19° X 29'14	18°55'17	direct	14612 Apr 25 15:16	0° X 21'10	
	14611 May 27 20:51	0° II		morning max el	14612 May 02 00:34	3° X 42'53	18°15'12
desc. node	14611 May 30 05:51	3° II 27'49		desc. node	14612 May 16 02:42	23° X 24'33	
greatest brilliancy	14611 Jun 01 21:41	7° II 26'58	-0.8m		14612 May 20 05:54	0° II	
morning set	14611 Jun 11 06:53	21° II 52'54		morning set	14612 May 21 13:35	2° II 06'38	
	14611 Jun 16 12:26	0° X					
max. Earth dist.	14611 Jun 25 12:47	14° X 02'37	1.45662 AU	superior conj	14612 Jun 05 22:31	26° II 24'51	-2°02'45
				minimum elong	14612 Jun 05 15:13	25° II 56'19	2°03'21
superior conj	14611 Jun 27 14:08	17° X 15'57	-2°13'50	max. Earth dist.	14612 Jun 07 09:08	28° II 40'02	1.45906 AU
minimum elong	14611 Jun 27 13:53	17° X 14'57	2°14'50		14612 Jun 08 05:38	0° X	
	14611 Jul 05 15:26	0° X		evening rise	14612 Jun 21 23:30	21° X 24'00	
evening rise	14611 Jul 12 16:39	11° X 19'38			14612 Jun 27 12:13	0° X	
asc. node	14611 Jul 24 08:08	29° X 54'33		greatest brilliancy	14612 Jul 02 18:51	8° X 06'48	-0.8m
	14611 Jul 24 09:34	0° X		asc. node	14612 Jul 10 04:54	18° X 50'03	
evening max el	14611 Aug 01 15:56	10° X 49'55	18°26'12	evening max el	14612 Jul 15 02:23	24° X 37'23	19°03'46
retrograde	14611 Aug 08 02:10	14° X 16'25		retrograde	14612 Jul 21 22:20	28° X 23'18	
evening set	14611 Aug 11 04:22	13° X 23'01		evening set	14612 Jul 25 09:48	27° X 13'13	
inferior conj	14611 Aug 16 23:13	7° X 50'34	2°25'39	inferior conj	14612 Jul 30 21:15	21° X 26'20	2°53'56
minimum elong	14611 Aug 17 01:32	7° X 43'41	2°24'36	minimum elong	14612 Jul 30 22:53	21° X 21'04	2°52'57
min. Earth dist.	14611 Aug 19 03:27	5° X 15'36	0.65014 AU	min. Earth dist.	14612 Aug 01 11:03	19° X 25'07	0.66697 AU
morning rise	14611 Aug 22 21:25	1° X 28'28		morning rise	14612 Aug 05 11:17	15° X 01'04	
	14611 Aug 25 01:10	30° R X		direct	14612 Aug 11 14:54	12° X 23'09	
desc. node	14611 Aug 26 03:40	29° X 28'39		desc. node	14612 Aug 12 01:09	12° X 23'50	
direct	14611 Aug 29 09:17	28° X 50'34		morning max el	14612 Aug 24 08:46	19° X 58'30	26°08'40
	14611 Sep 03 02:02	0° X			14612 Sep 01 22:59	0° X	
morning max el	14611 Sep 11 21:28	6° X 45'40	27°13'28		14612 Sep 21 21:51	0° X	
	14611 Sep 29 19:20	0° X		morning set	14612 Sep 29 07:36	13° X 09'01	
morning set	14611 Oct 17 09:04	0° X 26'19		max. Earth dist.	14612 Oct 03 02:27	20° X 19'51	1.35056 AU
	14611 Oct 17 03:39	0° X		asc. node	14612 Oct 06 06:45	26° X 36'01	
asc. node	14611 Oct 20 10:07	6° X 28'27			14612 Oct 07 23:08	0° X	
max. Earth dist.	14611 Oct 21 18:12	9° X 11'48	1.33269 AU				
				superior conj	14612 Oct 08 13:34	1° X 13'40	0°21'06
superior conj	14611 Oct 25 17:21	17° X 29'08	0°47'59	minimum elong	14612 Oct 08 12:24	1° X 07'39	0°21'19
minimum elong	14611 Oct 25 15:14	17° X 17'54	0°48'17	evening rise	14612 Oct 16 04:19	17° X 03'49	
	14611 Oct 31 13:14	0° X			14612 Oct 22 15:55	0° X	
evening rise	14611 Nov 01 19:46	2° X 43'03		evening max el	14612 Nov 03 20:03	17° X 51'30	20°38'54
	14611 Nov 16 17:47	0° X		desc. node	14612 Nov 07 21:28	21° X 10'37	
desc. node	14611 Nov 22 00:14	6° X 29'06		retrograde	14612 Nov 15 01:58	23° X 27'03	
evening max el	14611 Nov 22 23:40	7° X 28'25	22°10'19	evening set	14612 Nov 17 10:26	23° X 13'28	
retrograde	14611 Dec 05 15:35	13° X 44'34		inferior conj	14612 Nov 26 08:06	19° X 19'21	-5°09'16
evening set	14611 Dec 09 02:11	13° X 18'24		minimum elong	14612 Nov 25 22:34	19° X 33'06	5°06'07
min. Earth dist.	14611 Dec 17 05:59	9° X 39'55	0.54556 AU	min. Earth dist.	14612 Nov 27 11:50	18° X 39'23	0.54595 AU
inferior conj	14611 Dec 17 16:37	9° X 25'02	-5°57'11	morning rise	14612 Dec 04 10:38	15° X 22'54	
minimum elong	14611 Dec 17 13:47	9° X 29'00	5°56'00	direct	14612 Dec 08 20:27	14° X 41'14	
morning rise	14611 Dec 26 02:21	5° X 37'51		morning max el	14612 Dec 22 03:20	21° X 09'34	23°26'42
direct	14611 Dec 29 12:25	5° X 11'48			14612 Dec 29 15:40	0° X	
morning max el	14612 Jan 10 15:06	11° X 01'07	21°39'57	asc. node	14613 Jan 02 07:04	5° X 28'12	
asc. node	14612 Jan 16 09:50	17° X 44'27		morning set	14613 Jan 14 16:12	29° X 02'41	
	14612 Jan 24 00:09	0° \approx			14613 Jan 15 02:55	0° \approx	

superior conj	14613 Jan 21 13:15	13° \approx 56'38	1°31'33	direct	14613 Nov 19 13:28	24° \mathbb{M} 05'05	
minimum elong	14613 Jan 21 14:46	14° \approx 04'53	1°32'16		14613 Dec 02 07:51	0° \mathbb{A}	
max. Earth dist.	14613 Jan 24 12:21	20° \approx 16'34	1.33097 AU	morning max el	14613 Dec 03 12:51	1° \mathbb{A} 06'28	25°14'19
evening rise	14613 Jan 29 07:52	0° \mathbb{H} 09'17		asc. node	14613 Dec 20 04:12	23° \mathbb{A} 58'36	
	14613 Jan 29 06:00	0° \mathbb{H}			14613 Dec 23 10:37	0° \mathbb{B}	
desc. node	14613 Feb 03 21:14	10° \mathbb{H} 46'25		morning set	14613 Dec 30 03:59	13° \mathbb{B} 44'23	
	14613 Feb 15 09:04	0° \mathbb{Y}					
evening max el	14613 Mar 04 14:55	21° \mathbb{Y} 48'50	27°23'02	superior conj	14614 Jan 05 22:06	28° \mathbb{B} 35'20	1°37'22
retrograde	14613 Mar 18 06:04	29° \mathbb{Y} 18'12		minimum elong	14614 Jan 05 22:35	28° \mathbb{B} 38'00	1°38'19
evening set	14613 Mar 24 23:43	26° \mathbb{Y} 48'54			14614 Jan 06 13:27	0° \approx	
min. Earth dist.	14613 Mar 28 19:52	23° \mathbb{Y} 18'57	0.64561 AU	max. Earth dist.	14614 Jan 07 14:30	2° \approx 17'31	1.31923 AU
inferior conj	14613 Mar 31 08:23	20° \mathbb{Y} 36'11	0°03'35	evening rise	14614 Jan 13 03:40	14° \approx 07'39	
minimum elong	14613 Mar 31 08:17	20° \mathbb{Y} 36'28	0°03'16		14614 Jan 21 08:19	0° \mathbb{H}	
transit middle	14613 Mar 31 08:17	20° \mathbb{Y} 36'28	0°03'16	desc. node	14614 Jan 21 17:53	0° \mathbb{H} 43'03	
transit begin	14613 Mar 31 05:17	20° \mathbb{Y} 44'36			14614 Feb 10 12:49	0° \mathbb{Y}	
transit end	14613 Mar 31 11:18	20° \mathbb{Y} 28'20		evening max el	14614 Feb 15 01:48	4° \mathbb{Y} 47'12	27°34'29
asc. node	14613 Mar 31 03:53	20° \mathbb{Y} 48'22		retrograde	14614 Feb 28 23:18	12° \mathbb{Y} 13'13	
morning rise	14613 Apr 06 18:51	15° \mathbb{Y} 11'55		evening set	14614 Mar 07 20:09	9° \mathbb{Y} 54'09	
direct	14613 Apr 09 09:16	14° \mathbb{Y} 37'01		min. Earth dist.	14614 Mar 11 14:15	6° \mathbb{Y} 51'07	0.62542 AU
morning max el	14613 Apr 15 17:23	17° \mathbb{Y} 53'03	17°52'09	inferior conj	14614 Mar 14 12:56	4° \mathbb{Y} 01'23	-1°08'19
	14613 Apr 24 16:56	0° \mathbb{B}		minimum elong	14614 Mar 14 15:14	3° \mathbb{Y} 55'48	1°07'21
desc. node	14613 May 02 23:27	13° \mathbb{B} 37'36		asc. node	14614 Mar 18 01:19	0° \mathbb{Y} 53'36	
morning set	14613 May 03 00:12	13° \mathbb{B} 40'44			14614 Mar 19 07:42	30° \mathbb{R} \mathbb{H}	
	14613 May 12 21:44	0° \mathbb{II}		morning rise	14614 Mar 21 13:09	28° \mathbb{H} 53'34	
				direct	14614 Mar 23 19:55	28° \mathbb{H} 29'31	
superior conj	14613 May 16 16:20	6° \mathbb{II} 04'30	-1°34'26		14614 Mar 28 05:23	0° \mathbb{Y}	
minimum elong	14613 May 16 07:38	5° \mathbb{II} 29'43	1°34'24	morning max el	14614 Mar 30 11:05	1° \mathbb{Y} 51'22	17°46'34
max. Earth dist.	14613 May 21 05:17	13° \mathbb{II} 16'18	1.45397 AU	morning set	14614 Apr 15 11:00	26° \mathbb{Y} 23'13	
	14613 Jun 01 00:02	0° \mathbb{B}			14614 Apr 17 12:32	0° \mathbb{B}	
evening rise	14613 Jun 01 13:23	0° \mathbb{B} 51'06		desc. node	14614 Apr 19 20:07	4° \mathbb{B} 02'01	
greatest brilliancy	14613 Jun 16 08:49	23° \mathbb{B} 04'18	-0.6m				
	14613 Jun 21 07:04	0° \mathbb{Q}		superior conj	14614 Apr 27 07:27	16° \mathbb{B} 44'52	-0°56'53
asc. node	14613 Jun 27 01:46	7° \mathbb{Q} 10'07		minimum elong	14614 Apr 27 01:57	16° \mathbb{B} 21'57	0°56'46
evening max el	14613 Jun 28 07:25	8° \mathbb{Q} 27'38	19°57'14	max. Earth dist.	14614 May 03 22:27	27° \mathbb{B} 34'36	1.44198 AU
retrograde	14613 Jul 05 20:58	12° \mathbb{Q} 45'05			14614 May 05 10:51	0° \mathbb{II}	
evening set	14613 Jul 09 18:16	11° \mathbb{Q} 17'46		evening rise	14614 May 12 01:37	10° \mathbb{II} 21'47	
inferior conj	14613 Jul 15 01:28	5° \mathbb{Q} 17'58	3°08'06		14614 May 25 03:46	0° \mathbb{B}	
minimum elong	14613 Jul 15 02:09	5° \mathbb{Q} 15'37	3°07'09	evening max el	14614 Jun 11 06:28	22° \mathbb{B} 18'29	21°04'20
min. Earth dist.	14613 Jul 16 01:07	3° \mathbb{Q} 58'02	0.67945 AU	asc. node	14614 Jun 13 22:43	24° \mathbb{B} 43'12	
	14613 Jul 19 06:40	30° \mathbb{R} \mathbb{B}		retrograde	14614 Jun 19 19:56	27° \mathbb{B} 16'27	
morning rise	14613 Jul 20 09:40	28° \mathbb{B} 54'07		evening set	14614 Jun 24 03:43	25° \mathbb{B} 32'13	
direct	14613 Jul 26 02:28	26° \mathbb{B} 24'11		inferior conj	14614 Jun 29 09:27	19° \mathbb{B} 21'03	3°10'08
desc. node	14613 Jul 29 22:34	27° \mathbb{B} 20'14		minimum elong	14614 Jun 29 09:09	19° \mathbb{B} 22'06	3°09'07
	14613 Aug 03 01:47	0° \mathbb{Q}		min. Earth dist.	14614 Jun 29 19:32	18° \mathbb{B} 46'02	0.68725 AU
morning max el	14613 Aug 06 19:34	3° \mathbb{Q} 25'15	24°46'52	morning rise	14614 Jul 04 14:20	13° \mathbb{B} 01'46	
	14613 Aug 27 03:38	0° \mathbb{M}		direct	14614 Jul 09 19:03	10° \mathbb{B} 45'51	
morning set	14613 Sep 11 13:18	25° \mathbb{M} 06'15		desc. node	14614 Jul 16 19:55	13° \mathbb{B} 52'48	
	14613 Sep 14 07:07	0° \mathbb{Q}		morning max el	14614 Jul 20 06:28	17° \mathbb{B} 00'08	23°17'43
max. Earth dist.	14613 Sep 15 02:56	1° \mathbb{Q} 30'04	1.37232 AU		14614 Jul 31 01:09	0° \mathbb{Q}	
					14614 Aug 20 04:19	0° \mathbb{M}	
superior conj	14613 Sep 21 23:21	14° \mathbb{Q} 27'10	-0°10'42	morning set	14614 Aug 23 21:41	6° \mathbb{M} 07'12	
minimum elong	14613 Sep 22 00:03	14° \mathbb{Q} 30'32	0°10'24	max. Earth dist.	14614 Aug 28 00:59	13° \mathbb{M} 09'01	1.39602 AU
behind sun begin	14613 Sep 21 18:56	14° \mathbb{Q} 05'36					
behind sun end	14613 Sep 22 05:09	14° \mathbb{Q} 55'30		superior conj	14614 Sep 04 18:51	27° \mathbb{M} 00'31	-0°45'49
asc. node	14613 Sep 23 03:21	16° \mathbb{Q} 44'26		minimum elong	14614 Sep 04 22:15	27° \mathbb{M} 16'18	0°45'23
	14613 Sep 29 18:15	0° \mathbb{M}			14614 Sep 06 09:25	0° \mathbb{Q}	
evening rise	14613 Sep 30 08:24	1° \mathbb{M} 11'12		asc. node	14614 Sep 09 23:54	6° \mathbb{Q} 49'49	
evening max el	14613 Oct 17 06:44	29° \mathbb{M} 01'41	19°27'42	evening rise	14614 Sep 14 05:08	14° \mathbb{Q} 57'24	
	14613 Oct 18 07:18	0° \mathbb{A}			14614 Sep 22 08:06	0° \mathbb{M}	
desc. node	14613 Oct 25 18:48	3° \mathbb{A} 46'40		evening max el	14614 Sep 30 06:27	11° \mathbb{M} 00'26	18°38'36
retrograde	14613 Oct 26 21:24	3° \mathbb{A} 50'22		retrograde	14614 Oct 08 10:09	15° \mathbb{M} 07'21	
evening set	14613 Oct 28 18:42	3° \mathbb{A} 40'03		evening set	14614 Oct 10 08:23	14° \mathbb{M} 54'21	
	14613 Nov 05 17:59	30° \mathbb{R} \mathbb{M}		desc. node	14614 Oct 12 16:12	14° \mathbb{M} 06'42	
inferior conj	14613 Nov 06 10:28	29° \mathbb{M} 33'29	-3°36'08	inferior conj	14614 Oct 18 08:40	10° \mathbb{M} 28'30	-1°48'55
minimum elong	14613 Nov 06 01:34	29° \mathbb{M} 47'50	3°32'13	minimum elong	14614 Oct 18 04:14	10° \mathbb{M} 36'48	1°46'33
min. Earth dist.	14613 Nov 08 21:06	27° \mathbb{M} 59'00	0.55545 AU	min. Earth dist.	14614 Oct 21 12:13	8° \mathbb{M} 07'20	0.57244 AU
morning rise	14613 Nov 14 06:19	25° \mathbb{M} 08'17		morning rise	14614 Oct 25 20:41	5° \mathbb{M} 26'12	

direct	14614 Oct 31 21:03	3°♍56'37		min. Earth dist.	14615 Oct 03 11:06	19°♊19'22	0.59399 AU
morning max el	14614 Nov 15 03:08	11°♍23'54	26°43'55	morning rise	14615 Oct 07 06:31	16°♊33'54	
	14614 Nov 29 13:02	0°♊		direct	14615 Oct 13 18:06	14°♊37'36	
asc. node	14614 Dec 07 01:14	13°♊02'48		morning max el	14615 Oct 28 01:09	22°♊23'19	27°40'50
morning set	14614 Dec 14 14:02	28°♊16'48			14615 Nov 03 19:03	0°♍	
	14614 Dec 15 09:11	0°♊			14615 Nov 22 14:49	0°♊	
				asc. node	14615 Nov 23 22:10	2°♊31'46	
superior conj	14614 Dec 21 09:12	13°♊16'51	1°37'06	morning set	14615 Nov 28 20:35	12°♊35'30	
minimum elong	14614 Dec 21 08:37	13°♊13'36	1°38'06	max. Earth dist.	14615 Dec 05 05:14	26°♊29'31	1.31122 AU
max. Earth dist.	14614 Dec 21 21:12	14°♊23'52	1.31258 AU				
evening rise	14614 Dec 28 06:21	28°♊21'40		superior conj	14615 Dec 05 20:41	27°♊55'49	1°30'55
	14614 Dec 29 01:01	0°♋		minimum elong	14615 Dec 05 19:10	27°♊47'25	1°31'49
desc. node	14615 Jan 08 14:36	20°♋15'10			14615 Dec 06 18:53	0°♋	
	14615 Jan 14 15:04	0°♋		evening rise	14615 Dec 12 13:44	12°♋46'00	
evening max el	14615 Jan 28 07:59	17°♋03'16	27°12'47		14615 Dec 21 03:43	0°♋	
retrograde	14615 Feb 11 07:57	24°♋20'27		desc. node	14615 Dec 26 11:25	9°♋13'39	
evening set	14615 Feb 18 02:05	22°♋19'46		evening max el	14616 Jan 10 07:02	28°♋28'30	26°16'19
min. Earth dist.	14615 Feb 21 22:30	19°♋35'32	0.60349 AU		14616 Jan 11 23:39	0°♋	
inferior conj	14615 Feb 25 02:53	16°♋54'27	-2°30'48	retrograde	14616 Jan 24 06:06	5°♋33'56	
minimum elong	14615 Feb 25 08:25	16°♋42'44	2°28'19	evening set	14616 Jan 30 13:45	3°♋58'24	
morning rise	14615 Mar 04 18:03	12°♋05'47		min. Earth dist.	14616 Feb 03 20:27	1°♋21'21	0.58179 AU
asc. node	14615 Mar 04 22:48	12°♋02'45			14616 Feb 05 17:17	30°♌	
direct	14615 Mar 06 19:29	11°♋48'53		inferior conj	14616 Feb 06 22:38	29°♌05'46	-3°57'27
morning max el	14615 Mar 14 02:13	15°♋27'20	17°59'23	minimum elong	14616 Feb 07 07:07	28°♌50'13	3°54'05
	14615 Mar 24 04:17	0°♌		morning rise	14616 Feb 15 03:32	24°♌38'23	
morning set	14615 Mar 29 15:54	9°♌55'30		direct	14616 Feb 17 03:46	24°♌24'53	
desc. node	14615 Apr 06 16:40	24°♌33'02		asc. node	14616 Feb 19 20:16	24°♌50'17	
				morning max el	14616 Feb 25 11:00	28°♌30'12	18°32'13
superior conj	14615 Apr 08 22:17	28°♌30'09	-0°17'57		14616 Feb 26 21:01	0°♌	
minimum elong	14615 Apr 08 20:43	28°♌23'20	0°18'05	morning set	14616 Mar 12 09:32	24°♌01'43	
	14615 Apr 09 18:49	0°♌			14616 Mar 15 11:56	0°♌	
max. Earth dist.	14615 Apr 16 11:12	11°♌21'27	1.42437 AU				
evening rise	14615 Apr 22 02:58	20°♌32'10		superior conj	14616 Mar 21 09:58	11°♌11'57	0°17'25
	14615 Apr 28 04:44	0°♍		minimum elong	14616 Mar 21 11:09	11°♌17'28	0°17'07
	14615 May 19 12:43	0°♍		desc. node	14616 Mar 23 13:10	15°♌07'02	
evening max el	14615 May 25 00:26	6°♍10'10	22°21'14	max. Earth dist.	14616 Mar 28 19:55	24°♌29'26	1.40304 AU
asc. node	14615 May 31 19:45	11°♍14'32			14616 Apr 01 01:29	0°♍	
retrograde	14615 Jun 03 17:29	11°♍52'12		evening rise	14616 Apr 02 00:43	1°♍37'05	
evening set	14615 Jun 08 12:26	9°♍52'07			14616 Apr 20 12:38	0°♍	
inferior conj	14615 Jun 13 19:07	3°♍31'34	3°01'18	evening max el	14616 May 06 15:13	20°♍03'14	23°42'25
minimum elong	14615 Jun 13 17:56	3°♍35'42	3°00'08	retrograde	14616 May 17 12:13	26°♍26'28	
min. Earth dist.	14615 Jun 13 16:07	3°♍42'01	0.69023 AU	asc. node	14616 May 17 16:55	26°♍26'18	
	14615 Jun 16 10:14	30°♌		evening set	14616 May 22 18:49	24°♍12'28	
morning rise	14615 Jun 18 23:14	27°♍18'54		min. Earth dist.	14616 May 27 12:41	18°♍39'19	0.68844 AU
direct	14615 Jun 23 15:29	25°♍21'07		inferior conj	14616 May 28 04:31	17°♍45'06	2°42'05
	14615 Jul 02 02:21	0°♍		minimum elong	14616 May 28 02:40	17°♍51'26	2°40'45
morning max el	14615 Jul 02 19:56	0°♍42'58	21°50'14	morning rise	14616 Jun 02 10:30	11°♍40'30	
desc. node	14615 Jul 03 17:10	1°♍37'28		direct	14616 Jun 06 14:23	10°♍02'53	
	14615 Jul 24 19:54	0°♎		morning max el	14616 Jun 14 15:06	14°♍36'12	20°31'27
morning set	14615 Aug 04 05:39	16°♎04'48		desc. node	14616 Jun 19 14:16	20°♍14'40	
max. Earth dist.	14615 Aug 10 03:04	25°♎39'06	1.41892 AU		14616 Jun 26 19:50	0°♍	
	14615 Aug 12 17:32	0°♎		morning set	14616 Jul 13 15:54	25°♍07'16	
					14616 Jul 16 19:11	0°♎	
superior conj	14615 Aug 17 19:43	8°♎44'28	-1°21'15	max. Earth dist.	14616 Jul 22 12:16	9°♎03'10	1.43825 AU
minimum elong	14615 Aug 18 02:01	9°♎12'03	1°20'52				
asc. node	14615 Aug 27 20:26	26°♎48'51		superior conj	14616 Jul 28 21:57	19°♎29'51	-1°51'57
evening rise	14615 Aug 28 14:51	28°♎13'33		minimum elong	14616 Jul 29 05:24	20°♎00'46	1°52'03
	14615 Aug 29 14:01	0°♏			14616 Aug 04 03:29	0°♎	
evening max el	14615 Sep 13 15:10	23°♏39'50	18°10'34	evening rise	14616 Aug 10 08:54	10°♎47'29	
retrograde	14615 Sep 20 17:51	27°♏17'29		asc. node	14616 Aug 13 17:00	16°♎37'05	
evening set	14615 Sep 22 22:25	26°♏57'22			14616 Aug 21 19:30	0°♏	
desc. node	14615 Sep 29 13:40	22°♏42'39		evening max el	14616 Aug 27 04:38	6°♏48'59	18°02'08
inferior conj	14615 Sep 30 04:33	22°♏10'16	-0°11'41	retrograde	14616 Sep 02 17:14	10°♏11'41	
minimum elong	14615 Sep 30 04:09	22°♏11'09	0°11'14	evening set	14616 Sep 05 05:46	9°♏40'48	
transit middle	14615 Sep 30 04:09	22°♏11'09	0°11'14	inferior conj	14616 Sep 11 19:29	4°♏34'03	1°05'36
transit begin	14615 Sep 30 01:42	22°♏16'31		minimum elong	14616 Sep 11 21:17	4°♏29'31	1°04'57
transit end	14615 Sep 30 06:36	22°♏05'46		min. Earth dist.	14616 Sep 14 19:20	1°♏34'25	0.61693 AU

desc. node	14616 Sep 15 11:11	0°♄57'01		minimum elong	14617 Aug 26 03:54	17°♎25'06	2°00'51
	14616 Sep 16 12:48	30°♎♎		min. Earth dist.	14617 Aug 28 13:30	14°♎43'17	0.63876 AU
morning rise	14616 Sep 18 10:10	28°♎32'10		morning rise	14617 Sep 01 05:16	11°♎14'28	
direct	14616 Sep 25 02:15	26°♎13'36		desc. node	14617 Sep 02 08:43	10°♎25'32	
	14616 Oct 04 11:16	0°♄		direct	14617 Sep 07 19:56	8°♎41'06	
morning max el	14616 Oct 09 06:16	4°♄10'52	27°58'54	morning max el	14617 Sep 21 15:56	16°♎41'00	27°39'24
	14616 Oct 28 12:34	0°♍			14617 Oct 02 17:11	0°♄	
asc. node	14616 Nov 09 18:59	22°♍18'06			14617 Oct 21 07:32	0°♍	
morning set	14616 Nov 11 21:38	26°♍35'36		morning set	14617 Oct 26 14:50	10°♍11'26	
	14616 Nov 13 12:51	0°♊		asc. node	14617 Oct 27 15:42	12°♍16'11	
max. Earth dist.	14616 Nov 17 10:48	8°♊25'23	1.31523 AU	max. Earth dist.	14617 Oct 31 10:00	20°♍02'36	1.32474 AU
superior conj	14616 Nov 19 06:40	12°♊26'55	1°18'51	superior conj	14617 Nov 03 13:12	26°♍44'38	1°00'56
minimum elong	14616 Nov 19 04:32	12°♊15'08	1°19'32	minimum elong	14617 Nov 03 10:54	26°♍32'12	1°01'21
evening rise	14616 Nov 25 23:53	27°♊15'34			14617 Nov 05 01:11	0°♊	
	14616 Nov 27 06:32	0°♋		evening rise	14617 Nov 10 10:56	11°♊45'24	
desc. node	14616 Dec 12 08:22	27°♋26'03			14617 Nov 19 14:34	0°♋	
	14616 Dec 14 03:47	0°♌		desc. node	14617 Nov 29 05:27	14°♋34'48	
evening max el	14616 Dec 21 21:39	9°♌02'44	24°50'24	evening max el	14617 Dec 03 07:14	19°♋03'31	23°08'42
retrograde	14617 Jan 04 15:49	15°♌55'24		retrograde	14617 Dec 16 12:48	25°♋37'39	
evening set	14617 Jan 10 03:24	14°♌48'38		evening set	14617 Dec 20 18:19	24°♋58'47	
min. Earth dist.	14617 Jan 15 09:32	12°♌02'52	0.56282 AU	min. Earth dist.	14617 Dec 27 17:00	21°♋44'42	0.54952 AU
inferior conj	14617 Jan 17 21:38	10°♌27'19	-5°13'57	inferior conj	14617 Dec 29 00:58	20°♋58'43	-5°57'05
minimum elong	14617 Jan 18 06:07	10°♌13'47	5°11'20	minimum elong	14617 Dec 29 03:31	20°♋55'03	5°55'57
morning rise	14617 Jan 26 11:05	6°♌21'28		morning rise	14618 Jan 06 14:14	17°♋08'39	
direct	14617 Jan 28 17:05	6°♌07'26		direct	14618 Jan 09 11:25	16°♋49'02	
asc. node	14617 Feb 05 17:41	9°♌20'35		morning max el	14618 Jan 20 17:44	22°♋13'12	20°45'20
morning max el	14617 Feb 07 09:21	10°♌48'48	19°27'09	asc. node	14618 Jan 23 15:04	25°♋19'47	
	14617 Feb 20 03:54	0°♈			14618 Jan 27 03:28	0°♌	
morning set	14617 Feb 24 11:51	8°♈29'59		morning set	14618 Feb 08 19:38	23°♌09'54	
					14618 Feb 12 02:28	0°♈	
superior conj	14617 Mar 04 14:07	24°♈38'31	0°46'47	superior conj	14618 Feb 16 06:21	8°♈36'40	1°09'26
minimum elong	14617 Mar 04 16:34	24°♈50'32	0°46'36	minimum elong	14618 Feb 16 08:58	8°♈50'00	1°09'34
	14617 Mar 07 08:51	0°♉		max. Earth dist.	14618 Feb 21 10:43	18°♈56'30	1.35855 AU
desc. node	14617 Mar 10 09:41	5°♉40'46		evening rise	14618 Feb 25 08:09	26°♈18'49	
max. Earth dist.	14617 Mar 11 02:31	6°♉57'59	1.38029 AU	desc. node	14618 Feb 25 06:12	26°♈09'48	
evening rise	14617 Mar 14 19:23	13°♉35'38			14618 Feb 27 08:39	0°♉	
	14617 Mar 24 16:26	0°♊			14618 Mar 18 03:08	0°♊	
	14617 Apr 15 11:26	0°♋		evening max el	14618 Apr 01 18:15	17°♊47'14	26°10'42
evening max el	14617 Apr 19 04:46	3°♋57'09	25°01'14	retrograde	14618 Apr 14 13:18	25°♊06'03	
retrograde	14617 May 01 03:09	10°♋53'44		evening set	14618 Apr 20 18:07	22°♊34'48	
asc. node	14617 May 04 14:12	10°♋02'43		asc. node	14618 Apr 21 11:34	21°♊56'47	
evening set	14617 May 06 21:18	8°♋28'52		min. Earth dist.	14618 Apr 24 21:32	18°♊13'34	0.67099 AU
min. Earth dist.	14617 May 11 07:11	3°♋32'17	0.68197 AU	inferior conj	14618 Apr 26 14:52	16°♊05'46	1°31'49
inferior conj	14617 May 12 11:47	1°♋58'15	2°12'27	minimum elong	14618 Apr 26 12:55	16°♊11'49	1°30'30
minimum elong	14617 May 12 09:38	2°♋05'20	2°11'00	morning rise	14618 May 02 08:33	10°♋20'54	
	14617 May 14 00:26	30°♎♋		direct	14618 May 05 13:42	9°♋22'20	
morning rise	14617 May 17 22:16	26°♋02'52		morning max el	14618 May 12 03:27	12°♋52'53	18°36'12
direct	14617 May 21 14:22	24°♋45'32		desc. node	14618 May 24 08:10	29°♋14'12	
morning max el	14617 May 28 17:44	28°♋40'58	19°25'58		14618 May 24 20:08	0°♋	
	14617 May 30 00:22	0°♌		morning set	14618 Jun 02 10:39	13°♌24'26	
desc. node	14617 Jun 06 11:16	9°♌30'32			14618 Jun 13 01:18	0°♌	
greatest brilliancy	14617 Jun 10 09:03	15°♌08'56	-0.7m	superior conj	14618 Jun 18 11:43	8°♌28'39	-2°11'35
	14617 Jun 20 05:21	0°♍		minimum elong	14618 Jun 18 08:05	8°♌14'26	2°12'32
morning set	14617 Jun 22 18:39	3°♍54'57		max. Earth dist.	14618 Jun 17 22:12	7°♍35'53	1.45854 AU
max. Earth dist.	14617 Jul 05 03:30	23°♍07'59	1.45190 AU		14618 Jul 02 04:22	0°♎	
superior conj	14617 Jul 09 00:54	29°♍17'33	-2°10'57	evening rise	14618 Jul 04 02:41	3°♎03'48	
minimum elong	14617 Jul 09 04:53	29°♍33'24	2°11'46	greatest brilliancy	14618 Jul 11 18:28	15°♎12'13	-0.9m
	14617 Jul 09 11:34	0°♎		asc. node	14618 Jul 18 10:22	25°♎20'58	
evening rise	14617 Jul 23 06:08	22°♎27'00			14618 Jul 21 19:47	0°♎	
	14617 Jul 27 19:15	0°♏		evening max el	14618 Jul 25 07:49	4°♏01'14	18°40'08
asc. node	14617 Jul 31 13:39	6°♏09'50		retrograde	14618 Jul 31 21:21	7°♏34'51	
evening max el	14617 Aug 10 19:12	20°♏18'43	18°12'14	evening set	14618 Aug 04 03:19	6°♏34'39	
retrograde	14617 Aug 17 03:47	23°♏40'17		inferior conj	14618 Aug 09 18:37	0°♏55'51	2°39'31
evening set	14617 Aug 20 00:48	22°♏55'48		minimum elong	14618 Aug 09 20:42	0°♏49'26	2°38'30
inferior conj	14617 Aug 26 01:29	17°♏31'57	2°01'53				

	14618 Aug 10 12:39	30° κ Ω		retrograde	14619 Jul 15 18:45	21° Ω 48'01	
min. Earth dist.	14618 Aug 11 16:47	28° Ω 33'46	0.65771 AU	evening set	14619 Jul 19 10:16	20° Ω 30'48	
morning rise	14618 Aug 15 13:02	24° Ω 31'24		inferior conj	14619 Jul 24 19:34	14° Ω 38'31	3°01'31
desc. node	14618 Aug 20 06:13	22° Ω 02'22		minimum elong	14619 Jul 24 20:49	14° Ω 34'23	3°00'34
direct	14618 Aug 21 21:41	21° Ω 52'18		min. Earth dist.	14619 Jul 26 03:24	12° Ω 53'51	0.67280 AU
morning max el	14618 Sep 04 03:15	29° Ω 41'48	26°48'39	morning rise	14619 Jul 30 06:48	8° Ω 13'19	
	14618 Sep 04 10:25	0° η		direct	14619 Aug 05 06:09	5° Ω 37'35	
	14618 Sep 26 15:00	0° $\underline{\Omega}$		desc. node	14619 Aug 07 03:42	5° Ω 51'17	
morning set	14618 Oct 09 21:15	23° $\underline{\Omega}$ 16'31		morning max el	14619 Aug 17 14:11	13° Ω 00'35	25°35'21
	14618 Oct 13 08:04	0° \mathbb{M}			14619 Aug 31 08:01	0° η	
max. Earth dist.	14618 Oct 13 23:50	1° \mathbb{M} 18'38	1.33964 AU		14619 Sep 19 08:38	0° $\underline{\Omega}$	
asc. node	14618 Oct 14 12:22	2° \mathbb{M} 21'37		morning set	14619 Sep 22 13:06	5° $\underline{\Omega}$ 40'49	
				max. Earth dist.	14619 Sep 26 03:48	12° $\underline{\Omega}$ 22'16	1.35937 AU
superior conj	14618 Oct 18 13:59	10° \mathbb{M} 43'35	0°37'15	asc. node	14619 Oct 01 08:56	22° $\underline{\Omega}$ 29'40	
minimum elong	14618 Oct 18 12:10	10° \mathbb{M} 34'03	0°37'30				
evening rise	14618 Oct 25 20:59	26° \mathbb{M} 11'07		superior conj	14619 Oct 02 06:10	24° $\underline{\Omega}$ 15'45	0°08'11
	14618 Oct 27 16:45	0° \mathbb{X}		minimum elong	14619 Oct 02 05:39	24° $\underline{\Omega}$ 13'14	0°08'25
evening max el	14618 Nov 14 21:12	29° \mathbb{X} 09'01	21°29'24	behind sun begin	14619 Oct 02 00:17	23° $\underline{\Omega}$ 46'18	
	14618 Nov 15 18:40	0° \mathbb{Z}		behind sun end	14619 Oct 02 11:02	24° $\underline{\Omega}$ 40'12	
desc. node	14618 Nov 16 02:39	0° \mathbb{Z} 18'00			14619 Oct 05 02:05	0° \mathbb{M}	
retrograde	14618 Nov 27 00:27	5° \mathbb{Z} 09'48		evening rise	14619 Oct 10 03:54	10° \mathbb{M} 26'25	
evening set	14618 Nov 29 22:04	4° \mathbb{Z} 50'34			14619 Oct 20 12:34	0° \mathbb{X}	
inferior conj	14618 Dec 08 16:57	0° \mathbb{Z} 58'26	-5°44'04	evening max el	14619 Oct 27 23:37	9° \mathbb{X} 51'08	20°06'02
minimum elong	14618 Dec 08 10:29	1° \mathbb{Z} 07'31	5°42'12	desc. node	14619 Nov 02 23:56	14° \mathbb{X} 08'54	
min. Earth dist.	14618 Dec 08 22:54	0° \mathbb{Z} 50'06	0.54452 AU	retrograde	14619 Nov 07 12:45	15° \mathbb{X} 06'12	
	14618 Dec 10 10:53	30° \mathbb{X} \mathbb{X}		evening set	14619 Nov 09 14:37	14° \mathbb{X} 54'55	
morning rise	14618 Dec 16 23:32	27° \mathbb{X} 09'33		inferior conj	14619 Nov 18 11:27	10° \mathbb{X} 57'10	-4°33'30
direct	14618 Dec 20 19:28	26° \mathbb{X} 37'42		minimum elong	14619 Nov 18 01:22	11° \mathbb{X} 12'18	4°29'42
	14618 Dec 30 04:40	0° \mathbb{Z}		min. Earth dist.	14619 Nov 20 06:00	9° \mathbb{X} 53'26	0.54897 AU
morning max el	14619 Jan 02 12:00	2° \mathbb{Z} 45'01	22°24'02	morning rise	14619 Nov 26 11:06	6° \mathbb{X} 50'19	
asc. node	14619 Jan 10 12:21	12° \mathbb{Z} 30'25		direct	14619 Dec 01 06:42	5° \mathbb{X} 59'51	
	14619 Jan 20 10:41	0° \approx		morning max el	14619 Dec 14 21:44	12° \mathbb{X} 43'24	24°13'19
morning set	14619 Jan 24 06:30	7° \approx 54'43		asc. node	14619 Dec 28 09:32	0° \mathbb{Z} 35'22	
					14619 Dec 28 01:05	0° \mathbb{Z}	
superior conj	14619 Jan 31 07:12	22° \approx 56'39	1°25'21	morning set	14620 Jan 08 18:27	22° \mathbb{Z} 38'26	
minimum elong	14619 Jan 31 09:14	23° \approx 07'29	1°25'51		14620 Jan 12 03:42	0° \approx	
	14619 Feb 03 16:05	0° \mathbb{X}					
max. Earth dist.	14619 Feb 04 01:03	0° \mathbb{X} 46'03	1.33986 AU	superior conj	14620 Jan 15 13:46	7° \approx 29'52	1°34'46
evening rise	14619 Feb 08 11:35	9° \mathbb{X} 37'53		minimum elong	14620 Jan 15 14:52	7° \approx 35'53	1°35'35
desc. node	14619 Feb 12 02:47	16° \mathbb{X} 30'17		max. Earth dist.	14620 Jan 17 23:15	12° \approx 41'21	1.32542 AU
	14619 Feb 19 20:38	0° \mathbb{Y}		evening rise	14620 Jan 23 02:14	23° \approx 23'47	
	14619 Mar 13 21:13	0° \mathbb{B}			14620 Jan 26 10:31	0° \mathbb{X}	
evening max el	14619 Mar 15 07:57	1° \mathbb{B} 26'40	27°03'18	desc. node	14620 Jan 29 23:24	6° \mathbb{X} 37'08	
retrograde	14619 Mar 28 17:43	8° \mathbb{B} 55'27			14620 Feb 13 12:31	0° \mathbb{Y}	
evening set	14619 Apr 04 07:21	6° \mathbb{B} 23'39		evening max el	14620 Feb 25 20:40	14° \mathbb{Y} 44'22	27°31'46
min. Earth dist.	14619 Apr 08 05:44	2° \mathbb{B} 35'39	0.65590 AU	retrograde	14620 Mar 10 15:14	22° \mathbb{Y} 12'50	
asc. node	14619 Apr 08 08:59	2° \mathbb{B} 26'34		evening set	14620 Mar 17 10:41	19° \mathbb{Y} 47'18	
inferior conj	14619 Apr 10 11:27	0° \mathbb{B} 02'37	0°39'24	min. Earth dist.	14620 Mar 21 05:45	16° \mathbb{Y} 29'13	0.63731 AU
minimum elong	14619 Apr 10 10:25	0° \mathbb{B} 05'34	0°38'34	inferior conj	14620 Mar 23 22:47	13° \mathbb{Y} 42'00	-0°25'26
	14619 Apr 10 12:22	30° \mathbb{K} \mathbb{Y}		minimum elong	14620 Mar 23 23:35	13° \mathbb{Y} 39'56	0°25'15
morning rise	14619 Apr 16 15:02	24° \mathbb{Y} 29'59		asc. node	14620 Mar 25 06:26	12° \mathbb{Y} 21'43	
direct	14619 Apr 19 10:23	23° \mathbb{Y} 47'26		morning rise	14620 Mar 30 14:50	8° \mathbb{Y} 24'03	
morning max el	14619 Apr 25 18:22	27° \mathbb{Y} 05'39	18°03'12	direct	14620 Apr 02 01:46	7° \mathbb{Y} 54'11	
	14619 Apr 28 09:24	0° \mathbb{B}		morning max el	14620 Apr 08 11:53	11° \mathbb{Y} 11'33	17°47'32
desc. node	14619 May 11 04:58	19° \mathbb{B} 18'10			14620 Apr 21 10:00	0° \mathbb{B}	
morning set	14619 May 14 05:12	24° \mathbb{B} 11'50		morning set	14620 Apr 25 02:53	6° \mathbb{B} 17'41	
	14619 May 17 19:01	0° \mathbb{I}		desc. node	14620 Apr 27 01:40	9° \mathbb{B} 36'40	
superior conj	14619 May 28 22:05	17° \mathbb{I} 45'12	-1°52'26	superior conj	14620 May 08 00:05	27° \mathbb{B} 48'31	-1°19'07
minimum elong	14619 May 28 13:23	17° \mathbb{I} 10'59	1°52'43	minimum elong	14620 May 07 16:26	27° \mathbb{B} 17'24	1°18'58
max. Earth dist.	14619 May 31 18:10	22° \mathbb{I} 12'09	1.45776 AU		14620 May 09 08:35	0° \mathbb{I}	
	14619 Jun 05 18:18	0° \mathbb{B}		max. Earth dist.	14620 May 13 13:22	6° \mathbb{I} 42'58	1.44968 AU
evening rise	14619 Jun 14 00:40	12° \mathbb{B} 46'55		evening rise	14620 May 23 11:50	22° \mathbb{I} 10'44	
	14619 Jun 25 07:08	0° Ω			14620 May 28 15:21	0° \mathbb{B}	
greatest brilliancy	14619 Jun 26 20:49	2° Ω 20'32	-0.7m		14620 Jun 19 04:19	0° Ω	
asc. node	14619 Jul 05 07:10	14° Ω 02'22		evening max el	14620 Jun 20 18:42	1° Ω 41'16	20°24'22
evening max el	14619 Jul 08 16:05	17° Ω 49'59	19°24'47	asc. node	14620 Jun 21 04:04	2° Ω 04'21	

retrograde	14620 Jun 28 17:37	6°♎14'37		asc. node	14621 Jun 08 01:04	19°♏13'17	
evening set	14620 Jul 02 19:22	4°♎39'59		retrograde	14621 Jun 12 16:07	20°♏48'36	
	14620 Jul 07 00:44	30°♎		evening set	14621 Jun 17 04:42	18°♏57'13	
inferior conj	14620 Jul 08 01:38	28°♏35'25	3°10'19	inferior conj	14621 Jun 22 10:33	12°♏41'46	3°07'38
minimum elong	14620 Jul 08 01:54	28°♏34'29	3°09'22	minimum elong	14621 Jun 22 09:52	12°♏44'11	3°06'34
min. Earth dist.	14620 Jul 08 19:29	27°♏34'16	0.68340 AU	min. Earth dist.	14621 Jun 22 14:57	12°♏26'27	0.68917 AU
morning rise	14620 Jul 13 08:08	22°♏13'24		morning rise	14621 Jun 27 14:50	6°♏25'21	
direct	14620 Jul 18 20:01	19°♏48'40		direct	14621 Jul 02 14:16	4°♏16'58	
desc. node	14620 Jul 24 01:04	21°♏31'48		desc. node	14621 Jul 10 22:22	8°♏37'34	
morning max el	14620 Jul 30 00:36	26°♏30'20	24°09'16	morning max el	14621 Jul 12 12:17	10°♏08'29	22°39'51
	14620 Aug 02 06:08	0°♎			14621 Jul 28 04:24	0°♎	
	14620 Aug 23 21:36	0°♎		morning set	14621 Aug 15 08:17	27°♎48'27	
morning set	14620 Sep 03 10:10	17°♎14'38			14621 Aug 16 16:19	0°♎	
max. Earth dist.	14620 Sep 07 02:26	23°♎41'09	1.38237 AU	max. Earth dist.	14621 Aug 20 02:08	5°♎42'12	1.40608 AU
	14620 Sep 10 14:00	0°♎					
				superior conj	14621 Aug 27 22:25	19°♎26'15	-1°01'03
superior conj	14620 Sep 14 10:21	7°♎13'13	-0°25'18	minimum elong	14621 Aug 28 03:07	19°♎47'28	1°00'37
minimum elong	14620 Sep 14 12:06	7°♎21'36	0°24'58		14621 Sep 02 15:59	0°♎	
asc. node	14620 Sep 17 05:29	12°♎37'03		asc. node	14621 Sep 04 02:02	2°♎40'05	
evening rise	14620 Sep 23 05:11	24°♎25'23		evening rise	14621 Sep 06 21:43	7°♎59'57	
	14620 Sep 26 01:28	0°♎			14621 Sep 19 17:33	0°♎	
evening max el	14620 Oct 09 16:13	21°♎22'04	19°04'08	evening max el	14621 Sep 22 20:10	3°♎38'32	18°24'08
retrograde	14620 Oct 18 14:42	25°♎51'31		retrograde	14621 Sep 30 12:00	7°♎31'42	
desc. node	14620 Oct 19 21:18	25°♎46'21		evening set	14621 Oct 02 12:30	7°♎16'11	
evening set	14620 Oct 20 11:36	25°♎40'30		desc. node	14621 Oct 06 18:43	5°♎15'01	
inferior conj	14620 Oct 28 21:29	21°♎26'02	-2°50'35	inferior conj	14621 Oct 10 05:00	2°♎40'54	-1°05'35
minimum elong	14620 Oct 28 14:19	21°♎38'18	2°47'09	minimum elong	14621 Oct 10 02:29	2°♎45'57	1°04'05
min. Earth dist.	14620 Oct 31 17:05	19°♎30'25	0.56199 AU	min. Earth dist.	14621 Oct 13 11:08	0°♎04'49	0.58119 AU
morning rise	14620 Nov 05 14:20	16°♎45'45			14621 Oct 13 13:39	30°♎	
direct	14620 Nov 11 05:37	15°♎31'46		morning rise	14621 Oct 17 12:58	27°♎23'09	
morning max el	14620 Nov 25 08:20	22°♎44'03	25°55'40	direct	14621 Oct 23 18:39	25°♎42'19	
	14620 Dec 01 19:50	0°♎			14621 Nov 03 07:00	0°♎	
asc. node	14620 Dec 14 06:36	19°♎21'08		morning max el	14621 Nov 07 02:00	3°♎18'07	27°12'53
	14620 Dec 19 18:34	0°♎			14621 Nov 26 10:50	0°♎	
morning set	14620 Dec 23 05:41	7°♎16'24		asc. node	14621 Dec 01 03:35	8°♎36'58	
				morning set	14621 Dec 07 14:30	21°♎44'02	
superior conj	14620 Dec 29 23:46	22°♎09'55	1°37'59		14621 Dec 11 09:32	0°♎	
minimum elong	14620 Dec 29 23:48	22°♎10'03	1°38'58				
max. Earth dist.	14620 Dec 31 03:53	24°♎45'53	1.31583 AU	superior conj	14621 Dec 14 11:16	6°♎51'11	1°35'12
	14621 Jan 02 13:05	0°♎		minimum elong	14621 Dec 14 10:16	6°♎45'36	1°36'11
evening rise	14621 Jan 06 01:14	7°♎29'18		max. Earth dist.	14621 Dec 14 11:48	6°♎54'10	1.31132 AU
desc. node	14621 Jan 15 20:04	26°♎24'13		evening rise	14621 Dec 21 06:11	21°♎48'31	
	14621 Jan 17 21:50	0°♎			14621 Dec 25 04:54	0°♎	
evening max el	14621 Feb 07 06:04	27°♎26'32	27°29'33	desc. node	14622 Jan 02 16:50	15°♎43'47	
	14621 Feb 10 03:55	0°♎			14622 Jan 12 04:20	0°♎	
retrograde	14621 Feb 21 04:42	4°♎48'20		evening max el	14622 Jan 20 09:23	9°♎21'39	26°52'51
evening set	14621 Feb 28 01:20	2°♎36'19		retrograde	14622 Feb 03 09:01	16°♎34'07	
	14621 Mar 03 11:46	30°♎		evening set	14622 Feb 10 00:02	14°♎43'02	
min. Earth dist.	14621 Mar 03 19:50	29°♎42'30	0.61623 AU	min. Earth dist.	14622 Feb 13 23:24	12°♎03'56	0.59413 AU
inferior conj	14621 Mar 06 21:35	26°♎54'42	-1°42'16	inferior conj	14622 Feb 17 04:15	9°♎31'29	-3°07'37
minimum elong	14621 Mar 07 01:12	26°♎46'27	1°40'37	minimum elong	14622 Feb 17 11:11	9°♎17'40	3°04'37
asc. node	14621 Mar 12 03:55	22°♎47'41		morning rise	14622 Feb 25 01:39	4°♎51'59	
morning rise	14621 Mar 14 04:06	21°♎54'32		direct	14622 Feb 27 02:00	4°♎36'57	
direct	14621 Mar 16 08:23	21°♎33'50		asc. node	14622 Feb 27 01:23	4°♎36'57	
morning max el	14621 Mar 23 04:53	25°♎01'13	17°49'42	morning max el	14622 Mar 06 17:54	8°♎25'08	18°10'49
	14621 Mar 27 08:08	0°♎			14622 Mar 20 15:56	0°♎	
morning set	14621 Apr 07 22:08	19°♎23'45		morning set	14622 Mar 22 09:03	3°♎12'22	
desc. node	14621 Apr 13 22:15	0°♎04'17		desc. node	14622 Mar 31 18:47	20°♎37'12	
	14621 Apr 13 21:17	0°♎					
				superior conj	14622 Apr 01 01:43	21°♎08'18	-0°02'21
superior conj	14621 Apr 19 01:24	8°♎56'51	-0°40'10	minimum elong	14622 Apr 01 01:30	21°♎07'21	0°02'36
minimum elong	14621 Apr 18 21:39	8°♎40'53	0°40'09	behind sun begin	14622 Mar 31 18:00	20°♎33'38	
max. Earth dist.	14621 Apr 26 05:27	20°♎51'48	1.43511 AU	behind sun end	14622 Apr 01 09:00	21°♎41'00	
	14621 May 01 22:48	0°♎			14622 Apr 06 02:38	0°♎	
evening rise	14621 May 03 04:17	1°♎55'20		max. Earth dist.	14622 Apr 08 16:29	4°♎23'21	1.41563 AU
	14621 May 22 03:20	0°♎		evening rise	14622 Apr 13 13:54	12°♎28'04	
evening max el	14621 Jun 03 15:26	15°♎32'24	21°36'05		14622 Apr 24 21:04	0°♎	

evening max el	14622 May 17 07:37	29° Π 23'51	22°55'29	evening max el	14623 Apr 29 21:35	13° Π 17'14	24°16'39
	14622 May 17 22:21	0° \mathfrak{S}		retrograde	14623 May 11 06:11	19° Π 56'35	
asc. node	14622 May 25 22:11	5° \mathfrak{S} 13'01		asc. node	14623 May 12 19:25	19° Π 46'04	
retrograde	14622 May 27 12:44	5° \mathfrak{S} 24'32		evening set	14623 May 16 17:37	17° Π 37'38	
evening set	14622 Jun 01 12:39	3° \mathfrak{S} 18'00		min. Earth dist.	14623 May 21 07:53	12° Π 19'52	0.68621 AU
	14622 Jun 04 13:23	30° \mathfrak{R} Π		inferior conj	14623 May 22 05:08	11° Π 08'06	2°30'51
inferior conj	14622 Jun 06 20:21	26° Π 53'56	2°54'24	minimum elong	14623 May 22 03:06	11° Π 14'58	2°29'26
minimum elong	14622 Jun 06 18:51	26° Π 59'08	2°53'09	morning rise	14623 May 27 12:41	5° Π 07'05	
min. Earth dist.	14622 Jun 06 11:48	27° Π 23'38	0.69007 AU	direct	14623 May 31 11:23	3° Π 38'15	
morning rise	14622 Jun 12 00:58	20° Π 44'34		morning max el	14623 Jun 08 02:17	7° Π 54'25	20°01'41
direct	14622 Jun 16 11:47	18° Π 55'30		desc. node	14623 Jun 14 16:39	15° Π 41'52	
morning max el	14622 Jun 25 04:01	23° Π 56'01	21°15'17		14623 Jun 24 18:18	0° \mathfrak{S}	
desc. node	14622 Jun 27 19:34	26° Π 46'33		morning set	14623 Jul 05 10:48	16° \mathfrak{S} 09'48	
	14622 Jun 30 12:10	0° \mathfrak{S}			14623 Jul 14 07:55	0° Ω	
	14622 Jul 21 12:35	0° Ω		max. Earth dist.	14623 Jul 15 18:28	2° Ω 16'53	1.44481 AU
morning set	14622 Jul 26 06:08	7° Ω 20'10					
max. Earth dist.	14622 Aug 02 07:01	18° Ω 35'25	1.42771 AU	superior conj	14623 Jul 21 06:07	11° Ω 05'50	-2°01'54
	14622 Aug 09 03:20	0° \mathfrak{M}		minimum elong	14623 Jul 21 12:47	11° Ω 32'57	2°02'19
					14623 Aug 01 14:15	0° \mathfrak{M}	
superior conj	14622 Aug 09 13:59	0° \mathfrak{M} 45'24	-1°35'16	evening rise	14623 Aug 03 11:16	3° \mathfrak{M} 12'09	
minimum elong	14622 Aug 09 21:10	1° \mathfrak{M} 16'04	1°35'01	asc. node	14623 Aug 08 19:13	12° \mathfrak{M} 17'36	
evening rise	14622 Aug 21 01:26	20° \mathfrak{M} 59'40		evening max el	14623 Aug 20 21:47	29° \mathfrak{M} 51'06	18°04'17
asc. node	14622 Aug 21 22:36	22° \mathfrak{M} 34'57			14623 Aug 21 01:26	0° \mathfrak{A}	
	14622 Aug 26 02:21	0° \mathfrak{A}		retrograde	14623 Aug 27 07:31	3° \mathfrak{A} 11'30	
evening max el	14622 Sep 06 07:20	16° \mathfrak{A} 31'20	18°04'38	evening set	14623 Aug 29 23:36	2° \mathfrak{A} 35'12	
retrograde	14622 Sep 13 02:57	20° \mathfrak{A} 01'12			14623 Sep 02 16:02	30° \mathfrak{R} \mathfrak{M}	
evening set	14622 Sep 15 10:39	19° \mathfrak{A} 37'04		inferior conj	14623 Sep 05 07:21	27° \mathfrak{M} 21'13	1°31'55
inferior conj	14622 Sep 22 09:28	14° \mathfrak{A} 41'28	0°23'45	minimum elong	14623 Sep 05 09:35	27° \mathfrak{M} 15'20	1°31'02
minimum elong	14622 Sep 22 10:13	14° \mathfrak{A} 39'42	0°23'37	min. Earth dist.	14623 Sep 08 02:45	24° \mathfrak{M} 23'46	0.62649 AU
desc. node	14622 Sep 23 16:13	13° \mathfrak{A} 29'17		desc. node	14623 Sep 10 13:45	22° \mathfrak{M} 05'42	
min. Earth dist.	14622 Sep 25 14:06	11° \mathfrak{A} 43'57	0.60367 AU	morning rise	14623 Sep 11 17:17	21° \mathfrak{M} 11'36	
morning rise	14622 Sep 29 06:37	8° \mathfrak{A} 52'39		direct	14623 Sep 18 09:35	18° \mathfrak{M} 45'17	
direct	14622 Oct 05 20:47	6° \mathfrak{A} 45'58		morning max el	14623 Oct 02 10:43	26° \mathfrak{M} 45'23	27°54'48
morning max el	14622 Oct 20 03:27	14° \mathfrak{A} 38'36	27°53'26		14623 Oct 05 11:59	0° \mathfrak{A}	
	14622 Nov 01 13:51	0° \mathfrak{M}			14623 Oct 26 05:31	0° \mathfrak{M}	
asc. node	14622 Nov 18 00:27	28° \mathfrak{M} 13'55		asc. node	14623 Nov 04 21:14	18° \mathfrak{M} 05'58	
	14622 Nov 18 21:43	0° \mathfrak{X}		morning set	14623 Nov 05 17:00	19° \mathfrak{M} 45'58	
morning set	14622 Nov 21 18:59	5° \mathfrak{X} 55'26			14623 Nov 10 14:06	0° \mathfrak{X}	
max. Earth dist.	14622 Nov 27 19:07	18° \mathfrak{X} 55'56	1.31216 AU	max. Earth dist.	14623 Nov 10 22:12	0° \mathfrak{X} 43'35	1.31858 AU
superior conj	14622 Nov 28 22:20	21° \mathfrak{X} 27'17	1°26'31	superior conj	14623 Nov 13 07:08	5° \mathfrak{X} 53'36	1°11'58
minimum elong	14622 Nov 28 20:31	21° \mathfrak{X} 17'11	1°27'20	minimum elong	14623 Nov 13 04:51	5° \mathfrak{X} 41'09	1°12'32
	14622 Dec 02 18:24	0° \mathfrak{Z}		evening rise	14623 Nov 20 01:41	20° \mathfrak{X} 45'21	
evening rise	14622 Dec 05 14:56	6° \mathfrak{Z} 15'10			14623 Nov 24 11:34	0° \mathfrak{Z}	
	14622 Dec 17 20:37	0° \approx		desc. node	14623 Dec 07 10:43	22° \mathfrak{Z} 12'00	
desc. node	14622 Dec 20 13:43	4° \approx 24'26			14623 Dec 13 23:58	0° \approx	
evening max el	14623 Jan 02 04:32	20° \approx 23'20	25°42'46	evening max el	14623 Dec 14 16:20	0° \approx 40'03	24°08'02
retrograde	14623 Jan 16 02:30	27° \approx 24'37		retrograde	14623 Dec 28 06:49	7° \approx 25'51	
evening set	14623 Jan 22 02:47	26° \approx 00'58		evening set	14624 Jan 02 06:16	6° \approx 31'50	
min. Earth dist.	14623 Jan 26 17:20	23° \approx 22'22	0.57316 AU	min. Earth dist.	14624 Jan 08 03:52	3° \approx 36'10	0.55628 AU
inferior conj	14623 Jan 29 15:18	21° \approx 21'56	-4°32'20	inferior conj	14624 Jan 10 05:24	2° \approx 21'08	-5°37'57
minimum elong	14623 Jan 30 00:22	21° \approx 06'18	4°29'04	minimum elong	14624 Jan 10 12:09	2° \approx 10'54	5°36'02
morning rise	14623 Feb 07 00:48	17° \approx 04'14			14624 Jan 14 09:00	30° \mathfrak{R} \mathfrak{Z}	
direct	14623 Feb 09 02:14	16° \approx 51'10		morning rise	14624 Jan 18 19:51	28° \mathfrak{Z} 22'43	
asc. node	14623 Feb 13 22:50	18° \approx 08'45		direct	14624 Jan 21 07:01	28° \mathfrak{Z} 07'02	
morning max el	14623 Feb 17 22:50	21° \approx 10'56	18°52'48		14624 Jan 27 16:03	0° \approx	
	14623 Feb 24 17:19	0° \mathfrak{X}		morning max el	14624 Jan 31 15:30	3° \approx 06'47	19°57'34
morning set	14623 Mar 06 06:49	17° \mathfrak{X} 28'57		asc. node	14624 Jan 31 20:14	3° \approx 18'22	
	14623 Mar 12 16:32	0° \mathfrak{Y}			14624 Feb 17 11:31	0° \mathfrak{X}	
				morning set	14624 Feb 18 11:46	2° \mathfrak{X} 02'45	
superior conj	14623 Mar 14 20:58	4° \mathfrak{Y} 10'41	0°30'39				
minimum elong	14623 Mar 14 22:52	4° \mathfrak{Y} 19'40	0°30'22	superior conj	14624 Feb 26 06:41	17° \mathfrak{X} 51'30	0°57'13
desc. node	14623 Mar 18 15:19	11° \mathfrak{Y} 11'33		minimum elong	14624 Feb 26 09:19	18° \mathfrak{X} 04'39	0°57'09
max. Earth dist.	14623 Mar 21 23:20	17° \mathfrak{Y} 11'30	1.39337 AU	max. Earth dist.	14624 Mar 03 05:53	29° \mathfrak{X} 24'23	1.37080 AU
evening rise	14623 Mar 25 20:44	23° \mathfrak{Y} 56'28			14624 Mar 03 13:30	0° \mathfrak{Y}	
	14623 Mar 29 11:49	0° \mathfrak{X}		desc. node	14624 Mar 04 11:49	1° \mathfrak{Y} 43'37	
	14623 Apr 18 16:04	0° Π		evening rise	14624 Mar 06 23:31	6° \mathfrak{Y} 15'13	

	14624 Mar 21 09:09	0°♄			14625 Feb 23 17:04	0°♅		
evening max el	14624 Apr 11 11:12	27°♄10'56	25°32'31		14625 Mar 15 11:02	0°♄		
	14624 Apr 14 13:46	0°♄		evening max el	14625 Mar 25 01:01	10°♄58'46	26°35'38	
retrograde	14624 Apr 23 19:09	4°♄18'13		retrograde	14625 Apr 07 02:48	18°♄22'24		
asc. node	14624 Apr 28 16:45	2°♄38'45		evening set	14625 Apr 13 11:44	15°♄50'17		
evening set	14624 Apr 29 17:54	1°♄50'20		asc. node	14625 Apr 15 14:07	13°♄53'37		
	14624 May 01 15:27	30°♄8		min. Earth dist.	14625 Apr 17 12:54	11°♄43'35	0.66507 AU	
min. Earth dist.	14624 May 04 00:58	27°♄08'45	0.67781 AU	inferior conj	14625 Apr 19 11:32	9°♄24'06	1°11'07	
inferior conj	14624 May 05 10:54	25°♄19'45	1°56'39	minimum elong	14625 Apr 19 09:52	9°♄29'05	1°09'57	
minimum elong	14624 May 05 08:46	25°♄26'39	1°55'12	morning rise	14625 Apr 25 09:04	3°♄44'10		
morning rise	14624 May 11 00:05	19°♄28'24		direct	14625 Apr 28 10:03	2°♄52'36		
direct	14624 May 14 11:27	18°♄19'10		morning max el	14625 May 04 20:10	6°♄16'04	18°20'08	
morning max el	14624 May 21 07:59	22°♄02'27	19°02'43	desc. node	14625 May 18 10:28	25°♄04'18		
	14624 May 27 22:13	0°♄			14625 May 21 13:16	0°♄		
desc. node	14624 May 31 13:37	5°♄10'44		morning set	14625 May 24 19:25	5°♄10'26		
greatest brilliancy	14624 Jun 03 10:47	9°♄27'19	-0.7m					
morning set	14624 Jun 13 16:45	25°♄08'34		superior conj	14625 Jun 09 09:13	29°♄42'16	-2°05'41	
	14624 Jun 16 20:06	0°♄		minimum elong	14625 Jun 09 02:43	29°♄16'50	2°06'24	
max. Earth dist.	14624 Jun 27 11:31	16°♄33'49	1.45566 AU		14625 Jun 09 13:46	0°♄		
				max. Earth dist.	14625 Jun 10 07:41	1°♄09'56	1.45921 AU	
superior conj	14624 Jun 30 00:47	20°♄34'17	-2°13'42	evening rise	14625 Jun 25 08:28	24°♄37'25		
minimum elong	14624 Jun 30 01:44	20°♄38'01	2°14'43		14625 Jun 28 18:58	0°♄		
	14624 Jul 05 23:38	0°♄		greatest brilliancy	14625 Jul 05 09:25	10°♄14'38	-0.8m	
evening rise	14624 Jul 14 22:12	14°♄25'02		asc. node	14625 Jul 12 12:38	20°♄41'46		
	14624 Jul 24 13:42	0°♄		evening max el	14625 Jul 17 22:57	27°♄13'37	18°57'03	
asc. node	14624 Jul 25 15:53	1°♄42'01			14625 Jul 21 11:18	0°♄		
evening max el	14624 Aug 03 11:56	13°♄27'36	18°22'02	retrograde	14625 Jul 24 16:59	0°♄55'59		
retrograde	14624 Aug 09 21:23	16°♄52'18			14625 Jul 27 19:39	30°♄8		
evening set	14624 Aug 12 22:16	16°♄01'13		evening set	14625 Jul 28 03:00	29°♄48'28		
inferior conj	14624 Aug 18 18:31	10°♄30'51	2°19'55	inferior conj	14625 Aug 02 15:20	24°♄03'31	2°50'34	
minimum elong	14624 Aug 18 20:53	10°♄23'55	2°18'52	minimum elong	14625 Aug 02 17:06	23°♄57'54	2°49'35	
min. Earth dist.	14624 Aug 21 00:46	7°♄52'04	0.64732 AU	min. Earth dist.	14625 Aug 04 07:17	21°♄56'41	0.66473 AU	
morning rise	14624 Aug 24 18:07	4°♄09'49		morning rise	14625 Aug 08 06:27	17°♄38'14		
desc. node	14624 Aug 27 11:18	2°♄25'24		direct	14625 Aug 14 11:24	14°♄59'53		
direct	14624 Aug 31 06:52	1°♄32'53		desc. node	14625 Aug 14 08:48	14°♄59'56		
morning max el	14624 Sep 13 21:10	9°♄29'17	27°21'03	morning max el	14625 Aug 27 08:34	22°♄39'20	26°19'37	
	14624 Sep 29 23:16	0°♄			14625 Sep 02 20:06	0°♄		
	14624 Oct 17 14:53	0°♄			14625 Sep 23 06:10	0°♄		
morning set	14624 Oct 19 05:56	3°♄09'12		morning set	14625 Oct 02 06:36	15°♄57'50		
asc. node	14624 Oct 21 17:55	8°♄07'35		max. Earth dist.	14625 Oct 06 03:20	23°♄21'09	1.34759 AU	
max. Earth dist.	14624 Oct 23 17:35	12°♄11'07	1.33050 AU	asc. node	14625 Oct 08 14:32	28°♄14'31		
					14625 Oct 09 11:27	0°♄		
superior conj	14624 Oct 27 11:30	20°♄04'07	0°51'34					
minimum elong	14624 Oct 27 09:19	19°♄52'26	0°51'55	superior conj	14625 Oct 11 08:58	3°♄52'22	0°25'31	
	14624 Nov 01 02:05	0°♄		minimum elong	14625 Oct 11 07:35	3°♄45'18	0°25'45	
evening rise	14624 Nov 03 12:32	5°♄14'05		evening rise	14625 Oct 18 21:31	19°♄36'15		
	14624 Nov 16 16:10	0°♄			14625 Oct 24 00:39	0°♄		
desc. node	14624 Nov 23 07:51	8°♄47'23		evening max el	14625 Nov 06 21:03	20°♄55'42	20°51'21	
evening max el	14624 Nov 25 02:39	10°♄38'21	22°25'09	desc. node	14625 Nov 10 05:05	23°♄46'00		
retrograde	14624 Dec 07 22:24	16°♄59'30		retrograde	14625 Nov 18 08:48	26°♄38'20		
evening set	14624 Dec 11 13:56	16°♄30'19		evening set	14625 Nov 20 20:12	26°♄23'36		
min. Earth dist.	14624 Dec 19 10:03	12°♄58'45	0.54630 AU	inferior conj	14625 Nov 29 17:33	22°♄30'19	-5°20'05	
inferior conj	14624 Dec 20 02:26	12°♄35'46	-5°59'11	minimum elong	14625 Nov 29 08:33	22°♄43'09	5°17'16	
minimum elong	14624 Dec 20 01:01	12°♄37'45	5°58'07	min. Earth dist.	14625 Nov 30 15:44	21°♄58'37	0.54525 AU	
morning rise	14624 Dec 28 13:14	8°♄48'26		morning rise	14625 Dec 07 21:04	18°♄36'32		
direct	14624 Dec 31 19:51	8°♄24'15		direct	14625 Dec 12 03:17	17°♄57'41		
morning max el	14625 Jan 12 17:23	14°♄06'58	21°25'15	morning max el	14625 Dec 25 06:57	24°♄20'48	23°10'21	
asc. node	14625 Jan 17 17:34	19°♄50'04			14625 Dec 30 09:23	0°♄		
	14625 Jan 24 07:12	0°♄		asc. node	14626 Jan 04 14:48	7°♄25'38		
morning set	14625 Feb 01 21:09	16°♄45'57			14626 Jan 16 15:30	0°♄		
	14625 Feb 08 03:55	0°♄		morning set	14626 Jan 17 08:40	1°♄31'10		
superior conj	14625 Feb 09 02:57	2°♄00'06	1°17'00	superior conj	14626 Jan 24 06:30	16°♄26'40	1°30'08	
minimum elong	14625 Feb 09 05:23	2°♄12'45	1°17'17	minimum elong	14626 Jan 24 08:10	16°♄35'40	1°30'47	
max. Earth dist.	14625 Feb 13 16:40	11°♄18'43	1.35014 AU	max. Earth dist.	14626 Jan 27 10:27	23°♄10'12	1.33309 AU	
evening rise	14625 Feb 17 18:58	19°♄15'06			14626 Jan 30 18:10	0°♄		
desc. node	14625 Feb 19 08:21	22°♄09'48		evening rise	14626 Feb 01 03:29	2°♄46'14		

desc. node	14626 Feb 06 04:54	12° K 25'05		asc. node	14626 Dec 22 11:55	25° X 49'44	
	14626 Feb 16 13:53	0° Y			14626 Dec 24 19:28	0° Z	
evening max el	14626 Mar 07 14:20	24° Y 29'51	27°18'44	morning set	14627 Jan 01 20:31	16° Z 13'28	
	14626 Mar 14 15:07	0° B			14627 Jan 08 03:11	0° \approx	
retrograde	14626 Mar 21 04:15	1° B 59'33					
	14626 Mar 27 03:45	30° K Y		superior conj	14627 Jan 08 14:49	1° \approx 04'08	1°36'53
evening set	14626 Mar 27 21:00	29° Y 29'15		minimum elong	14627 Jan 08 15:28	1° \approx 07'42	1°37'47
min. Earth dist.	14626 Mar 31 17:37	25° Y 54'52	0.64839 AU	max. Earth dist.	14627 Jan 10 11:31	5° \approx 09'07	1.32067 AU
asc. node	14626 Apr 02 11:33	24° Y 00'44		evening rise	14627 Jan 15 22:00	16° \approx 41'30	
inferior conj	14626 Apr 03 04:29	23° Y 14'07	0°13'25		14627 Jan 22 17:50	0° K	
minimum elong	14626 Apr 03 04:06	23° Y 15'10	0°12'58	desc. node	14627 Jan 24 01:33	2° K 24'29	
transit middle	14626 Apr 03 04:06	23° Y 15'10	0°12'58		14627 Feb 11 04:52	0° Y	
transit begin	14626 Apr 03 02:19	23° Y 20'04		evening max el	14627 Feb 18 01:41	7° Y 33'11	27°34'48
transit end	14626 Apr 03 05:53	23° Y 10'16		retrograde	14627 Mar 03 22:42	15° Y 00'19	
morning rise	14626 Apr 09 13:05	17° Y 47'42		evening set	14627 Mar 10 19:18	12° Y 39'20	
direct	14626 Apr 12 04:44	17° Y 10'58		min. Earth dist.	14627 Mar 14 13:32	9° Y 32'33	0.62854 AU
morning max el	14626 Apr 18 12:35	20° Y 27'12	17°54'29	inferior conj	14627 Mar 17 10:51	6° Y 42'55	-0°56'43
	14626 Apr 25 21:16	0° B		minimum elong	14627 Mar 17 12:44	6° Y 38'17	0°55'57
desc. node	14626 May 05 07:11	15° B 14'59		asc. node	14627 Mar 20 09:01	4° Y 00'36	
morning set	14626 May 06 01:53	16° B 32'33		morning rise	14627 Mar 24 08:55	1° Y 32'25	
	14626 May 14 06:27	0° II		direct	14627 Mar 26 16:39	1° Y 07'02	
				morning max el	14627 Apr 02 06:18	4° Y 27'29	17°46'14
superior conj	14626 May 20 00:39	9° II 14'55	-1°39'32	morning set	14627 Apr 18 09:25	29° Y 05'41	
minimum elong	14626 May 19 15:46	8° II 39'35	1°39'33		14627 Apr 18 21:54	0° B	
max. Earth dist.	14626 May 24 03:46	15° II 46'29	1.45517 AU	desc. node	14627 Apr 22 03:48	5° B 37'36	
	14626 Jun 02 07:31	0° E					
evening rise	14626 Jun 04 23:56	4° E 07'26		superior conj	14627 Apr 30 12:08	19° B 45'02	-1°02'48
greatest brilliancy	14626 Jun 19 10:35	25° E 51'45	-0.6m	minimum elong	14627 Apr 30 06:02	19° B 19'44	1°02'40
	14626 Jun 22 07:56	0° O			14627 May 06 19:24	0° II	
asc. node	14626 Jun 29 09:29	9° O 08'06		max. Earth dist.	14627 May 06 21:15	0° II 07'22	1.44413 AU
evening max el	14626 Jul 01 04:49	11° O 03'43	19°48'20	evening rise	14627 May 15 11:16	13° II 34'37	
retrograde	14626 Jul 08 15:23	15° O 15'57			14627 May 26 08:56	0° E	
evening set	14626 Jul 12 11:08	13° O 51'19		evening max el	14627 Jun 14 04:45	24° E 54'45	20°53'41
inferior conj	14626 Jul 17 18:47	7° O 53'23	3°06'44	asc. node	14627 Jun 16 06:25	26° E 49'25	
minimum elong	14626 Jul 17 19:37	7° O 50'33	3°05'48	retrograde	14627 Jun 22 14:22	29° E 46'15	
min. Earth dist.	14626 Jul 18 20:32	6° O 26'51	0.67786 AU	evening set	14627 Jun 26 20:32	28° E 04'33	
morning rise	14626 Jul 23 03:41	1° O 28'58		inferior conj	14627 Jul 02 02:20	21° E 55'07	3°10'32
	14626 Jul 25 04:12	30° K E		minimum elong	14627 Jul 02 02:11	21° E 55'39	3°09'32
direct	14626 Jul 28 22:11	28° E 57'20		min. Earth dist.	14627 Jul 02 14:26	21° E 13'09	0.68638 AU
desc. node	14626 Aug 01 06:14	29° E 39'42		morning rise	14627 Jul 07 07:33	15° E 35'00	
	14626 Aug 02 00:32	0° O		direct	14627 Jul 12 14:10	13° E 16'34	
morning max el	14626 Aug 09 19:28	6° O 04'50	24°59'44	desc. node	14627 Jul 19 03:34	15° E 59'26	
	14626 Aug 28 08:40	0° M		morning max el	14627 Jul 23 06:05	19° E 38'19	23°31'05
morning set	14626 Sep 14 15:06	28° M 02'56			14627 Aug 01 01:15	0° O	
	14626 Sep 15 17:21	0° A			14627 Aug 21 12:15	0° M	
max. Earth dist.	14626 Sep 18 04:31	4° A 28'58	1.36887 AU	morning set	14627 Aug 27 02:53	9° M 12'52	
				max. Earth dist.	14627 Aug 31 02:20	16° M 01'23	1.39250 AU
superior conj	14626 Sep 24 20:31	17° A 11'18	-0°05'36				
minimum elong	14626 Sep 24 20:52	17° A 13'00	0°05'21	superior conj	14627 Sep 07 18:24	29° M 51'26	-0°40'22
behind sun begin	14626 Sep 24 14:40	16° A 42'35		minimum elong	14627 Sep 07 21:21	0° A 05'14	0°39'58
behind sun end	14626 Sep 25 03:03	17° A 43'28			14627 Sep 07 20:14	0° A	
asc. node	14626 Sep 25 11:06	18° A 23'10		asc. node	14627 Sep 12 07:38	8° A 29'19	
	14626 Oct 01 05:47	0° M		evening rise	14627 Sep 17 00:26	17° A 36'03	
evening rise	14626 Oct 03 02:26	3° M 46'10			14627 Sep 23 14:05	0° M	
	14626 Oct 18 09:59	0° X		evening max el	14627 Oct 03 03:39	13° M 50'50	18°44'32
evening max el	14626 Oct 20 05:38	1° X 58'46	19°36'56	retrograde	14627 Oct 11 11:52	18° M 03'03	
desc. node	14626 Oct 28 02:25	6° X 42'34		evening set	14627 Oct 13 09:35	17° M 50'42	
retrograde	14626 Oct 30 02:07	6° X 54'13		desc. node	14627 Oct 14 23:50	17° M 22'31	
evening set	14626 Nov 01 00:05	6° X 43'53		inferior conj	14627 Oct 21 12:29	13° M 27'57	-2°04'54
inferior conj	14626 Nov 09 17:33	2° X 39'58	-3°51'53	minimum elong	14627 Oct 21 07:20	13° M 37'22	2°02'13
minimum elong	14626 Nov 09 08:10	2° X 54'48	3°47'54	min. Earth dist.	14627 Oct 24 14:30	11° M 12'55	0.56960 AU
min. Earth dist.	14626 Nov 12 00:28	1° X 13'12	0.55351 AU	morning rise	14627 Oct 29 01:50	8° M 31'26	
	14626 Nov 14 01:50	30° K M		direct	14627 Nov 04 00:07	7° M 05'49	
morning rise	14626 Nov 17 14:23	28° M 19'49		morning max el	14627 Nov 18 05:24	14° M 29'21	26°32'19
direct	14626 Nov 22 18:40	27° M 20'01			14627 Nov 30 14:58	0° X	
	14626 Dec 01 05:28	0° X		asc. node	14627 Dec 09 08:57	14° X 49'23	
morning max el	14626 Dec 06 16:17	4° X 17'17	24°58'55		14627 Dec 16 22:04	0° Z	

morning set	14627 Dec 17 06:56	0° Z 47'26		asc. node	14628 Nov 25 05:53	4° Z 15'12	
				morning set	14628 Nov 30 14:09	15° Z 08'44	
superior conj	14627 Dec 24 01:42	15° Z 45'32	1°37'31	max. Earth dist.	14628 Dec 07 01:58	29° Z 22'12	1.31109 AU
minimum elong	14627 Dec 24 01:17	15° Z 43'11	1°38'32		14628 Dec 07 08:44	0° Z	
max. Earth dist.	14627 Dec 24 17:46	17° Z 15'05	1.31327 AU				
evening rise	14627 Dec 30 23:49	0° \approx 53'41		superior conj	14628 Dec 07 13:16	0° Z 25'24	1°32'14
	14627 Dec 30 13:41	0° \approx		minimum elong	14628 Dec 07 11:54	0° Z 17'42	1°33'09
desc. node	14628 Jan 10 22:17	22° \approx 01'01		evening rise	14628 Dec 14 06:41	15° Z 17'07	
	14628 Jan 15 18:03	0° X			14628 Dec 21 12:40	0° \approx	
evening max el	14628 Jan 31 08:54	19° X 56'55	27°18'18	desc. node	14628 Dec 27 19:07	11° \approx 05'40	
retrograde	14628 Feb 14 08:42	27° X 15'17			14629 Jan 10 20:34	0° X	
evening set	14628 Feb 21 03:37	25° X 11'35		evening max el	14629 Jan 12 09:12	1° X 30'23	26°26'49
min. Earth dist.	14628 Feb 24 23:23	22° X 25'07	0.60677 AU	retrograde	14629 Jan 26 08:23	8° X 37'24	
inferior conj	14628 Feb 28 03:15	19° X 41'49	-2°17'50	evening set	14629 Feb 01 18:17	6° X 57'44	
minimum elong	14628 Feb 28 08:17	19° X 30'58	2°15'34	min. Earth dist.	14629 Feb 05 22:46	4° X 20'40	0.58491 AU
asc. node	14628 Mar 06 06:29	14° X 57'22		inferior conj	14629 Feb 09 01:58	2° X 00'19	-3°44'31
morning rise	14628 Mar 06 16:11	14° X 49'58		minimum elong	14629 Feb 09 10:07	1° X 45'04	3°41'13
direct	14628 Mar 08 18:14	14° X 32'11			14629 Feb 11 21:07	30° R \approx	
morning max el	14628 Mar 15 22:03	18° X 07'34	17°56'14	morning rise	14629 Feb 17 05:03	27° \approx 29'45	
	14628 Mar 24 11:06	0° Y		direct	14629 Feb 19 05:10	27° \approx 15'56	
morning set	14628 Mar 31 12:03	12° Y 32'09		asc. node	14629 Feb 21 03:58	27° \approx 29'35	
desc. node	14628 Apr 08 00:22	26° Y 08'04			14629 Feb 25 22:03	0° X	
	14628 Apr 10 04:58	0° B		morning max el	14629 Feb 27 08:04	1° X 16'24	18°26'01
				morning set	14629 Mar 15 04:08	26° X 34'39	
superior conj	14628 Apr 10 23:34	1° B 21'12	-0°23'42		14629 Mar 16 23:03	0° Y	
minimum elong	14628 Apr 10 21:28	1° B 12'05	0°23'48				
max. Earth dist.	14628 Apr 18 10:57	14° B 00'48	1.42727 AU	superior conj	14629 Mar 24 08:30	13° Y 55'51	0°12'23
evening rise	14628 Apr 24 10:05	23° B 38'09		minimum elong	14629 Mar 24 09:22	13° Y 59'52	0°12'07
	14628 Apr 28 11:56	0° II		behind sun begin	14629 Mar 24 04:39	13° Y 38'08	
	14628 May 19 10:15	0° E		behind sun end	14629 Mar 24 14:05	14° Y 21'33	
evening max el	14628 May 26 23:28	8° E 46'49	22°09'23	desc. node	14629 Mar 25 20:54	16° Y 42'05	
asc. node	14628 Jun 02 03:30	13° E 31'35		max. Earth dist.	14629 Mar 31 20:29	27° Y 16'07	1.40636 AU
retrograde	14628 Jun 05 12:10	14° E 21'59			14629 Apr 02 10:55	0° B	
evening set	14628 Jun 10 05:29	12° E 24'07		evening rise	14629 Apr 05 04:41	4° B 34'59	
inferior conj	14628 Jun 15 11:52	6° E 04'57	3°03'18		14629 Apr 21 16:36	0° II	
minimum elong	14628 Jun 15 10:49	6° E 08'39	3°02'10	evening max el	14629 May 09 14:34	22° II 39'39	23°30'16
min. Earth dist.	14628 Jun 15 10:48	6° E 08'41	0.69011 AU	retrograde	14629 May 20 07:26	28° II 57'07	
	14628 Jun 20 11:58	30° R II		asc. node	14629 May 20 00:41	28° II 56'46	
morning rise	14628 Jun 20 15:58	29° II 51'17		evening set	14629 May 25 12:21	26° II 44'52	
direct	14628 Jun 25 10:06	27° II 50'36		inferior conj	14629 May 30 21:28	20° II 18'18	2°45'41
	14628 Jun 30 22:56	0° E		minimum elong	14629 May 30 19:42	20° II 24'22	2°44'21
morning max el	14628 Jul 04 18:57	3° E 19'55	22°02'53	min. Earth dist.	14629 May 30 07:30	21° II 06'19	0.68903 AU
desc. node	14628 Jul 05 00:48	3° E 34'40		morning rise	14629 Jun 05 03:01	14° II 12'32	
	14628 Jul 25 01:33	0° O		direct	14629 Jun 09 08:42	12° II 31'57	
morning set	14628 Aug 06 14:31	19° O 19'58		morning max el	14629 Jun 17 13:13	17° II 11'53	20°42'27
max. Earth dist.	14628 Aug 12 03:50	28° O 24'36	1.41572 AU	desc. node	14629 Jun 21 21:56	22° II 04'59	
	14628 Aug 13 02:40	0° np			14629 Jun 27 22:22	0° E	
				morning set	14629 Jul 17 03:28	28° E 29'16	
superior conj	14628 Aug 19 22:21	11° np 43'37	-1°16'03		14629 Jul 18 02:50	0° O	
minimum elong	14628 Aug 20 04:16	12° np 09'43	1°15'37	max. Earth dist.	14629 Jul 25 12:06	11° O 41'41	1.43569 AU
asc. node	14628 Aug 29 04:12	28° np 29'52					
	14628 Aug 29 23:40	0° O		superior conj	14629 Aug 01 04:07	22° O 37'58	-1°47'54
evening rise	14628 Aug 30 12:06	0° O 57'34		minimum elong	14629 Aug 01 11:38	23° O 09'22	1°47'53
evening max el	14628 Sep 15 11:18	26° O 24'51	18°13'24		14629 Aug 05 12:41	0° np	
	14628 Sep 21 12:26	0° III		evening rise	14629 Aug 13 08:50	13° np 38'56	
retrograde	14628 Sep 22 16:57	0° III 05'59		asc. node	14629 Aug 16 00:49	18° np 20'24	
	14628 Sep 23 21:46	30° R O			14629 Aug 22 21:41	0° O	
evening set	14628 Sep 24 20:28	29° O 47'08		evening max el	14629 Aug 30 00:18	9° O 30'19	18°02'11
desc. node	14628 Sep 30 21:18	26° O 10'12		retrograde	14629 Sep 05 14:26	12° O 54'33	
inferior conj	14628 Oct 02 05:14	25° O 02'58	-0°25'13	evening set	14629 Sep 08 01:40	12° O 25'33	
minimum elong	14628 Oct 02 04:20	25° O 04'53	0°24'31	inferior conj	14629 Sep 14 17:38	7° O 21'29	0°55'15
min. Earth dist.	14628 Oct 05 11:59	22° O 15'20	0.59066 AU	minimum elong	14629 Sep 14 19:12	7° O 17'35	0°54'42
morning rise	14628 Oct 09 08:49	19° O 31'13		desc. node	14629 Sep 17 18:49	4° O 21'54	
direct	14628 Oct 15 19:07	17° O 38'54		min. Earth dist.	14629 Sep 17 18:51	4° O 21'50	0.61349 AU
morning max el	14628 Oct 30 02:17	25° O 21'54	27°34'48	morning rise	14629 Sep 21 09:59	1° O 22'38	
	14628 Nov 03 09:40	0° III			14629 Sep 23 21:38	30° R np	
	14628 Nov 23 00:28	0° Z		direct	14629 Sep 28 01:42	29° np 07'02	

	14629 Oct 02 10:44	0°♄		direct	14630 Sep 10 18:08	11°♄27'13	
morning max el	14629 Oct 12 06:38	7°♄03'22	27°58'46	morning max el	14630 Sep 24 15:48	19°♄27'58	27°44'31
	14629 Oct 29 17:30	0°♄			14630 Oct 03 15:30	0°♄	
asc. node	14629 Nov 12 02:44	23°♄59'49			14630 Oct 22 17:06	0°♄	
morning set	14629 Nov 14 16:14	29°♄12'42		morning set	14630 Oct 29 10:45	12°♄52'47	
	14629 Nov 15 01:21	0°♄		asc. node	14630 Oct 29 23:27	13°♄56'38	
max. Earth dist.	14629 Nov 20 08:15	11°♄20'57	1.31427 AU	max. Earth dist.	14630 Nov 03 08:33	23°♄01'14	1.32293 AU
superior conj	14629 Nov 21 23:39	14°♄58'35	1°21'04	superior conj	14630 Nov 06 06:49	29°♄18'52	1°04'02
minimum elong	14629 Nov 21 21:36	14°♄47'10	1°21'47	minimum elong	14630 Nov 06 04:30	29°♄06'19	1°04'30
evening rise	14629 Nov 28 16:35	29°♄46'44			14630 Nov 06 14:23	0°♄	
	14629 Nov 28 19:02	0°♄		evening rise	14630 Nov 13 03:35	14°♄16'52	
desc. node	14629 Dec 14 16:04	29°♄26'31			14630 Nov 20 21:43	0°♄	
	14629 Dec 15 01:06	0°♄		desc. node	14630 Dec 01 13:09	16°♄46'30	
evening max el	14629 Dec 25 00:55	12°♄11'35	25°04'33	evening max el	14630 Dec 06 10:46	22°♄15'35	23°24'09
retrograde	14630 Jan 07 20:11	19°♄06'44		retrograde	14630 Dec 19 19:12	28°♄53'21	
evening set	14630 Jan 13 11:28	17°♄55'29		evening set	14630 Dec 24 05:28	28°♄10'47	
min. Earth dist.	14630 Jan 18 12:56	15°♄12'14	0.56536 AU	min. Earth dist.	14630 Dec 30 21:09	25°♄02'02	0.55103 AU
inferior conj	14630 Jan 21 04:07	13°♄29'49	-5°03'55	inferior conj	14631 Jan 01 10:04	24°♄08'17	-5°53'47
minimum elong	14630 Jan 21 12:57	13°♄15'28	5°01'04	minimum elong	14631 Jan 01 13:54	24°♄02'43	5°52'30
morning rise	14630 Jan 29 16:52	9°♄21'09		morning rise	14631 Jan 09 23:56	20°♄16'25	
direct	14630 Jan 31 21:22	9°♄07'32		direct	14631 Jan 12 18:06	19°♄58'05	
asc. node	14630 Feb 08 01:23	11°♄45'16		morning max el	14631 Jan 23 18:56	25°♄16'00	20°32'12
morning max el	14630 Feb 10 08:18	13°♄42'54	19°17'30	asc. node	14631 Jan 25 22:45	27°♄32'08	
	14630 Feb 21 12:42	0°♄			14631 Jan 27 23:09	0°♄	
morning set	14630 Feb 27 05:23	11°♄00'26		morning set	14631 Feb 11 12:30	25°♄39'04	
					14631 Feb 13 14:57	0°♄	
superior conj	14630 Mar 07 10:31	27°♄16'53	0°42'44	superior conj	14631 Feb 19 01:11	11°♄11'06	1°06'26
minimum elong	14630 Mar 07 12:52	27°♄28'17	0°42'31	minimum elong	14631 Feb 19 03:49	11°♄24'31	1°06'29
	14630 Mar 08 20:24	0°♄		max. Earth dist.	14631 Feb 24 10:28	21°♄50'36	1.36165 AU
desc. node	14630 Mar 12 17:26	7°♄16'19		desc. node	14631 Feb 27 13:57	27°♄46'30	
max. Earth dist.	14630 Mar 14 03:00	9°♄49'27	1.38368 AU	evening rise	14631 Feb 28 06:40	29°♄03'26	
evening rise	14630 Mar 17 20:22	16°♄26'02			14631 Feb 28 19:03	0°♄	
	14630 Mar 25 23:53	0°♄			14631 Mar 19 06:05	0°♄	
	14630 Apr 16 05:24	0°♄		evening max el	14631 Apr 04 17:35	20°♄24'32	26°01'16
evening max el	14630 Apr 22 04:05	6°♄33'06	24°49'53	retrograde	14631 Apr 17 10:04	27°♄41'00	
retrograde	14630 May 03 23:03	13°♄25'44		evening set	14631 Apr 23 13:18	25°♄10'28	
asc. node	14630 May 06 21:56	12°♄48'17		asc. node	14631 Apr 23 19:16	24°♄57'49	
evening set	14630 May 09 15:31	11°♄02'10		min. Earth dist.	14631 Apr 27 17:36	20°♄43'57	0.67288 AU
min. Earth dist.	14630 May 14 02:27	6°♄00'11	0.68323 AU	inferior conj	14631 Apr 29 09:02	18°♄40'43	1°38'45
inferior conj	14630 May 15 05:11	4°♄31'36	2°17'40	minimum elong	14631 Apr 29 07:00	18°♄47'04	1°37'23
minimum elong	14630 May 15 03:03	4°♄38'42	2°16'13	morning rise	14631 May 05 01:27	12°♄54'05	
	14630 May 18 23:14	30°♄		direct	14631 May 08 08:09	11°♄52'51	
morning rise	14630 May 20 14:50	28°♄34'47		morning max el	14631 May 14 23:27	15°♄26'27	18°42'30
direct	14630 May 24 08:34	27°♄14'37			14631 May 26 01:01	0°♄	
	14630 May 30 06:04	0°♄		desc. node	14631 May 26 15:53	0°♄56'00	
morning max el	14630 May 31 14:44	1°♄15'01	19°34'42	morning set	14631 Jun 05 18:49	16°♄35'28	
desc. node	14630 Jun 08 18:58	11°♄15'39			14631 Jun 14 09:07	0°♄	
greatest brilliancy	14630 Jun 13 06:17	17°♄39'17	-0.6m	max. Earth dist.	14631 Jun 20 20:27	10°♄05'32	1.45801 AU
	14630 Jun 21 12:03	0°♄		superior conj	14631 Jun 21 22:40	11°♄47'56	-2°12'49
morning set	14630 Jun 26 05:56	7°♄15'07		minimum elong	14631 Jun 21 20:12	11°♄38'18	2°13'48
max. Earth dist.	14630 Jul 08 02:15	25°♄40'13	1.45024 AU		14631 Jul 03 12:03	0°♄	
	14630 Jul 10 19:51	0°♄		evening rise	14631 Jul 07 09:43	6°♄13'16	
superior conj	14630 Jul 12 10:14	2°♄33'05	-2°09'08	greatest brilliancy	14631 Jul 13 23:36	16°♄43'32	-0.9m
minimum elong	14630 Jul 12 15:06	2°♄52'32	2°09'52	asc. node	14631 Jul 20 18:09	27°♄11'04	
evening rise	14630 Jul 26 09:26	25°♄27'01			14631 Jul 22 17:13	0°♄	
	14630 Jul 29 02:39	0°♄		evening max el	14631 Jul 28 03:59	6°♄38'52	18°34'57
asc. node	14630 Aug 02 21:27	7°♄55'58		retrograde	14631 Aug 03 16:13	10°♄09'44	
evening max el	14630 Aug 13 14:54	22°♄57'28	18°09'39	evening set	14631 Aug 06 20:50	9°♄12'00	
retrograde	14630 Aug 19 23:33	26°♄18'29		inferior conj	14631 Aug 12 13:19	3°♄35'28	2°34'49
evening set	14630 Aug 22 19:14	25°♄36'15		minimum elong	14631 Aug 12 15:29	3°♄28'50	2°33'48
inferior conj	14630 Aug 28 21:38	20°♄14'56	1°54'34	min. Earth dist.	14631 Aug 14 13:38	1°♄08'34	0.65512 AU
minimum elong	14630 Aug 29 00:02	20°♄08'15	1°53'34		14631 Aug 15 13:15	30°♄	
min. Earth dist.	14630 Aug 31 11:40	17°♄23'21	0.63559 AU	morning rise	14631 Aug 18 09:01	27°♄11'40	
morning rise	14630 Sep 04 02:56	13°♄59'06		desc. node	14631 Aug 22 13:51	24°♄50'48	
desc. node	14630 Sep 04 16:21	13°♄34'27					


































































































































direct	14631 Aug 24 18:53	24° Ω 32'43		min. Earth dist.	14632 Jul 27 23:11	15° Ω 24'56	0.67089 AU
	14631 Sep 04 14:03	0° \mathfrak{M}		morning rise	14632 Aug 01 01:26	10° Ω 50'17	
morning max el	14631 Sep 07 02:54	2° \mathfrak{M} 24'40	26°57'50	direct	14632 Aug 07 02:20	8° Ω 13'37	
	14631 Sep 27 21:01	0° \mathfrak{L}		desc. node	14632 Aug 08 11:19	8° Ω 20'47	
morning set	14631 Oct 12 18:55	26° \mathfrak{L} 02'44		morning max el	14632 Aug 19 13:51	15° Ω 41'03	25°47'16
	14631 Oct 14 19:42	0° \mathfrak{M}			14632 Aug 31 09:20	0° \mathfrak{M}	
asc. node	14631 Oct 16 20:07	4° \mathfrak{M} 01'20			14632 Sep 19 17:47	0° \mathfrak{L}	
max. Earth dist.	14631 Oct 16 23:40	4° \mathfrak{M} 19'20	1.33708 AU	morning set	14632 Sep 24 13:08	8° \mathfrak{L} 33'14	
				max. Earth dist.	14632 Sep 28 04:58	15° \mathfrak{L} 23'19	1.35620 AU
superior conj	14631 Oct 21 08:34	13° \mathfrak{M} 20'59	0°41'13	asc. node	14632 Oct 02 16:42	24° \mathfrak{L} 09'11	
minimum elong	14631 Oct 21 06:38	13° \mathfrak{M} 10'45	0°41'29				
evening rise	14631 Oct 28 13:51	28° \mathfrak{M} 43'21		superior conj	14632 Oct 04 02:12	26° \mathfrak{L} 57'22	0°12'54
	14631 Oct 29 04:23	0° \mathfrak{X}		minimum elong	14632 Oct 04 01:26	26° \mathfrak{L} 53'31	0°13'07
	14631 Nov 15 19:30	0° \mathfrak{Z}		behind sun begin	14632 Oct 03 21:49	26° \mathfrak{L} 35'17	
evening max el	14631 Nov 17 23:29	2° \mathfrak{Z} 18'10	21°43'27	behind sun end	14632 Oct 04 05:02	27° \mathfrak{L} 11'45	
desc. node	14631 Nov 18 10:18	2° \mathfrak{Z} 44'16			14632 Oct 05 14:08	0° \mathfrak{M}	
retrograde	14631 Nov 30 07:28	8° \mathfrak{Z} 24'30		evening rise	14632 Oct 11 21:20	13° \mathfrak{M} 00'23	
evening set	14631 Dec 03 09:24	8° \mathfrak{Z} 03'06			14632 Oct 20 16:14	0° \mathfrak{X}	
inferior conj	14631 Dec 12 02:54	4° \mathfrak{Z} 10'53	-5°50'01	evening max el	14632 Oct 29 23:42	12° \mathfrak{X} 53'09	20°17'09
minimum elong	14631 Dec 11 21:37	4° \mathfrak{Z} 18'16	5°48'26	desc. node	14632 Nov 04 07:33	16° \mathfrak{X} 53'42	
min. Earth dist.	14631 Dec 12 03:04	4° \mathfrak{Z} 10'38	0.54471 AU	retrograde	14632 Nov 09 18:42	18° \mathfrak{X} 15'23	
morning rise	14631 Dec 20 10:35	0° \mathfrak{Z} 22'54		evening set	14632 Nov 11 22:37	18° \mathfrak{X} 03'27	
	14631 Dec 22 09:08	30° \mathfrak{R} 27		inferior conj	14632 Nov 20 20:01	14° \mathfrak{X} 07'17	-4°47'04
direct	14631 Dec 24 03:03	29° \mathfrak{X} 53'10		minimum elong	14632 Nov 20 09:57	14° \mathfrak{X} 22'07	4°43'26
	14631 Dec 25 20:24	0° \mathfrak{Z}		min. Earth dist.	14632 Nov 22 09:36	13° \mathfrak{X} 11'49	0.54769 AU
morning max el	14632 Jan 05 14:57	5° \mathfrak{Z} 54'26	22°08'17	morning rise	14632 Nov 28 20:38	10° \mathfrak{X} 04'32	
asc. node	14632 Jan 12 20:01	14° \mathfrak{Z} 32'58		direct	14632 Dec 03 12:57	9° \mathfrak{X} 17'14	
	14632 Jan 21 20:50	0° \mathfrak{A}		morning max el	14632 Dec 17 01:18	15° \mathfrak{X} 55'32	23°57'06
morning set	14632 Jan 26 23:00	10° \mathfrak{A} 23'29			14632 Dec 28 03:48	0° \mathfrak{Z}	
				asc. node	14632 Dec 29 17:11	2° \mathfrak{Z} 30'51	
superior conj	14632 Feb 03 00:53	25° \mathfrak{A} 28'13	1°23'22	morning set	14633 Jan 10 10:54	25° \mathfrak{Z} 08'11	
minimum elong	14632 Feb 03 03:02	25° \mathfrak{A} 39'38	1°23'48		14633 Jan 12 16:53	0° \mathfrak{A}	
	14632 Feb 05 04:48	0° \mathfrak{X}					
max. Earth dist.	14632 Feb 06 23:44	3° \mathfrak{X} 40'38	1.34242 AU	superior conj	14633 Jan 17 06:44	10° \mathfrak{A} 00'16	1°33'45
evening rise	14632 Feb 11 08:07	12° \mathfrak{X} 17'52		minimum elong	14633 Jan 17 08:00	10° \mathfrak{A} 07'07	1°34'31
desc. node	14632 Feb 14 10:30	18° \mathfrak{X} 08'40		max. Earth dist.	14633 Jan 19 20:58	15° \mathfrak{A} 35'54	1.32727 AU
	14632 Feb 21 04:14	0° \mathfrak{Y}		evening rise	14633 Jan 24 21:17	26° \mathfrak{A} 00'37	
	14632 Mar 13 09:12	0° \mathfrak{B}			14633 Jan 26 21:34	0° \mathfrak{X}	
evening max el	14632 Mar 17 07:23	4° \mathfrak{B} 06'46	26°56'52	desc. node	14633 Jan 31 07:06	8° \mathfrak{X} 18'17	
retrograde	14632 Mar 30 15:19	11° \mathfrak{B} 34'29			14633 Feb 13 13:38	0° \mathfrak{Y}	
evening set	14632 Apr 06 03:46	9° \mathfrak{B} 02'34		evening max el	14633 Feb 27 20:25	17° \mathfrak{Y} 29'01	27°29'17
asc. node	14632 Apr 09 16:40	5° \mathfrak{B} 38'13		retrograde	14633 Mar 13 13:49	24° \mathfrak{Y} 57'42	
min. Earth dist.	14632 Apr 10 02:52	5° \mathfrak{B} 09'42	0.65838 AU	evening set	14633 Mar 20 08:43	22° \mathfrak{Y} 30'45	
inferior conj	14632 Apr 12 06:44	2° \mathfrak{B} 39'56	0°48'09	min. Earth dist.	14633 Mar 24 04:09	19° \mathfrak{Y} 08'37	0.64031 AU
minimum elong	14632 Apr 12 05:30	2° \mathfrak{B} 43'30	0°47'14	inferior conj	14633 Mar 26 19:38	16° \mathfrak{Y} 22'44	-0°14'47
	14632 Apr 14 16:33	30° \mathfrak{R} 7		minimum elong	14633 Mar 26 20:06	16° \mathfrak{Y} 21'32	0°14'47
morning rise	14632 Apr 18 08:39	27° \mathfrak{Y} 05'14		transit middle	14633 Mar 26 20:06	16° \mathfrak{Y} 21'32	0°14'47
direct	14632 Apr 21 05:26	26° \mathfrak{Y} 20'26		transit begin	14633 Mar 26 18:54	16° \mathfrak{Y} 24'40	
morning max el	14632 Apr 27 13:42	29° \mathfrak{Y} 39'39	18°07'02	transit end	14633 Mar 26 21:17	16° \mathfrak{Y} 18'25	
	14632 Apr 27 21:55	0° \mathfrak{B}		asc. node	14633 Mar 27 14:06	15° \mathfrak{Y} 34'44	
desc. node	14632 May 12 12:40	20° \mathfrak{B} 57'34		morning rise	14633 Apr 02 09:40	11° \mathfrak{Y} 02'27	
morning set	14632 May 16 09:11	27° \mathfrak{B} 11'12		direct	14633 Apr 04 21:50	10° \mathfrak{Y} 30'51	
	14632 May 18 03:00	0° \mathfrak{I}		morning max el	14633 Apr 11 07:02	13° \mathfrak{Y} 47'28	17°48'46
					14633 Apr 22 17:11	0° \mathfrak{B}	
superior conj	14632 May 31 07:59	21° \mathfrak{I} 01'04	-1°56'26	morning set	14633 Apr 28 03:08	9° \mathfrak{B} 06'38	
minimum elong	14632 May 30 23:39	20° \mathfrak{I} 28'21	1°56'50	desc. node	14633 Apr 29 09:21	11° \mathfrak{B} 14'20	
max. Earth dist.	14632 Jun 02 16:33	24° \mathfrak{I} 42'28	1.45840 AU		14633 May 10 17:08	0° \mathfrak{I}	
	14632 Jun 06 02:01	0° \mathfrak{B}					
evening rise	14632 Jun 16 10:35	16° \mathfrak{B} 03'16		superior conj	14633 May 11 06:57	0° \mathfrak{I} 55'51	-1°24'43
	14632 Jun 25 12:10	0° \mathfrak{L}		minimum elong	14633 May 10 22:51	0° \mathfrak{I} 23'08	1°24'36
greatest brilliancy	14632 Jun 28 14:26	4° \mathfrak{L} 40'17	-0.7m	max. Earth dist.	14633 May 16 12:19	9° \mathfrak{I} 16'21	1.45138 AU
asc. node	14632 Jul 06 14:56	15° \mathfrak{L} 57'42		evening rise	14633 May 26 22:23	25° \mathfrak{I} 27'41	
evening max el	14632 Jul 10 13:02	20° \mathfrak{L} 27'13	19°17'05		14633 May 29 21:51	0° \mathfrak{B}	
retrograde	14632 Jul 17 13:09	24° \mathfrak{L} 20'38			14633 Jun 19 20:31	0° \mathfrak{L}	
evening set	14632 Jul 21 03:15	23° \mathfrak{L} 05'55		asc. node	14633 Jun 23 11:49	4° \mathfrak{L} 06'31	
inferior conj	14632 Jul 26 13:15	17° \mathfrak{L} 15'34	2°59'02	evening max el	14633 Jun 23 16:31	4° \mathfrak{L} 18'20	20°14'32
minimum elong	14632 Jul 26 14:39	17° \mathfrak{L} 11'00	2°58'05	retrograde	14633 Jul 01 11:58	8° \mathfrak{L} 45'48	

evening set	14633 Jul 05 12:10	7°♎13'40		retrograde	14634 Jun 15 10:44	23°♏19'15	
inferior conj	14633 Jul 10 18:43	1°♎10'42	3°09'44	evening set	14634 Jun 19 21:38	21°♏30'17	
minimum elong	14633 Jul 10 19:08	1°♎09'16	3°08'47	inferior conj	14634 Jun 25 03:23	15°♏16'15	3°08'45
min. Earth dist.	14633 Jul 11 14:34	0°♎02'59	0.68217 AU	minimum elong	14634 Jun 25 02:50	15°♏18'10	3°07'42
	14633 Jul 11 15:26	30°♎		min. Earth dist.	14634 Jun 25 09:45	14°♏54'05	0.68860 AU
morning rise	14633 Jul 16 01:47	24°♏48'02		morning rise	14634 Jun 30 07:50	8°♏58'47	
direct	14633 Jul 21 15:24	22°♏21'27		direct	14634 Jul 05 09:04	6°♏47'46	
desc. node	14633 Jul 26 08:43	23°♏46'11		desc. node	14634 Jul 13 06:00	10°♏40'45	
morning max el	14633 Aug 02 00:24	29°♏09'55	24°22'28	morning max el	14634 Jul 15 11:51	12°♏47'24	22°53'01
	14633 Aug 02 19:51	0°♎			14634 Jul 29 07:28	0°♎	
	14633 Aug 25 03:58	0°♎			14634 Aug 18 00:43	0°♎	
morning set	14633 Sep 06 13:16	20°♎15'08		morning set	14634 Aug 18 15:07	0°♎59'09	
max. Earth dist.	14633 Sep 10 04:12	26°♎38'51	1.37885 AU	max. Earth dist.	14634 Aug 23 03:21	8°♎32'40	1.40261 AU
	14633 Sep 12 00:33	0°♏					
superior conj	14633 Sep 17 08:24	10°♏00'23	-0°20'02	superior conj	14634 Aug 30 23:13	22°♎21'08	-0°55'38
minimum elong	14633 Sep 17 09:46	10°♏06'55	0°19'43	minimum elong	14634 Aug 31 03:27	22°♎40'27	0°55'11
asc. node	14633 Sep 19 13:16	14°♏16'50			14634 Sep 04 02:28	0°♏	
evening rise	14633 Sep 25 23:40	27°♏02'15		asc. node	14634 Sep 06 09:51	4°♏21'07	
	14633 Sep 27 11:33	0°♎		evening rise	14634 Sep 09 17:49	10°♏41'39	
evening max el	14633 Oct 12 14:14	24°♎16'22	19°11'55		14634 Sep 20 14:43	0°♎	
retrograde	14633 Oct 21 18:13	28°♎52'28		evening max el	14634 Sep 25 16:49	6°♎27'05	18°28'44
desc. node	14633 Oct 22 04:56	28°♎51'51		retrograde	14634 Oct 03 12:39	10°♎24'52	
evening set	14633 Oct 23 15:05	28°♎41'48		evening set	14634 Oct 05 12:14	10°♎10'21	
inferior conj	14633 Nov 01 03:08	24°♎30'08	-3°06'55	desc. node	14634 Oct 09 02:23	8°♎38'17	
minimum elong	14633 Oct 31 19:19	24°♎43'16	3°03'15	inferior conj	14634 Oct 13 07:28	5°♎38'21	-1°20'42
min. Earth dist.	14633 Nov 03 19:53	22°♎41'46	0.55952 AU	minimum elong	14634 Oct 13 04:18	5°♎44'35	1°18'55
morning rise	14633 Nov 08 21:04	19°♎55'19		min. Earth dist.	14634 Oct 16 12:58	3°♎07'03	0.57805 AU
direct	14633 Nov 14 09:36	18°♎45'15		morning rise	14634 Oct 20 16:52	0°♎25'49	
morning max el	14633 Nov 28 11:21	25°♎53'49	25°41'49		14634 Oct 21 14:24	30°♎	
	14633 Dec 02 08:31	0°♎		direct	14634 Oct 26 20:48	28°♏48'52	
asc. node	14633 Dec 16 14:17	21°♎11'10			14634 Nov 01 06:10	0°♎	
	14633 Dec 21 05:24	0°♏		morning max el	14634 Nov 10 03:54	6°♎21'58	27°03'32
morning set	14633 Dec 25 22:22	9°♏47'28			14634 Nov 27 16:54	0°♎	
				asc. node	14634 Dec 03 11:17	10°♎22'50	
superior conj	14634 Jan 01 16:22	24°♏39'44	1°37'52	morning set	14634 Dec 10 07:41	24°♎16'42	
minimum elong	14634 Jan 01 16:34	24°♏40'48	1°38'52		14634 Dec 12 22:56	0°♏	
max. Earth dist.	14634 Jan 03 00:50	27°♏39'19	1.31686 AU	superior conj	14634 Dec 17 03:47	9°♏21'02	1°36'00
	14634 Jan 04 02:25	0°♏		minimum elong	14634 Dec 17 02:56	9°♏16'16	1°37'00
evening rise	14634 Jan 08 19:11	10°♏03'31		max. Earth dist.	14634 Dec 17 08:21	9°♏46'29	1.31161 AU
desc. node	14634 Jan 18 03:46	28°♏08'53		evening rise	14634 Dec 23 23:24	24°♏20'41	
	14634 Jan 19 04:59	0°♎			14634 Dec 26 16:20	0°♏	
	14634 Feb 09 23:16	0°♎		desc. node	14635 Jan 05 00:34	17°♏33'01	
evening max el	14634 Feb 10 06:21	0°♎17'00	27°32'00		14635 Jan 13 00:59	0°♎	
retrograde	14634 Feb 24 04:34	7°♎40'20		evening max el	14635 Jan 23 10:40	12°♎19'06	27°00'34
evening set	14634 Mar 03 01:29	5°♎25'38		retrograde	14635 Feb 06 10:33	19°♎33'31	
min. Earth dist.	14634 Mar 06 19:43	2°♎28'51	0.61950 AU	evening set	14635 Feb 13 02:48	17°♎38'54	
	14634 Mar 09 11:59	30°♎		min. Earth dist.	14635 Feb 17 00:54	14°♎58'17	0.59736 AU
inferior conj	14634 Mar 09 20:32	29°♎39'59	-1°29'54	inferior conj	14635 Feb 20 05:49	12°♎22'21	-2°54'26
minimum elong	14634 Mar 09 23:40	29°♎32'41	1°28'30	minimum elong	14635 Feb 20 12:16	12°♎09'14	2°51'37
asc. node	14634 Mar 14 11:35	25°♎51'57		morning rise	14635 Feb 28 01:06	7°♎39'43	
morning rise	14634 Mar 17 00:50	24°♎37'08		asc. node	14635 Mar 01 09:03	7°♎25'59	
direct	14634 Mar 19 05:58	24°♎15'19		direct	14635 Mar 02 01:42	7°♎24'07	
morning max el	14634 Mar 26 00:22	27°♎40'23	17°48'12	morning max el	14635 Mar 09 14:14	11°♎08'42	18°06'24
	14634 Mar 28 03:09	0°♎			14635 Mar 22 01:19	0°♎	
morning set	14634 Apr 10 19:32	22°♎04'41		morning set	14635 Mar 25 04:27	5°♎47'44	
	14634 Apr 15 06:58	0°♏		desc. node	14635 Apr 03 02:31	22°♎12'56	
desc. node	14634 Apr 16 05:57	1°♏40'43					
superior conj	14634 Apr 22 04:41	11°♏54'20	-0°46'08	superior conj	14635 Apr 04 01:45	23°♎56'49	-0°07'51
minimum elong	14634 Apr 22 00:19	11°♏35'53	0°46'04	minimum elong	14635 Apr 04 01:06	23°♎53'53	0°08'03
max. Earth dist.	14634 Apr 29 04:49	23°♏28'47	1.43765 AU	behind sun begin	14635 Apr 03 18:22	23°♎23'54	
	14634 May 03 06:45	0°♎		behind sun end	14635 Apr 04 07:49	24°♎23'49	
evening rise	14634 May 06 13:03	5°♎06'33			14635 Apr 07 12:27	0°♏	
	14634 May 23 06:14	0°♏		max. Earth dist.	14635 Apr 11 16:22	7°♏05'22	1.41875 AU
evening max el	14634 Jun 06 14:02	18°♏09'23	21°24'46	evening rise	14635 Apr 16 19:40	15°♏31'07	
asc. node	14634 Jun 10 08:50	21°♏24'36			14635 Apr 26 03:07	0°♎	
					14635 May 18 08:38	0°♏	

evening max el	14635 May 20 06:47	2°☿00'46	22°43'27	max. Earth dist.	14636 Mar 23 23:49	20°♊00'39	1.39674 AU
asc. node	14635 May 28 05:57	7°☿35'56		evening rise	14636 Mar 27 23:24	26°♊51'50	
retrograde	14635 May 30 07:46	7°☿55'09			14636 Mar 29 20:25	0°♋	
evening set	14635 Jun 04 05:55	5°☿50'51			14636 Apr 18 17:11	0°♌	
	14635 Jun 09 03:59	30°♍♌		evening max el	14636 May 01 21:03	15°♌54'32	24°04'45
inferior conj	14635 Jun 09 13:12	29°♌27'55	2°57'06	retrograde	14636 May 13 01:41	22°♌28'23	
minimum elong	14635 Jun 09 11:49	29°♌32'45	2°55'52	asc. node	14636 May 14 03:09	22°♌23'27	
min. Earth dist.	14635 Jun 09 06:36	29°♌50'55	0.69022 AU	evening set	14636 May 18 11:25	20°♌11'09	
morning rise	14635 Jun 14 17:36	23°♌17'18		min. Earth dist.	14636 May 23 02:56	14°♌47'57	0.68711 AU
direct	14635 Jun 19 06:16	21°♌25'10		inferior conj	14636 May 23 22:15	13°♌42'19	2°35'07
morning max el	14635 Jun 28 02:45	26°♌33'10	21°27'15	minimum elong	14636 May 23 20:17	13°♌49'01	2°33'44
desc. node	14635 Jun 30 03:12	28°♌41'13		morning rise	14636 May 29 05:12	7°♌39'56	
	14635 Jul 01 06:54	0°♍		direct	14636 Jun 02 05:44	6°♌07'59	
	14635 Jul 22 19:10	0°♎		morning max el	14636 Jun 09 23:54	10°♌29'55	20°11'46
morning set	14635 Jul 29 16:25	10°♎39'37		desc. node	14636 Jun 16 00:18	17°♌30'24	
max. Earth dist.	14635 Aug 05 07:07	21°♎17'21	1.42472 AU		14636 Jun 24 23:00	0°♏	
	14635 Aug 10 12:30	0°♐		morning set	14636 Jul 07 22:42	19°♏32'48	
					14636 Jul 14 15:50	0°♑	
superior conj	14635 Aug 12 18:07	3°♐49'04	-1°30'24	max. Earth dist.	14636 Jul 17 17:46	4°♑52'53	1.44268 AU
minimum elong	14635 Aug 13 01:02	4°♐18'53	1°30'05				
evening rise	14635 Aug 23 23:45	23°♐47'21		superior conj	14636 Jul 23 13:48	14°♑18'15	-1°58'38
asc. node	14635 Aug 24 06:26	24°♐17'38		minimum elong	14636 Jul 23 20:51	14°♑47'09	1°58'57
	14635 Aug 27 10:12	0°♒			14636 Aug 01 22:56	0°♓	
evening max el	14635 Sep 09 03:15	19°♒15'30	18°06'18	evening rise	14636 Aug 05 12:34	6°♓07'29	
retrograde	14635 Sep 16 01:07	22°♒47'47		asc. node	14636 Aug 10 03:03	14°♓02'25	
evening set	14635 Sep 18 07:42	22°♒25'08			14636 Aug 20 11:06	0°♈	
inferior conj	14635 Sep 25 09:02	17°♒32'32	0°11'32	evening max el	14636 Aug 22 17:27	2°♈31'44	18°03'08
minimum elong	14635 Sep 25 09:25	17°♒31'40	0°11'35	retrograde	14636 Aug 29 03:57	5°♈52'32	
transit middle	14635 Sep 25 09:25	17°♒31'40	0°11'35	evening set	14636 Aug 31 18:48	5°♈18'10	
transit begin	14635 Sep 25 07:05	17°♒36'59		inferior conj	14636 Sep 07 04:34	0°♈06'41	1°22'53
transit end	14635 Sep 25 11:45	17°♒26'19		minimum elong	14636 Sep 07 06:40	0°♈01'13	1°22'05
desc. node	14635 Sep 25 23:53	16°♒58'30			14636 Sep 07 07:08	30°♍♐	
min. Earth dist.	14635 Sep 28 14:33	14°♒36'50	0.60030 AU	min. Earth dist.	14636 Sep 10 01:36	27°♐08'07	0.62322 AU
morning rise	14635 Oct 02 07:52	11°♒47'52		desc. node	14636 Sep 11 21:23	25°♐25'07	
direct	14635 Oct 08 21:18	9°♒44'35		morning rise	14636 Sep 13 16:09	23°♐59'38	
morning max el	14635 Oct 23 04:11	17°♒35'03	27°49'48	direct	14636 Sep 20 08:33	21°♐35'51	
	14635 Nov 02 12:52	0°♌		morning max el	14636 Oct 04 10:41	29°♐34'59	27°56'57
asc. node	14635 Nov 20 08:11	29°♌56'54			14636 Oct 04 20:39	0°♈	
	14635 Nov 20 08:49	0°♉			14636 Oct 26 12:53	0°♌	
morning set	14635 Nov 24 12:56	8°♉30'35		asc. node	14636 Nov 06 05:00	19°♌46'59	
max. Earth dist.	14635 Nov 30 15:56	21°♉49'19	1.31171 AU	morning set	14636 Nov 07 12:03	22°♌24'21	
					14636 Nov 11 03:08	0°♊	
superior conj	14635 Dec 01 15:04	23°♉58'09	1°28'13	max. Earth dist.	14636 Nov 12 19:56	3°♉39'46	1.31731 AU
minimum elong	14635 Dec 01 13:21	23°♉48'37	1°29'04				
	14635 Dec 04 07:55	0°♊		superior conj	14636 Nov 15 00:19	8°♉26'09	1°14'34
evening rise	14635 Dec 08 07:44	8°♊46'30		minimum elong	14636 Nov 14 22:05	8°♉13'53	1°15'10
	14635 Dec 19 02:23	0°♋		evening rise	14636 Nov 21 18:18	23°♉16'28	
desc. node	14635 Dec 22 21:28	6°♋20'08			14636 Nov 24 22:34	0°♌	
evening max el	14636 Jan 05 07:13	23°♋28'49	25°55'07	desc. node	14636 Dec 08 18:27	24°♊16'44	
	14636 Jan 15 13:49	0°♈			14636 Dec 13 04:57	0°♋	
retrograde	14636 Jan 19 05:46	0°♈31'40		evening max el	14636 Dec 16 19:55	3°♋51'04	24°23'05
	14636 Jan 22 21:19	30°♍♋		retrograde	14636 Dec 30 11:49	10°♋39'14	
evening set	14636 Jan 25 08:45	29°♋03'53		evening set	14637 Jan 04 15:43	9°♋40'52	
min. Earth dist.	14636 Jan 29 20:17	26°♋26'06	0.57604 AU	min. Earth dist.	14637 Jan 10 07:38	6°♋49'03	0.55840 AU
inferior conj	14636 Feb 01 19:57	24°♋20'08	-4°20'17	inferior conj	14637 Jan 12 13:05	5°♋26'49	-5°30'18
minimum elong	14636 Feb 02 04:53	24°♋04'22	4°16'56	minimum elong	14637 Jan 12 20:35	5°♋15'14	5°28'08
morning rise	14636 Feb 10 03:58	19°♋59'02		morning rise	14637 Jan 21 03:23	1°♋25'54	
direct	14636 Feb 12 04:45	19°♋45'56		direct	14637 Jan 23 12:33	1°♋10'53	
asc. node	14636 Feb 16 06:28	20°♋41'44		asc. node	14637 Feb 02 03:52	5°♋37'13	
morning max el	14636 Feb 20 20:37	24°♋00'38	18°45'12	morning max el	14637 Feb 02 15:16	6°♋04'11	19°46'30
	14636 Feb 25 18:05	0°♈			14637 Feb 17 22:30	0°♈	
morning set	14636 Mar 08 00:54	20°♈01'05		morning set	14637 Feb 20 04:58	4°♈32'53	
	14636 Mar 13 03:59	0°♊					
				superior conj	14637 Feb 28 02:18	20°♈28'07	0°53'38
superior conj	14636 Mar 16 18:30	6°♊52'28	0°26'02	minimum elong	14637 Feb 28 04:54	20°♈40'57	0°53'30
minimum elong	14636 Mar 16 20:10	7°♊00'20	0°25'44		14637 Mar 05 00:41	0°♊	
desc. node	14636 Mar 19 23:04	12°♊47'23		max. Earth dist.	14637 Mar 06 06:18	2°♊18'28	1.37406 AU

desc. node	14637 Mar 06 19:34	3°♿19'56		evening rise	14638 Feb 20 16:32	21°♿57'22	
evening rise	14637 Mar 09 23:22	9°♿03'21		desc. node	14638 Feb 21 16:07	23°♿47'10	
	14637 Mar 22 15:02	0°♿			14638 Feb 25 02:33	0°♿	
evening max el	14637 Apr 14 10:37	29°♿48'19	25°21'49		14638 Mar 16 10:19	0°♿	
	14637 Apr 14 15:24	0°♿		evening max el	14638 Mar 28 00:18	13°♿36'43	26°27'16
retrograde	14637 Apr 26 15:17	6°♿51'56		retrograde	14638 Apr 09 23:46	20°♿58'49	
asc. node	14637 May 01 00:25	5°♿31'38		evening set	14638 Apr 16 07:21	18°♿26'49	
evening set	14637 May 02 12:28	4°♿25'02		asc. node	14638 Apr 17 21:45	16°♿59'36	
	14637 May 06 13:42	30°♿		min. Earth dist.	14638 Apr 20 09:15	14°♿15'10	0.66724 AU
min. Earth dist.	14637 May 06 20:31	29°♿38'15	0.67937 AU	inferior conj	14638 Apr 22 06:04	11°♿59'32	1°18'47
inferior conj	14637 May 08 04:34	27°♿54'24	2°02'33	minimum elong	14638 Apr 22 04:17	12°♿04'57	1°17'34
minimum elong	14637 May 08 02:25	28°♿01'25	2°01'07	morning rise	14638 Apr 28 02:12	6°♿17'55	
morning rise	14637 May 13 16:45	22°♿01'37		direct	14638 May 01 04:38	5°♿23'57	
direct	14637 May 17 05:47	20°♿49'31		morning max el	14638 May 07 15:50	8°♿49'32	18°25'24
morning max el	14637 May 24 04:30	24°♿36'40	19°10'31	desc. node	14638 May 20 18:07	26°♿44'31	
	14637 May 28 20:51	0°♿			14638 May 22 20:03	0°♿	
desc. node	14637 Jun 02 21:15	6°♿54'38		morning set	14638 May 28 01:47	8°♿16'13	
greatest brilliancy	14637 Jun 06 01:50	11°♿35'59	-0.7m		14638 Jun 10 21:43	0°♿	
morning set	14637 Jun 17 03:06	28°♿26'32					
	14637 Jun 18 03:20	0°♿		superior conj	14638 Jun 12 20:00	3°♿00'33	-2°08'12
max. Earth dist.	14637 Jun 30 10:19	19°♿06'14	1.45454 AU	minimum elong	14638 Jun 12 14:25	2°♿38'46	2°09'00
				max. Earth dist.	14638 Jun 13 06:06	3°♿39'57	1.45914 AU
superior conj	14637 Jul 03 11:08	23°♿52'47	-2°13'09	evening rise	14638 Jun 28 16:53	27°♿50'11	
minimum elong	14637 Jul 03 13:15	24°♿01'04	2°14'05		14638 Jun 30 01:55	0°♿	
	14637 Jul 07 07:42	0°♿		greatest brilliancy	14638 Jul 07 22:54	12°♿19'07	-0.8m
evening rise	14637 Jul 18 03:08	17°♿29'41		asc. node	14638 Jul 14 20:25	22°♿33'39	
	14637 Jul 25 18:55	0°♿			14638 Jul 20 23:11	0°♿	
asc. node	14637 Jul 27 23:42	3°♿29'51		evening max el	14638 Jul 20 19:21	29°♿50'33	18°50'47
evening max el	14637 Aug 06 07:47	16°♿05'53	18°18'14	retrograde	14638 Jul 27 11:39	3°♿29'39	
retrograde	14637 Aug 12 16:43	19°♿29'12		evening set	14638 Jul 30 20:15	2°♿24'43	
evening set	14637 Aug 15 16:15	18°♿40'25			14638 Aug 02 14:50	30°♿	
inferior conj	14637 Aug 21 13:59	13°♿12'14	2°13'46	inferior conj	14638 Aug 05 09:33	26°♿41'50	2°46'53
minimum elong	14637 Aug 21 16:22	13°♿05'16	2°12'45	minimum elong	14638 Aug 05 11:26	26°♿35'53	2°45'54
min. Earth dist.	14637 Aug 23 22:15	10°♿29'46	0.64440 AU	min. Earth dist.	14638 Aug 07 03:39	24°♿29'29	0.66235 AU
morning rise	14637 Aug 27 15:01	6°♿52'19		morning rise	14638 Aug 11 01:46	20°♿16'38	
desc. node	14637 Aug 29 18:53	5°♿25'41		desc. node	14638 Aug 16 16:22	17°♿39'32	
direct	14637 Sep 03 04:30	4°♿16'31		direct	14638 Aug 17 08:01	17°♿37'56	
morning max el	14637 Sep 16 20:54	12°♿14'14	27°28'07	morning max el	14638 Aug 30 08:21	25°♿21'19	26°30'12
	14637 Oct 01 01:51	0°♿			14638 Sep 03 14:12	0°♿	
	14637 Oct 19 01:33	0°♿			14638 Sep 24 13:48	0°♿	
morning set	14637 Oct 22 02:32	5°♿52'20		morning set	14638 Oct 05 05:15	18°♿46'33	
asc. node	14637 Oct 24 01:42	9°♿47'42		max. Earth dist.	14638 Oct 09 03:58	26°♿23'04	1.34470 AU
max. Earth dist.	14637 Oct 26 16:48	15°♿11'26	1.32836 AU	asc. node	14638 Oct 10 22:19	29°♿54'01	
					14638 Oct 10 23:31	0°♿	
superior conj	14637 Oct 30 05:28	22°♿39'29	0°55'03				
minimum elong	14637 Oct 30 03:14	22°♿27'27	0°55'25	superior conj	14638 Oct 14 04:07	6°♿31'14	0°29'50
	14637 Nov 02 14:57	0°♿		minimum elong	14638 Oct 14 02:33	6°♿23'11	0°30'03
evening rise	14637 Nov 06 05:15	7°♿45'58		evening rise	14638 Oct 21 14:37	22°♿09'07	
	14637 Nov 17 17:44	0°♿			14638 Oct 25 10:19	0°♿	
desc. node	14637 Nov 25 15:32	11°♿04'41		evening max el	14638 Nov 09 22:25	24°♿01'55	21°04'19
evening max el	14637 Nov 28 05:47	13°♿49'44	22°40'16	desc. node	14638 Nov 12 12:45	26°♿19'31	
retrograde	14637 Dec 11 05:11	20°♿15'44		retrograde	14638 Nov 21 15:53	29°♿51'17	
evening set	14637 Dec 15 01:41	19°♿43'18		evening set	14638 Nov 24 06:32	29°♿35'12	
min. Earth dist.	14637 Dec 22 14:07	16°♿18'16	0.54726 AU	inferior conj	14638 Dec 03 03:14	25°♿42'32	-5°29'47
inferior conj	14637 Dec 23 12:09	15°♿47'07	-5°59'42	minimum elong	14638 Dec 02 18:59	25°♿54'13	5°27'18
minimum elong	14637 Dec 23 12:11	15°♿47'05	5°58'41	min. Earth dist.	14638 Dec 03 19:46	25°♿19'05	0.54479 AU
morning rise	14637 Dec 31 23:57	11°♿59'15		morning rise	14638 Dec 11 07:49	21°♿50'53	
direct	14638 Jan 04 03:10	11°♿36'48		direct	14638 Dec 15 10:22	21°♿14'39	
morning max el	14638 Jan 15 19:25	17°♿12'55	21°10'51	morning max el	14638 Dec 28 10:30	27°♿32'26	22°53'58
asc. node	14638 Jan 20 01:12	21°♿57'43			14638 Dec 30 20:03	0°♿	
	14638 Jan 25 12:07	0°♿		asc. node	14639 Jan 06 22:27	9°♿24'30	
morning set	14638 Feb 04 13:48	19°♿15'00			14639 Jan 18 03:30	0°♿	
	14638 Feb 09 16:43	0°♿		morning set	14639 Jan 20 01:07	3°♿59'59	
superior conj	14638 Feb 11 21:12	4°♿33'08	1°14'26	superior conj	14639 Jan 26 23:51	18°♿57'24	1°28'32
minimum elong	14638 Feb 11 23:43	4°♿46'06	1°14'39	minimum elong	14639 Jan 27 01:40	19°♿07'07	1°29'09
max. Earth dist.	14638 Feb 16 16:08	14°♿13'58	1.35302 AU	max. Earth dist.	14639 Jan 30 08:39	26°♿04'11	1.33537 AU

	14639 Feb 01 06:29	0° H	superior conj	14640 Jan 11 07:37	3° \approx 33'23	1°36'14
evening rise	14639 Feb 03 23:19	5° H 24'13	minimum elong	14640 Jan 11 08:26	3° \approx 37'51	1°37'08
desc. node	14639 Feb 08 12:41	14° H 04'14	max. Earth dist.	14640 Jan 13 08:40	8° \approx 01'15	1.32222 AU
	14639 Feb 17 19:36	0° Y	evening rise	14640 Jan 18 16:33	19° \approx 16'14	
evening max el	14639 Mar 10 13:43	27° Y 10'32 27°13'51		14640 Jan 24 03:52	0° H	
	14639 Mar 13 17:50	0° B	desc. node	14640 Jan 26 09:19	4° H 06'13	
retrograde	14639 Mar 24 02:20	4° B 40'20		14640 Feb 12 00:20	0° Y	
evening set	14639 Mar 30 18:04	2° B 09'17	evening max el	14640 Feb 21 01:36	10° Y 19'03	27°34'25
	14639 Apr 02 04:40	30° R Y	retrograde	14640 Mar 05 21:57	17° Y 46'56	
min. Earth dist.	14639 Apr 03 15:14	28° Y 30'15 0.65106 AU	evening set	14640 Mar 12 18:12	15° Y 24'16	
asc. node	14639 Apr 04 19:10	27° Y 13'26	min. Earth dist.	14640 Mar 16 12:39	12° Y 13'36	0.63163 AU
inferior conj	14639 Apr 06 00:20	25° Y 51'54 0°23'00	inferior conj	14640 Mar 19 08:33	9° Y 24'28	-0°45'16
minimum elong	14639 Apr 05 23:42	25° Y 53'39 0°22'23	minimum elong	14640 Mar 19 10:01	9° Y 20'46	0°44'44
morning rise	14639 Apr 12 07:08	20° Y 23'19	asc. node	14640 Mar 21 16:39	7° Y 09'57	
direct	14639 Apr 15 00:01	19° Y 44'39	morning rise	14640 Mar 26 04:27	4° Y 11'17	
morning max el	14639 Apr 21 07:48	23° Y 01'23 17°57'13	direct	14640 Mar 28 13:15	3° Y 44'26	
	14639 Apr 26 23:22	0° B	morning max el	14640 Apr 04 01:32	7° Y 03'40	17°46'19
desc. node	14639 May 07 14:53	16° B 52'52		14640 Apr 19 06:51	0° B	
morning set	14639 May 09 04:08	19° B 26'19	morning set	14640 Apr 20 08:21	1° B 50'05	
	14639 May 15 14:59	0° II	desc. node	14640 Apr 23 11:33	7° B 13'57	
superior conj	14639 May 23 09:25	12° II 27'05 -1°44'22	superior conj	14640 May 02 17:28	22° B 47'18	-1°08'42
minimum elong	14639 May 23 00:28	11° II 51'41 1°44'30	minimum elong	14640 May 02 10:46	22° B 19'46	1°08'33
max. Earth dist.	14639 May 27 02:05	18° II 16'21 1.45619 AU		14640 May 07 04:00	0° II	
	14639 Jun 03 15:02	0° B	max. Earth dist.	14640 May 08 20:06	2° II 40'24	1.44618 AU
evening rise	14639 Jun 08 10:25	7° B 24'13	evening rise	14640 May 17 21:18	16° II 49'01	
greatest brilliancy	14639 Jun 22 09:18	28° B 29'03 -0.6m		14640 May 26 14:36	0° B	
	14639 Jun 23 10:17	0° O	evening max el	14640 Jun 16 03:00	27° B 31'36	20°43'12
asc. node	14639 Jul 01 17:14	11° O 05'48	asc. node	14640 Jun 17 14:11	28° B 54'44	
evening max el	14639 Jul 04 02:06	13° O 40'27 19°39'45		14640 Jun 18 21:46	0° O	
retrograde	14639 Jul 11 09:48	17° O 47'35	retrograde	14640 Jun 24 08:47	2° O 16'32	
evening set	14639 Jul 15 04:01	16° O 25'36	evening set	14640 Jun 28 13:23	0° O 37'21	
inferior conj	14639 Jul 20 12:11	10° O 29'37 3°05'07		14640 Jun 29 06:44	30° R B	
minimum elong	14639 Jul 20 13:11	10° O 26'17 3°04'10	inferior conj	14640 Jul 03 19:18	24° B 29'40	3°10'41
min. Earth dist.	14639 Jul 21 16:05	8° O 56'33 0.67618 AU	minimum elong	14640 Jul 03 19:18	24° B 29'40	3°09'41
morning rise	14639 Jul 25 21:52	4° O 04'45	min. Earth dist.	14640 Jul 04 09:25	23° B 40'52	0.68544 AU
direct	14639 Jul 31 18:05	1° O 31'30	morning rise	14640 Jul 09 00:54	18° B 08'49	
desc. node	14639 Aug 03 13:47	2° O 01'50	direct	14640 Jul 14 09:25	15° B 48'01	
morning max el	14639 Aug 12 19:17	8° O 44'53 25°12'24	desc. node	14640 Jul 20 11:10	18° B 07'56	
	14639 Aug 29 12:49	0° M	morning max el	14640 Jul 25 05:47	22° B 16'54	23°44'27
	14639 Sep 17 03:16	0° A		14640 Jul 31 23:31	0° O	
morning set	14639 Sep 17 16:26	0° A 58'41		14640 Aug 21 19:50	0° M	
max. Earth dist.	14639 Sep 21 05:56	7° A 28'24 1.36550 AU	morning set	14640 Aug 29 07:34	12° M 17'13	
			max. Earth dist.	14640 Sep 02 03:54	18° M 55'28	1.38898 AU
superior conj	14639 Sep 27 17:22	19° A 54'55 -0°00'36		14640 Sep 08 07:02	0° A	
minimum elong	14639 Sep 27 17:24	19° A 55'01 0°00'20	superior conj	14640 Sep 09 17:36	2° A 41'27	-0°34'58
behind sun begin	14639 Sep 27 10:59	19° A 23'19	minimum elong	14640 Sep 09 20:07	2° A 53'17	0°34'34
behind sun end	14639 Sep 27 23:48	20° A 26'47	asc. node	14640 Sep 13 15:29	10° A 09'17	
asc. node	14639 Sep 27 18:55	20° A 02'36	evening rise	14640 Sep 18 19:33	20° A 14'10	
	14639 Oct 02 17:32	0° M		14640 Sep 23 21:44	0° M	
evening rise	14639 Oct 05 20:17	6° M 20'57	evening max el	14640 Oct 05 01:04	16° M 42'10	18°50'55
	14639 Oct 19 01:07	0° A	retrograde	14640 Oct 13 14:01	21° M 00'02	
evening max el	14639 Oct 23 04:50	4° A 57'16 19°46'39	evening set	14640 Oct 15 11:21	20° M 48'13	
desc. node	14639 Oct 30 10:03	9° A 35'32	desc. node	14640 Oct 16 07:26	20° M 35'47	
retrograde	14639 Nov 02 07:08	9° A 59'29	inferior conj	14640 Oct 23 16:47	16° M 28'28	-2°21'02
evening set	14639 Nov 04 06:09	9° A 48'58	minimum elong	14640 Oct 23 10:55	16° M 38'58	2°18'04
inferior conj	14639 Nov 13 01:02	5° A 47'29 -4°07'12	min. Earth dist.	14640 Oct 26 16:55	14° M 19'54	0.56684 AU
minimum elong	14639 Nov 12 15:17	6° A 02'36 4°03'12	morning rise	14640 Oct 31 07:24	11° M 37'43	
min. Earth dist.	14639 Nov 15 03:59	4° A 28'34 0.55176 AU	direct	14640 Nov 06 03:28	10° M 16'08	
morning rise	14639 Nov 20 22:50	1° A 32'10	morning max el	14640 Nov 20 07:52	17° M 35'47	26°20'10
direct	14639 Nov 26 00:11	0° A 35'41		14640 Nov 30 14:30	0° A	
morning max el	14639 Dec 09 19:46	7° A 28'29 24°43'13	asc. node	14640 Dec 10 16:42	16° A 36'53	
asc. node	14639 Dec 24 19:37	27° A 41'53		14640 Dec 17 10:33	0° B	
	14639 Dec 26 03:04	0° B	morning set	14640 Dec 18 23:50	3° B 18'18	
morning set	14640 Jan 04 13:03	18° B 42'39				
	14640 Jan 09 16:51	0° \approx	superior conj	14640 Dec 25 18:17	18° B 14'39	1°37'48

minimum elong	14640 Dec 25 18:01	18°  13'10	1°38'49	superior conj	14641 Dec 10 05:51	2°  54'49	1°33'25
max. Earth dist.	14640 Dec 26 14:31	20°  07'16	1.31402 AU	minimum elong	14641 Dec 10 04:36	2°  47'51	1°34'22
	14640 Dec 31 02:39	0°  ≈		max. Earth dist.	14641 Dec 09 22:43	2°  14'53	1.31105 AU
evening rise	14641 Jan 01 17:29	3°  ≈26'31		evening rise	14641 Dec 16 23:42	17°  348'20	
desc. node	14641 Jan 12 06:03	23°  ≈46'50			14641 Dec 22 22:30	0°  ≈	
	14641 Jan 15 22:29	0°  ✕		desc. node	14641 Dec 30 02:52	12°  ≈56'53	
evening max el	14641 Feb 02 09:46	22°  ✕50'11	27°23'02		14642 Jan 11 04:19	0°  ✕	
	14641 Feb 14 11:11	0°  Υ		evening max el	14642 Jan 15 11:10	4°  ✕31'02	26°36'39
retrograde	14641 Feb 16 09:14	0°  Υ09'39		retrograde	14642 Jan 29 10:27	11°  ✕39'53	
	14641 Feb 18 06:32	30°  ✕✕		evening set	14642 Feb 04 22:24	9°  ✕56'08	
evening set	14641 Feb 23 04:52	28°  ✕02'59		min. Earth dist.	14642 Feb 09 00:51	7°  ✕18'44	0.58809 AU
min. Earth dist.	14641 Feb 27 00:06	25°  ✕14'07	0.61009 AU	inferior conj	14642 Feb 12 04:53	4°  ✕53'49	-3°31'28
inferior conj	14641 Mar 02 03:20	22°  ✕28'57	-2°04'56	minimum elong	14642 Feb 12 12:38	4°  ✕38'59	3°28'14
minimum elong	14641 Mar 02 07:51	22°  ✕19'00	2°02'54	morning rise	14642 Feb 20 06:04	0°  ✕20'08	
asc. node	14641 Mar 08 14:08	17°  ✕55'09		direct	14642 Feb 22 06:11	0°  ✕05'57	
morning rise	14641 Mar 09 14:00	17°  ✕34'01		asc. node	14642 Feb 23 11:37	0°  ✕11'28	
direct	14641 Mar 11 16:47	17°  ✕15'17		morning max el	14642 Mar 02 04:59	4°  ✕01'48	18°20'15
morning max el	14641 Mar 18 17:50	20°  ✕47'39	17°53'31	morning set	14642 Mar 17 22:56	29°  ✕07'55	
	14641 Mar 25 16:10	0°  Υ			14642 Mar 18 09:54	0°  Υ	
morning set	14641 Apr 03 08:34	15°  Υ10'05		superior conj	14642 Mar 27 07:26	16°  Υ40'41	0°07'14
desc. node	14641 Apr 10 08:08	27°  Υ43'34		minimum elong	14642 Mar 27 07:57	16°  Υ43'03	0°06'58
	14641 Apr 11 15:06	0°  ⋈		behind sun begin	14642 Mar 27 01:18	16°  Υ12'43	
superior conj	14641 Apr 14 01:26	4°  ⋈13'59	-0°29'33	behind sun end	14642 Mar 27 14:35	17°  Υ13'18	
minimum elong	14641 Apr 13 22:46	4°  ⋈02'28	0°29'35	desc. node	14642 Mar 28 04:41	18°  Υ17'13	
max. Earth dist.	14641 Apr 21 10:48	16°  ⋈39'59	1.43014 AU		14642 Apr 03 20:36	0°  ⋈	
evening rise	14641 Apr 27 17:44	26°  ⋈45'38		max. Earth dist.	14642 Apr 03 20:55	0°  ⋈01'22	1.40968 AU
	14641 Apr 29 19:28	0°  ♁		evening rise	14642 Apr 08 09:08	7°  ♁33'50	
	14641 May 20 09:59	0°  ♁			14642 Apr 22 21:24	0°  ♁	
evening max el	14641 May 29 22:27	11°  ♁23'19	21°57'36	evening max el	14642 May 12 13:51	25°  ♁15'26	23°18'04
asc. node	14641 Jun 04 11:14	15°  ♁46'44			14642 May 18 10:21	0°  ♁	
retrograde	14641 Jun 08 06:51	16°  ♁51'41		asc. node	14642 May 22 08:23	1°  ♁24'34	
evening set	14641 Jun 12 22:32	14°  ♁56'00		retrograde	14642 May 23 02:36	1°  ♁27'08	
inferior conj	14641 Jun 18 04:41	8°  ♁38'09	3°05'04		14642 May 27 07:45	30°  ♁♁	
minimum elong	14641 Jun 18 03:45	8°  ♁41'24	3°03'57	evening set	14642 May 28 05:48	29°  ♁16'45	
min. Earth dist.	14641 Jun 18 05:31	8°  ♁35'14	0.68992 AU	min. Earth dist.	14642 Jun 02 02:17	23°  ♁32'43	0.68952 AU
morning rise	14641 Jun 23 08:48	2°  ♁23'33		inferior conj	14642 Jun 02 14:23	22°  ♁50'59	2°49'00
direct	14641 Jun 28 04:48	0°  ♁20'06		minimum elong	14642 Jun 02 12:42	22°  ♁56'45	2°47'43
desc. node	14641 Jul 07 08:26	5°  ♁32'53		morning rise	14642 Jun 07 19:33	16°  ♁43'59	
morning max el	14641 Jul 07 18:10	5°  ♁57'01	22°15'39	direct	14642 Jun 12 03:00	15°  ♁00'29	
	14641 Jul 26 06:46	0°  ♁		morning max el	14642 Jun 20 11:30	19°  ♁47'21	20°53'40
morning set	14641 Aug 09 22:52	22°  ♁33'24		desc. node	14642 Jun 24 05:35	23°  ♁55'43	
	14641 Aug 14 11:47	0°  ♁			14642 Jun 28 23:42	0°  ♁	
max. Earth dist.	14641 Aug 15 04:47	1°  ♁10'59	1.41243 AU	morning set	14642 Jul 20 14:45	1°  ♁50'03	
superior conj	14641 Aug 23 00:29	14°  ♁41'03	-1°10'45	max. Earth dist.	14642 Jul 28 11:55	14°  ♁20'11	1.43299 AU
minimum elong	14641 Aug 23 05:59	15°  ♁05'32	1°10'19				
	14641 Aug 31 09:45	0°  ♁		superior conj	14642 Aug 04 09:43	25°  ♁44'07	-1°43'35
asc. node	14641 Aug 31 12:03	0°  ♁10'43		minimum elong	14642 Aug 04 17:11	26°  ♁15'37	1°43'29
evening rise	14641 Sep 02 09:01	3°  ♁40'27			14642 Aug 06 22:04	0°  ♁	
evening max el	14641 Sep 18 07:33	29°  ♁10'15	18°16'43	evening rise	14642 Aug 16 08:18	16°  ♁28'42	
	14641 Sep 19 04:39	0°  ♁		asc. node	14642 Aug 18 08:38	20°  ♁03'02	
retrograde	14641 Sep 25 16:29	2°  ♁55'18			14642 Aug 24 02:19	0°  ♁	
evening set	14641 Sep 27 18:55	2°  ♁37'40		evening max el	14642 Sep 01 19:59	12°  ♁11'36	18°02'39
	14641 Oct 02 16:41	30°  ♁✕		retrograde	14642 Sep 08 11:52	15°  ♁37'39	
desc. node	14641 Oct 03 04:54	29°  ♁36'52		evening set	14642 Sep 10 21:49	15°  ♁10'27	
inferior conj	14641 Oct 05 06:22	27°  ♁56'28	-0°39'13	inferior conj	14642 Sep 17 16:06	10°  ♁09'15	0°44'23
minimum elong	14641 Oct 05 04:56	27°  ♁59'29	0°38'15	minimum elong	14642 Sep 17 17:25	10°  ♁06'03	0°43'58
min. Earth dist.	14641 Oct 08 13:05	25°  ♁12'34	0.58731 AU	desc. node	14642 Sep 20 02:23	7°  ♁47'56	
morning rise	14641 Oct 12 11:31	22°  ♁29'31		min. Earth dist.	14642 Sep 20 18:37	7°  ♁09'55	0.61005 AU
direct	14641 Oct 18 20:22	20°  ♁41'13		morning rise	14642 Sep 24 10:07	4°  ♁13'38	
morning max el	14641 Nov 02 03:38	28°  ♁21'36	27°27'59	direct	14642 Oct 01 01:22	2°  ♁01'02	
	14641 Nov 03 18:28	0°  ♁		morning max el	14642 Oct 15 07:05	9°  ♁56'18	27°57'43
	14641 Nov 24 09:21	0°  ♁			14642 Oct 30 21:20	0°  ♁	
asc. node	14641 Nov 27 13:39	5°  ♁59'15		asc. node	14642 Nov 14 10:29	25°  ♁41'23	
morning set	14641 Dec 03 07:39	17°  ♁41'42			14642 Nov 16 13:37	0°  ♁	
	14641 Dec 08 22:35	0°  ♁		morning set	14642 Nov 17 10:36	1°  ♁48'30	

max. Earth dist.	14642 Nov 23 05:28	14°♌15'10	1.31343 AU	max. Earth dist.	14643 Nov 06 06:44	25°♍57'47	1.32129 AU
					14643 Nov 08 03:43	0°♌	
superior conj	14642 Nov 24 16:30	17°♌29'09	1°23'10	superior conj	14643 Nov 09 00:15	1°♌51'37	1°07'01
minimum elong	14642 Nov 24 14:31	17°♌18'09	1°23'54	minimum elong	14643 Nov 08 21:56	1°♌39'02	1°07'30
	14642 Nov 30 08:01	0°♌		evening rise	14643 Nov 15 20:09	16°♌47'06	
evening rise	14642 Dec 01 09:14	2°♌17'00			14643 Nov 22 06:25	0°♌	
	14642 Dec 16 01:43	0°♌		desc. node	14643 Dec 03 20:48	18°♌55'12	
desc. node	14642 Dec 16 23:47	1°♌25'00		evening max el	14643 Dec 09 14:17	25°♌26'25	23°39'33
evening max el	14642 Dec 28 03:56	15°♌18'37	25°18'18		14643 Dec 15 13:18	0°♌	
retrograde	14643 Jan 11 00:17	22°♌16'06		retrograde	14643 Dec 23 01:11	2°♌07'17	
evening set	14643 Jan 16 18:55	21°♌00'26		evening set	14643 Dec 27 16:07	1°♌20'51	
min. Earth dist.	14643 Jan 21 16:11	18°♌19'11	0.56799 AU		14643 Dec 30 21:52	30°♌	
inferior conj	14643 Jan 24 10:04	16°♌30'10	-4°53'14	min. Earth dist.	14644 Jan 03 01:13	28°♌16'57	0.55270 AU
minimum elong	14643 Jan 24 19:06	16°♌15'12	4°50'12	inferior conj	14644 Jan 04 18:44	27°♌15'43	-5°49'13
morning rise	14643 Feb 01 21:53	12°♌18'31		minimum elong	14644 Jan 04 23:43	27°♌08'21	5°47'45
direct	14643 Feb 04 01:06	12°♌05'12		morning rise	14644 Jan 13 09:00	23°♌21'41	
asc. node	14643 Feb 10 09:01	14°♌11'10		direct	14644 Jan 16 00:25	23°♌04'27	
morning max el	14643 Feb 13 06:54	16°♌34'55	19°08'26	morning max el	14644 Jan 26 19:40	28°♌16'07	20°19'39
	14643 Feb 22 20:16	0°♌		asc. node	14644 Jan 28 06:22	29°♌45'01	
morning set	14643 Mar 01 23:00	13°♌30'18			14644 Jan 28 11:50	0°♌	
				morning set	14644 Feb 14 05:23	28°♌07'23	
superior conj	14643 Mar 10 07:09	29°♌55'15	0°38'33		14644 Feb 15 03:18	0°♌	
minimum elong	14643 Mar 10 09:21	0°♌05'53	0°38'17				
	14643 Mar 10 08:08	0°♌		superior conj	14644 Feb 21 20:08	13°♌45'01	1°03'16
desc. node	14643 Mar 15 01:13	8°♌51'27		minimum elong	14644 Feb 21 22:48	13°♌58'25	1°03'16
max. Earth dist.	14643 Mar 17 03:23	12°♌39'12	1.38705 AU	max. Earth dist.	14644 Feb 27 10:18	24°♌43'39	1.36477 AU
evening rise	14643 Mar 20 21:43	19°♌16'47		desc. node	14644 Feb 29 21:44	29°♌22'35	
	14643 Mar 27 07:55	0°♌			14644 Mar 01 05:51	0°♌	
	14643 Apr 17 02:16	0°♌		evening rise	14644 Mar 02 05:28	1°♌48'02	
evening max el	14643 Apr 25 03:24	9°♌08'37	24°38'24		14644 Mar 19 10:15	0°♌	
retrograde	14643 May 06 18:53	15°♌57'01		evening max el	14644 Apr 06 16:55	23°♌01'14	25°51'32
asc. node	14643 May 09 05:36	15°♌31'08			14644 Apr 17 05:24	0°♌	
evening set	14643 May 12 09:36	13°♌34'54		retrograde	14644 Apr 19 06:38	0°♌14'55	
min. Earth dist.	14643 May 16 21:38	8°♌27'27	0.68437 AU		14644 Apr 21 05:50	30°♌	
inferior conj	14643 May 17 22:28	7°♌04'33	2°22'36	evening set	14644 Apr 25 08:17	27°♌45'16	
minimum elong	14643 May 17 20:22	7°♌11'36	2°21'11	asc. node	14644 Apr 25 02:53	27°♌56'22	
morning rise	14643 May 23 07:20	1°♌06'14		min. Earth dist.	14644 Apr 29 13:33	23°♌13'25	0.67468 AU
	14643 May 25 09:15	30°♌		inferior conj	14644 May 01 03:02	21°♌15'02	1°45'26
direct	14643 May 27 02:46	29°♌43'06		minimum elong	14644 May 01 00:57	21°♌21'37	1°44'02
	14643 May 28 21:40	0°♌		morning rise	14644 May 06 18:15	15°♌26'39	
morning max el	14643 Jun 03 11:53	3°♌48'52	19°43'48	direct	14644 May 10 02:34	14°♌22'40	
desc. node	14643 Jun 11 02:38	13°♌01'04		morning max el	14644 May 16 19:34	17°♌59'29	18°49'14
greatest brilliancy	14643 Jun 16 09:11	20°♌29'49	-0.6m		14644 May 26 04:56	0°♌	
	14643 Jun 22 18:30	0°♌		desc. node	14644 May 27 23:34	2°♌37'48	
morning set	14643 Jun 29 17:30	10°♌35'47		greatest brilliancy	14644 May 30 14:52	6°♌36'59	-0.8m
max. Earth dist.	14643 Jul 11 01:04	28°♌12'35	1.44846 AU	morning set	14644 Jun 08 03:38	19°♌47'59	
	14643 Jul 12 04:11	0°♌			14644 Jun 14 17:01	0°♌	
				max. Earth dist.	14644 Jun 22 18:48	12°♌35'08	1.45737 AU
superior conj	14643 Jul 15 19:12	5°♌47'29	-2°06'55				
minimum elong	14643 Jul 16 00:49	6°♌10'06	2°07'32	superior conj	14644 Jun 24 09:35	15°♌06'48	-2°13'34
evening rise	14643 Jul 29 12:12	28°♌25'13		minimum elong	14644 Jun 24 08:21	15°♌01'55	2°14'35
	14643 Jul 30 10:40	0°♌			14644 Jul 03 20:03	0°♌	
asc. node	14643 Aug 05 05:14	9°♌41'02		evening rise	14644 Jul 09 16:14	9°♌20'54	
evening max el	14643 Aug 16 10:32	25°♌35'58	18°07'25	asc. node	14644 Jul 22 01:55	28°♌59'38	
retrograde	14643 Aug 22 19:26	28°♌56'34			14644 Jul 22 18:08	0°♌	
evening set	14643 Aug 25 13:49	28°♌16'30		evening max el	14644 Jul 30 00:03	9°♌15'48	18°30'03
inferior conj	14643 Aug 31 18:01	22°♌57'46	1°46'49	retrograde	14644 Aug 05 11:08	12°♌44'10	
minimum elong	14643 Aug 31 20:22	22°♌51'19	1°45'52	evening set	14644 Aug 08 14:25	11°♌48'48	
min. Earth dist.	14643 Sep 03 10:00	20°♌03'43	0.63243 AU	inferior conj	14644 Aug 14 08:10	6°♌14'27	2°29'48
desc. node	14643 Sep 06 23:54	16°♌45'47		minimum elong	14644 Aug 14 10:25	6°♌07'39	2°28'46
morning rise	14643 Sep 07 00:54	16°♌43'53		min. Earth dist.	14644 Aug 16 10:36	3°♌43'05	0.65250 AU
direct	14643 Sep 13 16:35	14°♌13'42		morning rise	14644 Aug 20 05:12	29°♌51'31	
morning max el	14643 Sep 27 15:38	22°♌14'44	27°48'49		14644 Aug 20 01:09	30°♌	
	14643 Oct 04 11:35	0°♌		desc. node	14644 Aug 23 21:24	27°♌41'28	
	14643 Oct 24 02:21	0°♌		direct	14644 Aug 26 16:12	27°♌13'01	
morning set	14643 Nov 01 06:22	15°♌32'20			14644 Sep 03 03:28	0°♌	
asc. node	14643 Nov 01 07:14	15°♌36'40					


































































































































morning max el	14644 Sep 09 02:28	5° \mathbb{M} 06'46	27°06'26	morning max el	14645 Aug 22 13:36	18° Ω 21'13	25°58'53
	14644 Sep 28 02:32	0° $\underline{\mathbf{a}}$			14645 Sep 01 09:30	0° \mathbb{M}	
morning set	14644 Oct 14 16:15	28° $\underline{\mathbf{a}}$ 46'44			14645 Sep 21 02:46	0° $\underline{\mathbf{a}}$	
	14644 Oct 15 07:20	0° \mathbb{M}		morning set	14645 Sep 27 12:50	11° $\underline{\mathbf{a}}$ 23'55	
asc. node	14644 Oct 18 03:55	5° \mathbb{M} 40'17		max. Earth dist.	14645 Oct 01 06:09	18° $\underline{\mathbf{a}}$ 24'28	1.35310 AU
max. Earth dist.	14644 Oct 18 23:15	7° \mathbb{M} 18'19	1.33466 AU	asc. node	14645 Oct 05 00:33	25° $\underline{\mathbf{a}}$ 48'08	
superior conj	14644 Oct 23 02:57	15° \mathbb{M} 56'35	0°45'03	superior conj	14645 Oct 06 22:01	29° $\underline{\mathbf{a}}$ 37'34	0°17'31
minimum elong	14644 Oct 23 00:54	15° \mathbb{M} 45'45	0°45'20	minimum elong	14645 Oct 06 21:01	29° $\underline{\mathbf{a}}$ 32'28	0°17'45
	14644 Oct 29 16:40	0° \mathbb{M}			14645 Oct 07 02:26	0° \mathbb{M}	
evening rise	14644 Oct 30 06:38	1° \mathbb{M} 14'13		evening rise	14645 Oct 14 14:43	15° \mathbb{M} 33'26	
	14644 Nov 15 08:22	0° \mathbb{M}			14645 Oct 21 22:24	0° \mathbb{M}	
desc. node	14644 Nov 19 17:56	5° \mathbb{M} 06'51		evening max el	14645 Nov 02 00:09	15° \mathbb{M} 55'35	20°28'44
evening max el	14644 Nov 20 01:59	5° \mathbb{M} 26'50	21°57'50	desc. node	14645 Nov 06 15:10	19° \mathbb{M} 34'41	
retrograde	14644 Dec 02 14:20	11° \mathbb{M} 38'31		retrograde	14645 Nov 13 01:03	21° \mathbb{M} 25'04	
evening set	14644 Dec 05 20:55	11° \mathbb{M} 14'39		evening set	14645 Nov 15 07:19	21° \mathbb{M} 12'18	
inferior conj	14644 Dec 14 12:48	7° \mathbb{M} 22'03	-5°54'36	inferior conj	14645 Nov 24 04:58	17° \mathbb{M} 17'24	-4°59'44
minimum elong	14644 Dec 14 08:49	7° \mathbb{M} 27'36	5°53'16	minimum elong	14645 Nov 23 19:06	17° \mathbb{M} 31'44	4°56'22
min. Earth dist.	14644 Dec 14 07:11	7° \mathbb{M} 29'53	0.54506 AU	min. Earth dist.	14645 Nov 25 13:18	16° \mathbb{M} 30'19	0.54663 AU
morning rise	14644 Dec 22 21:36	3° \mathbb{M} 34'38		morning rise	14645 Dec 02 06:34	13° \mathbb{M} 18'20	
direct	14644 Dec 26 10:36	3° \mathbb{M} 06'57		direct	14645 Dec 06 19:28	12° \mathbb{M} 34'07	
morning max el	14645 Jan 07 17:39	9° \mathbb{M} 01'55	21°52'53	morning max el	14645 Dec 20 04:58	19° \mathbb{M} 07'07	23°40'45
asc. node	14645 Jan 14 03:40	16° \mathbb{M} 35'59			14645 Dec 29 04:05	0° \mathbb{M}	
	14645 Jan 22 06:06	0° \approx		asc. node	14646 Jan 01 00:55	4° \mathbb{M} 26'36	
morning set	14645 Jan 28 15:31	12° \approx 51'29		morning set	14646 Jan 13 03:23	27° \mathbb{M} 37'01	
					14646 Jan 14 06:00	0° \approx	
superior conj	14645 Feb 04 18:40	27° \approx 59'16	1°21'12	superior conj	14646 Jan 19 23:49	12° \approx 29'56	1°32'34
minimum elong	14645 Feb 04 20:56	28° \approx 11'10	1°21'36	minimum elong	14646 Jan 20 01:14	12° \approx 37'35	1°33'18
	14645 Feb 05 17:44	0° \mathbb{M}		max. Earth dist.	14646 Jan 22 18:53	18° \approx 29'49	1.32923 AU
max. Earth dist.	14645 Feb 08 22:40	6° \mathbb{M} 34'56	1.34505 AU	evening rise	14646 Jan 27 16:32	28° \approx 36'53	
evening rise	14645 Feb 13 04:52	14° \mathbb{M} 57'35			14646 Jan 28 09:14	0° \mathbb{M}	
desc. node	14645 Feb 15 18:16	19° \mathbb{M} 46'16		desc. node	14646 Feb 02 14:52	9° \mathbb{M} 58'16	
	14645 Feb 21 12:36	0° \mathbb{Y}			14646 Feb 14 16:32	0° \mathbb{Y}	
	14645 Mar 14 01:55	0° \mathbb{B}		evening max el	14646 Mar 02 20:02	20° \mathbb{Y} 11'36	27°26'08
evening max el	14645 Mar 20 06:49	6° \mathbb{B} 45'46	26°49'56	retrograde	14646 Mar 16 12:13	27° \mathbb{Y} 40'34	
retrograde	14645 Apr 02 12:42	14° \mathbb{B} 12'08		evening set	14646 Mar 23 06:30	25° \mathbb{Y} 12'18	
evening set	14645 Apr 08 23:58	11° \mathbb{B} 40'06		min. Earth dist.	14646 Mar 27 02:19	21° \mathbb{Y} 45'59	0.64324 AU
asc. node	14645 Apr 12 00:17	8° \mathbb{B} 48'06		inferior conj	14646 Mar 29 16:13	19° \mathbb{Y} 01'41	-0°04'23
min. Earth dist.	14645 Apr 12 23:47	7° \mathbb{B} 42'26	0.66079 AU	minimum elong	14646 Mar 29 16:22	19° \mathbb{Y} 01'19	0°04'35
inferior conj	14645 Apr 15 01:48	5° \mathbb{B} 16'07	0°56'40	transit middle	14646 Mar 29 16:22	19° \mathbb{Y} 01'19	0°04'35
minimum elong	14645 Apr 15 00:24	5° \mathbb{B} 20'14	0°55'39	transit begin	14646 Mar 29 13:24	19° \mathbb{Y} 09'14	
	14645 Apr 20 12:01	30° \mathbb{R} \mathbb{Y}		transit end	14646 Mar 29 19:20	18° \mathbb{Y} 53'25	
morning rise	14645 Apr 21 02:07	29° \mathbb{Y} 39'28		asc. node	14646 Mar 29 21:43	18° \mathbb{Y} 47'03	
direct	14645 Apr 24 00:22	28° \mathbb{Y} 52'19		morning rise	14646 Apr 05 04:18	13° \mathbb{Y} 39'11	
	14645 Apr 27 14:34	0° \mathbb{B}		direct	14646 Apr 07 17:42	13° \mathbb{Y} 05'49	
morning max el	14645 Apr 30 09:06	2° \mathbb{B} 12'46	18°11'16	morning max el	14646 Apr 14 02:11	16° \mathbb{Y} 21'56	17°50'23
desc. node	14645 May 14 20:23	22° \mathbb{B} 36'37			14646 Apr 23 23:44	0° \mathbb{B}	
	14645 May 19 10:55	0° \mathbb{II}		morning set	14646 May 01 03:50	11° \mathbb{B} 55'36	
morning set	14645 May 19 13:50	0° \mathbb{II} 11'42		desc. node	14646 May 01 17:07	12° \mathbb{B} 51'22	
					14646 May 12 01:57	0° \mathbb{II}	
superior conj	14645 Jun 03 18:13	24° \mathbb{II} 17'08	-2°00'05	superior conj	14646 May 14 14:17	4° \mathbb{II} 03'20	-1°30'10
minimum elong	14645 Jun 03 10:24	23° \mathbb{II} 46'30	2°00'35	minimum elong	14646 May 14 05:49	3° \mathbb{II} 29'20	1°30'05
max. Earth dist.	14645 Jun 05 15:05	27° \mathbb{II} 12'31	1.45886 AU	max. Earth dist.	14646 May 19 11:06	11° \mathbb{II} 47'51	1.45286 AU
	14645 Jun 07 10:02	0° \mathbb{B}		evening rise	14646 May 30 08:56	28° \mathbb{II} 43'38	
evening rise	14645 Jun 19 20:13	19° \mathbb{B} 18'19			14646 May 31 04:55	0° \mathbb{B}	
	14645 Jun 26 18:04	0° Ω		greatest brilliancy	14646 Jun 14 05:25	20° \mathbb{B} 58'22	-0.6m
greatest brilliancy	14645 Jul 01 06:46	6° Ω 54'43	-0.7m		14646 Jun 20 17:20	0° Ω	
asc. node	14645 Jul 08 22:41	17° Ω 51'16		asc. node	14646 Jun 25 19:34	6° Ω 06'40	
evening max el	14645 Jul 13 09:52	23° Ω 03'44	19°09'44	evening max el	14646 Jun 26 14:12	6° Ω 54'35	20°05'06
retrograde	14645 Jul 20 07:37	26° Ω 52'53		retrograde	14646 Jul 04 06:25	11° Ω 16'33	
evening set	14645 Jul 23 20:20	25° Ω 40'39		evening set	14646 Jul 08 05:03	9° Ω 46'58	
inferior conj	14645 Jul 29 07:05	19° Ω 52'11	2°56'16	inferior conj	14646 Jul 13 11:55	3° Ω 45'41	3°08'53
minimum elong	14645 Jul 29 08:37	19° Ω 47'13	2°55'17	minimum elong	14646 Jul 13 12:29	3° Ω 43'43	3°07'56
min. Earth dist.	14645 Jul 30 19:07	17° Ω 55'46	0.66886 AU	min. Earth dist.	14646 Jul 14 09:48	2° Ω 31'24	0.68076 AU
morning rise	14645 Aug 03 20:15	13° Ω 26'51			14646 Jul 16 08:29	30° \mathbb{R} \mathbb{B}	
direct	14645 Aug 09 22:38	10° Ω 49'29					
desc. node	14645 Aug 10 18:53	10° Ω 52'11					

morning rise	14646 Jul 18 19:35	27° Ω 22'21		evening set	14647 Jun 22 14:33	24° Ω 02'50	
direct	14646 Jul 24 10:55	24° Ω 53'59		inferior conj	14647 Jun 27 20:16	17° Ω 50'19	3°09'35
desc. node	14646 Jul 28 16:18	26° Ω 01'55		minimum elong	14647 Jun 27 19:51	17° Ω 51'45	3°08'34
	14646 Aug 03 03:00	0° Ω		min. Earth dist.	14647 Jun 28 04:37	17° Ω 21'13	0.68790 AU
morning max el	14646 Aug 05 00:19	1° Ω 49'19	24°35'38	morning rise	14647 Jul 03 00:55	11° Ω 31'49	
	14646 Aug 26 09:56	0° Π		direct	14647 Jul 08 04:00	9° Ω 18'11	
morning set	14646 Sep 09 16:00	23° Π 14'17		desc. node	14647 Jul 15 13:38	12° Ω 44'46	
	14646 Sep 13 11:04	0° $\underline{\Omega}$		morning max el	14647 Jul 18 11:28	15° Ω 25'48	23°06'17
max. Earth dist.	14646 Sep 13 06:03	29° Π 37'17	1.37534 AU		14647 Jul 30 09:42	0° Ω	
					14647 Aug 19 09:00	0° Π	
superior conj	14646 Sep 20 06:13	12° $\underline{\Omega}$ 46'25	-0°14'49	morning set	14647 Aug 21 21:25	4° Π 07'57	
minimum elong	14646 Sep 20 07:11	12° $\underline{\Omega}$ 51'10	0°14'30	max. Earth dist.	14647 Aug 26 04:37	11° Π 23'27	1.39910 AU
behind sun begin	14646 Sep 20 04:12	12° $\underline{\Omega}$ 36'42					
behind sun end	14646 Sep 20 10:10	13° $\underline{\Omega}$ 05'38		superior conj	14647 Sep 02 23:36	25° Π 14'24	-0°50'11
asc. node	14646 Sep 21 21:08	15° $\underline{\Omega}$ 56'18		minimum elong	14647 Sep 03 03:23	25° Π 31'46	0°49'44
evening rise	14646 Sep 28 18:04	29° $\underline{\Omega}$ 38'31			14647 Sep 05 13:12	0° $\underline{\Omega}$	
	14646 Sep 28 22:21	0° Π		asc. node	14647 Sep 08 17:42	6° $\underline{\Omega}$ 01'31	
evening max el	14646 Oct 15 12:36	27° Π 11'30	19°20'10	evening rise	14647 Sep 12 13:40	13° $\underline{\Omega}$ 22'01	
	14646 Oct 18 22:25	0° \mathcal{A}			14647 Sep 21 16:29	0° Π	
retrograde	14646 Oct 24 22:18	1° \mathcal{A} 54'21		evening max el	14647 Sep 28 13:41	9° Π 15'59	18°33'47
desc. node	14646 Oct 24 12:31	1° \mathcal{A} 53'50		retrograde	14647 Oct 06 13:39	13° Π 18'35	
evening set	14646 Oct 26 19:16	1° \mathcal{A} 43'55		evening set	14647 Oct 08 12:27	13° Π 04'56	
	14646 Oct 31 10:37	30° $\mathcal{R}\Pi$		desc. node	14647 Oct 11 09:56	11° Π 58'53	
inferior conj	14646 Nov 04 09:23	27° Π 35'01	-3°23'06	inferior conj	14647 Oct 16 10:25	8° Π 36'14	-1°36'13
minimum elong	14646 Nov 04 00:57	27° Π 48'53	3°19'17	minimum elong	14647 Oct 16 06:34	8° Π 43'37	1°34'06
min. Earth dist.	14646 Nov 06 22:58	25° Π 54'03	0.55726 AU	min. Earth dist.	14647 Oct 19 15:01	6° Π 10'10	0.57504 AU
morning rise	14646 Nov 12 04:20	23° Π 05'29		morning rise	14647 Oct 23 21:13	3° Π 29'07	
direct	14646 Nov 17 14:01	21° Π 59'08		direct	14647 Oct 29 23:19	1° Π 56'04	
morning max el	14646 Dec 01 14:37	29° Π 03'55	25°27'17	morning max el	14647 Nov 13 05:56	9° Π 26'08	26°53'20
	14646 Dec 02 13:32	0° \mathcal{A}			14647 Nov 28 21:44	0° \mathcal{A}	
asc. node	14646 Dec 18 22:03	23° \mathcal{A} 01'17		asc. node	14647 Dec 05 19:05	12° \mathcal{A} 08'52	
	14646 Dec 22 15:42	0° \mathcal{B}		morning set	14647 Dec 13 00:46	26° \mathcal{A} 48'16	
morning set	14646 Dec 28 15:04	12° \mathcal{B} 17'28			14647 Dec 14 12:16	0° \mathcal{B}	
superior conj	14647 Jan 04 09:04	27° \mathcal{B} 08'50	1°37'39	superior conj	14647 Dec 19 20:20	11° \mathcal{B} 50'08	1°36'40
minimum elong	14647 Jan 04 09:25	27° \mathcal{B} 10'48	1°38'36	minimum elong	14647 Dec 19 19:38	11° \mathcal{B} 46'13	1°37'40
	14647 Jan 05 16:05	0° \approx		max. Earth dist.	14647 Dec 20 04:52	12° \mathcal{B} 37'49	1.31205 AU
max. Earth dist.	14647 Jan 05 21:48	0° \approx 31'28	1.31807 AU	evening rise	14647 Dec 26 16:43	26° \mathcal{B} 52'26	
evening rise	14647 Jan 11 13:19	12° \approx 37'07			14647 Dec 28 04:24	0° \approx	
desc. node	14647 Jan 20 11:32	29° \approx 52'03		desc. node	14648 Jan 07 08:17	19° \approx 20'30	
	14647 Jan 20 13:19	0° \mathcal{H}			14648 Jan 14 00:37	0° \mathcal{H}	
	14647 Feb 10 06:02	0° Υ		evening max el	14648 Jan 26 11:49	15° \mathcal{H} 14'48	27°07'31
evening max el	14647 Feb 13 06:29	3° Υ 05'07	27°33'39	retrograde	14648 Feb 09 11:51	22° \mathcal{H} 30'53	
retrograde	14647 Feb 27 04:19	10° Υ 30'02		evening set	14648 Feb 16 05:07	20° \mathcal{H} 32'58	
evening set	14647 Mar 06 01:17	8° Υ 12'53		min. Earth dist.	14648 Feb 20 02:13	17° \mathcal{H} 50'34	0.60060 AU
min. Earth dist.	14647 Mar 09 19:23	5° Υ 12'52	0.62271 AU	inferior conj	14648 Feb 23 06:58	15° \mathcal{H} 11'38	-2°41'20
inferior conj	14647 Mar 12 19:08	2° Υ 23'18	-1°17'48	minimum elong	14648 Feb 23 12:54	14° \mathcal{H} 59'16	2°38'41
minimum elong	14647 Mar 12 21:48	2° Υ 16'58	1°16'38	morning rise	14648 Mar 02 00:03	10° \mathcal{H} 25'47	
	14647 Mar 15 10:37	30° $\mathcal{R}\mathcal{H}$		asc. node	14648 Mar 02 16:42	10° \mathcal{H} 16'41	
asc. node	14647 Mar 16 19:13	28° \mathcal{H} 56'52		direct	14648 Mar 04 01:02	10° \mathcal{H} 09'32	
morning rise	14647 Mar 19 21:14	27° \mathcal{H} 17'50		morning max el	14648 Mar 11 10:24	13° \mathcal{H} 50'47	18°02'27
direct	14647 Mar 22 03:14	26° \mathcal{H} 54'51			14648 Mar 22 10:00	0° Υ	
	14647 Mar 28 12:15	0° Υ		morning set	14648 Mar 27 00:07	8° Υ 23'18	
morning max el	14647 Mar 28 19:47	0° Υ 18'01	17°47'08	desc. node	14648 Apr 04 10:19	23° Υ 48'32	
morning set	14647 Apr 13 17:18	24° Υ 45'37					
	14647 Apr 16 16:44	0° \mathcal{B}		superior conj	14648 Apr 06 02:14	26° Υ 46'00	-0°13'25
desc. node	14647 Apr 18 13:46	3° \mathcal{B} 16'48		minimum elong	14648 Apr 06 01:06	26° Υ 40'57	0°13'37
				behind sun begin	14648 Apr 05 20:57	26° Υ 22'36	
superior conj	14647 Apr 25 08:28	14° \mathcal{B} 52'20	-0°52'06	behind sun end	14648 Apr 06 05:15	26° Υ 59'17	
minimum elong	14647 Apr 25 03:28	14° \mathcal{B} 31'25	0°52'00		14648 Apr 07 22:28	0° \mathcal{B}	
max. Earth dist.	14647 May 02 03:58	26° \mathcal{B} 03'40	1.44002 AU	max. Earth dist.	14648 Apr 13 16:11	9° \mathcal{B} 46'14	1.42179 AU
	14647 May 04 15:05	0° Π		evening rise	14648 Apr 19 01:55	18° \mathcal{B} 35'05	
evening rise	14647 May 09 22:10	8° Π 17'57			14648 Apr 26 09:43	0° Π	
	14647 May 24 10:14	0° \mathcal{B}			14648 May 18 00:48	0° \mathcal{B}	
evening max el	14647 Jun 09 12:32	20° \mathcal{B} 45'46	21°13'42	evening max el	14648 May 22 05:55	4° \mathcal{B} 37'28	22°31'27
asc. node	14647 Jun 12 16:32	23° \mathcal{B} 33'35		asc. node	14648 May 29 13:36	9° \mathcal{B} 56'23	
retrograde	14647 Jun 18 05:19	25° \mathcal{B} 49'18		retrograde	14648 Jun 01 02:40	10° \mathcal{B} 25'15	

evening set	14648 Jun 05 23:04	8°♄23'13		14649 Apr 19 19:37	0°♄	
inferior conj	14648 Jun 11 06:00	2°♄01'31	2°59'31	evening max el	14649 May 04 20:28	18°♄31'18 23°52'41
minimum elong	14648 Jun 11 04:44	2°♄05'58	2°58'20	retrograde	14649 May 15 21:00	24°♄59'25
min. Earth dist.	14648 Jun 11 01:21	2°♄17'45	0.69029 AU	asc. node	14649 May 16 10:46	24°♄57'59
	14648 Jun 12 17:20	30°♄		evening set	14649 May 21 05:03	22°♄43'55
morning rise	14648 Jun 16 10:14	25°♄49'45		min. Earth dist.	14649 May 25 21:50	17°♄15'20 0.68794 AU
direct	14648 Jun 21 00:50	23°♄54'32		inferior conj	14649 May 26 15:16	16°♄15'52 2°39'07
morning max el	14648 Jun 30 01:34	29°♄10'01	21°39'29	minimum elong	14649 May 26 13:22	16°♄22'22 2°37'45
	14648 Jun 30 21:05	0°♄		morning rise	14649 May 31 21:41	10°♄12'14
desc. node	14648 Jul 01 10:52	0°♄36'39		direct	14649 Jun 05 00:01	8°♄37'12
	14648 Jul 23 01:31	0°♄		morning max el	14649 Jun 12 21:37	13°♄05'04 20°22'09
morning set	14648 Aug 01 02:12	13°♄57'20		desc. node	14649 Jun 18 07:59	19°♄19'30
max. Earth dist.	14648 Aug 07 07:22	24°♄00'01	1.42166 AU		14649 Jun 26 03:03	0°♄
	14648 Aug 10 21:41	0°♄		morning set	14649 Jul 11 10:27	22°♄55'07
					14649 Jul 15 23:42	0°♄
superior conj	14648 Aug 14 21:42	6°♄50'51	-1°25'23	max. Earth dist.	14649 Jul 20 17:09	7°♄29'16 1.44041 AU
minimum elong	14648 Aug 15 04:18	7°♄19'32	1°25'02			
evening rise	14648 Aug 25 21:38	26°♄33'18		superior conj	14649 Jul 26 20:51	17°♄28'42 -1°55'05
asc. node	14648 Aug 25 14:13	25°♄59'25		minimum elong	14649 Jul 27 04:11	17°♄58'54 1°55'16
	14648 Aug 27 18:55	0°♄			14649 Aug 03 07:51	0°♄
evening max el	14648 Sep 10 23:13	21°♄59'45	18°08'24	evening rise	14649 Aug 08 13:16	9°♄00'54
retrograde	14648 Sep 17 23:34	25°♄34'44		asc. node	14649 Aug 12 10:47	15°♄46'08
evening set	14648 Sep 20 05:03	25°♄13'29			14649 Aug 21 06:23	0°♄
inferior conj	14648 Sep 27 08:57	20°♄23'52	-0°01'12	evening max el	14649 Aug 25 13:02	5°♄12'14 18°02'26
minimum elong	14648 Sep 27 08:55	20°♄23'56	0°00'55	retrograde	14649 Sep 01 00:33	8°♄33'54
transit middle	14648 Sep 27 08:55	20°♄23'56	0°00'55	evening set	14649 Sep 03 14:10	8°♄01'26
transit begin	14648 Sep 27 05:33	20°♄31'27		inferior conj	14649 Sep 10 02:01	2°♄52'26 1°13'27
transit end	14648 Sep 27 12:18	20°♄16'24		minimum elong	14649 Sep 10 03:58	2°♄47'28 1°12'43
desc. node	14648 Sep 27 07:26	20°♄27'16			14649 Sep 12 21:48	30°♄
min. Earth dist.	14648 Sep 30 15:07	17°♄30'32	0.59692 AU	min. Earth dist.	14649 Sep 13 00:36	29°♄53'11 0.61985 AU
morning rise	14648 Oct 04 09:28	14°♄43'35		desc. node	14649 Sep 14 04:56	28°♄46'18
direct	14648 Oct 10 22:02	12°♄43'56		morning rise	14649 Sep 16 15:16	26°♄48'09
morning max el	14648 Oct 25 05:00	20°♄31'56	27°45'23	direct	14649 Sep 23 07:34	24°♄27'05
	14648 Nov 02 09:22	0°♄			14649 Oct 04 20:24	0°♄
	14648 Nov 20 19:25	0°♄		morning max el	14649 Oct 07 10:42	2°♄25'11 27°58'23
asc. node	14648 Nov 21 15:59	1°♄40'21			14649 Oct 27 19:23	0°♄
morning set	14648 Nov 26 06:44	11°♄05'01		asc. node	14649 Nov 08 12:46	21°♄28'30
max. Earth dist.	14648 Dec 02 12:42	24°♄42'27	1.31135 AU	morning set	14649 Nov 10 06:53	25°♄02'16
					14649 Nov 12 15:56	0°♄
superior conj	14648 Dec 03 07:44	26°♄28'36	1°29'47	max. Earth dist.	14649 Nov 15 17:34	6°♄36'02 1.31612 AU
minimum elong	14648 Dec 03 06:08	26°♄19'41	1°30'40			
	14648 Dec 04 21:33	0°♄		superior conj	14649 Nov 17 17:22	10°♄58'23 1°17'01
evening rise	14648 Dec 10 00:33	11°♄17'48		minimum elong	14649 Nov 17 15:11	10°♄46'22 1°17'40
	14648 Dec 19 09:32	0°♄		evening rise	14649 Nov 24 10:53	25°♄47'41
desc. node	14648 Dec 24 05:07	8°♄14'19			14649 Nov 26 10:09	0°♄
evening max el	14649 Jan 07 09:46	26°♄33'24	26°06'54	desc. node	14649 Dec 11 02:05	26°♄19'51
	14649 Jan 11 13:18	0°♄			14649 Dec 13 18:17	0°♄
retrograde	14649 Jan 21 08:41	3°♄37'43		evening max el	14649 Dec 19 23:26	7°♄01'47 24°37'57
evening set	14649 Jan 27 14:13	2°♄05'47		retrograde	14650 Jan 02 16:36	13°♄52'22
	14649 Jan 31 04:37	30°♄		evening set	14650 Jan 08 00:45	12°♄49'33
min. Earth dist.	14649 Jan 31 23:04	29°♄28'33	0.57905 AU	min. Earth dist.	14650 Jan 13 11:15	10°♄01'10 0.56070 AU
inferior conj	14649 Feb 04 00:10	27°♄17'19	-4°07'47	inferior conj	14650 Jan 15 20:23	8°♄31'44 -5°21'41
minimum elong	14649 Feb 04 08:54	27°♄01'36	4°04'25	minimum elong	14650 Jan 16 04:30	8°♄19'00 5°19'16
morning rise	14649 Feb 12 06:35	22°♄52'49		morning rise	14650 Jan 24 10:21	4°♄28'14
direct	14649 Feb 14 06:57	22°♄39'34		direct	14650 Jan 26 17:43	4°♄13'47
asc. node	14649 Feb 17 14:09	23°♄17'06		asc. node	14650 Feb 04 11:34	7°♄58'25
morning max el	14649 Feb 22 18:07	26°♄49'12	18°38'01	morning max el	14650 Feb 05 14:45	9°♄00'39 19°35'52
	14649 Feb 25 13:51	0°♄			14650 Feb 19 08:45	0°♄
morning set	14649 Mar 10 19:08	22°♄33'29		morning set	14650 Feb 22 22:15	7°♄03'15
	14649 Mar 14 15:22	0°♄				
superior conj	14649 Mar 19 16:21	9°♄34'53	0°21'16	superior conj	14650 Mar 02 22:11	23°♄05'27 0°49'51
minimum elong	14649 Mar 19 17:45	9°♄41'28	0°20'57	minimum elong	14650 Mar 03 00:42	23°♄17'52 0°49'41
desc. node	14649 Mar 22 06:50	14°♄23'05			14650 Mar 06 12:01	0°♄
max. Earth dist.	14649 Mar 27 00:20	22°♄48'53	1.40015 AU	desc. node	14650 Mar 09 03:20	4°♄56'09
evening rise	14649 Mar 31 02:30	29°♄48'03		max. Earth dist.	14650 Mar 09 06:48	5°♄12'05 1.37741 AU
	14649 Mar 31 05:21	0°♄		evening rise	14650 Mar 12 23:36	11°♄52'22
					14650 Mar 23 21:32	0°♄

	14650 Apr 15 01:52	0°♂			14651 Mar 17 11:10	0°♂	
evening max el	14650 Apr 17 10:00	2°♂25'09	25°10'48	evening max el	14651 Mar 30 23:34	16°♂14'25	26°18'32
retrograde	14650 Apr 29 11:18	9°♂24'59		retrograde	14651 Apr 12 20:41	23°♂34'57	
asc. node	14650 May 03 08:03	8°♂21'53		evening set	14651 Apr 19 02:50	21°♂03'15	
evening set	14650 May 05 06:53	6°♂59'08		asc. node	14651 Apr 20 05:26	20°♂04'10	
min. Earth dist.	14650 May 09 15:54	2°♂07'07	0.68085 AU	min. Earth dist.	14651 Apr 23 05:31	16°♂46'32	0.66929 AU
inferior conj	14650 May 10 22:06	0°♂28'28	2°08'14	inferior conj	14651 Apr 25 00:28	14°♂34'59	1°26'13
minimum elong	14650 May 10 19:56	0°♂35'33	2°06'47	minimum elong	14651 Apr 24 22:35	14°♂40'46	1°24'55
	14650 May 11 06:50	30°♂♂		morning rise	14651 Apr 30 19:15	8°♂51'39	
morning rise	14650 May 16 09:21	24°♂34'19		direct	14651 May 03 23:09	7°♂55'14	
direct	14650 May 20 00:02	23°♂19'24		morning max el	14651 May 10 11:39	11°♂23'22	18°31'05
morning max el	14650 May 27 01:09	27°♂10'48	19°18'39	desc. node	14651 May 23 01:52	28°♂25'46	
	14650 May 29 15:43	0°♂			14651 May 24 02:13	0°♂	
desc. node	14650 Jun 05 04:58	8°♂39'11		morning set	14651 May 31 08:50	11°♂24'19	
greatest brilliancy	14650 Jun 08 18:27	13°♂50'08	-0.7m		14651 Jun 12 05:34	0°♂	
	14650 Jun 19 10:22	0°♂					
morning set	14650 Jun 20 13:48	1°♂45'28		superior conj	14651 Jun 16 06:58	6°♂19'55	-2°10'15
max. Earth dist.	14650 Jul 03 09:09	21°♂38'53	1.45320 AU	minimum elong	14651 Jun 16 02:25	6°♂02'09	2°11'09
				max. Earth dist.	14651 Jun 16 04:27	6°♂10'08	1.45889 AU
superior conj	14650 Jul 06 21:10	27°♂10'25	-2°12'07		14651 Jul 01 09:07	0°♂	
minimum elong	14650 Jul 07 00:21	27°♂23'02	2°13'00	evening rise	14651 Jul 02 00:56	1°♂02'28	
	14650 Jul 08 15:50	0°♂		greatest brilliancy	14651 Jul 10 11:03	14°♂18'50	-0.8m
evening rise	14650 Jul 21 07:29	20°♂32'56		asc. node	14651 Jul 17 04:09	24°♂25'08	
	14650 Jul 27 01:04	0°♂			14651 Jul 21 09:38	0°♂	
asc. node	14650 Jul 30 07:25	5°♂16'55		evening max el	14651 Jul 23 15:41	2°♂28'09	18°44'51
evening max el	14650 Aug 09 03:32	18°♂44'25	18°14'50	retrograde	14651 Jul 30 06:26	6°♂04'12	
retrograde	14650 Aug 15 12:11	22°♂06'41		evening set	14651 Aug 02 13:36	5°♂01'51	
evening set	14650 Aug 18 10:21	21°♂20'15			14651 Aug 07 15:25	30°♂♂	
inferior conj	14650 Aug 24 09:38	15°♂54'20	2°07'16	inferior conj	14651 Aug 08 03:57	29°♂21'09	2°42'52
minimum elong	14650 Aug 24 12:03	15°♂47'24	2°06'14	minimum elong	14651 Aug 08 05:56	29°♂14'55	2°41'51
min. Earth dist.	14650 Aug 26 19:56	13°♂08'24	0.64138 AU	min. Earth dist.	14651 Aug 10 00:14	27°♂03'27	0.65991 AU
morning rise	14650 Aug 30 12:08	9°♂35'38		morning rise	14651 Aug 13 21:20	22°♂56'14	
desc. node	14650 Sep 01 02:27	8°♂29'09		desc. node	14651 Aug 18 23:59	20°♂22'41	
direct	14650 Sep 06 02:16	7°♂01'08		direct	14651 Aug 20 04:53	20°♂17'16	
morning max el	14650 Sep 19 20:41	15°♂00'07	27°34'30	morning max el	14651 Sep 02 08:08	28°♂04'09	26°40'17
	14650 Oct 02 03:01	0°♂			14651 Sep 04 04:19	0°♂	
	14650 Oct 20 11:47	0°♂			14651 Sep 25 20:48	0°♂	
morning set	14650 Oct 24 22:51	8°♂34'49		morning set	14651 Oct 08 03:33	21°♂34'45	
asc. node	14650 Oct 26 09:28	11°♂28'02		max. Earth dist.	14651 Oct 12 04:18	29°♂24'41	1.34194 AU
max. Earth dist.	14650 Oct 29 15:47	18°♂11'18	1.32636 AU		14651 Oct 12 11:23	0°♂	
				asc. node	14651 Oct 13 06:06	1°♂33'49	
superior conj	14650 Nov 01 23:16	25°♂14'22	0°58'24				
minimum elong	14650 Nov 01 20:59	25°♂02'04	0°58'48	superior conj	14651 Oct 16 23:04	9°♂09'49	0°34'01
	14650 Nov 04 03:59	0°♂		minimum elong	14651 Oct 16 21:22	9°♂00'54	0°34'15
evening rise	14650 Nov 08 21:54	10°♂17'40		evening rise	14651 Oct 24 07:38	24°♂41'59	
	14650 Nov 18 21:51	0°♂			14651 Oct 26 20:52	0°♂	
desc. node	14650 Nov 27 23:09	13°♂19'43		evening max el	14651 Nov 13 00:06	27°♂09'17	21°17'38
evening max el	14650 Dec 01 09:02	17°♂01'20	22°55'31	desc. node	14651 Nov 14 20:22	28°♂50'21	
retrograde	14650 Dec 14 11:52	23°♂31'49			14651 Nov 16 08:08	0°♂	
evening set	14650 Dec 18 13:15	22°♂55'58		retrograde	14651 Nov 24 22:58	3°♂04'57	
min. Earth dist.	14650 Dec 25 18:09	19°♂36'59	0.54840 AU	evening set	14651 Nov 27 17:14	2°♂47'15	
inferior conj	14650 Dec 26 21:38	18°♂57'48	-5°58'52		14651 Dec 04 14:19	30°♂♂	
minimum elong	14650 Dec 26 23:05	18°♂55'45	5°57'49	inferior conj	14651 Dec 06 13:02	28°♂55'00	-5°38'12
morning rise	14651 Jan 04 10:19	15°♂08'54		minimum elong	14651 Dec 06 05:41	29°♂05'21	5°36'03
direct	14651 Jan 07 10:12	14°♂48'03		min. Earth dist.	14651 Dec 06 23:56	28°♂39'38	0.54454 AU
morning max el	14651 Jan 18 21:10	20°♂17'44	20°56'56	morning rise	14651 Dec 14 18:40	25°♂04'59	
asc. node	14651 Jan 22 08:55	24°♂07'11		direct	14651 Dec 18 17:37	24°♂31'11	
	14651 Jan 26 14:27	0°♂			14651 Dec 30 18:59	0°♂	
morning set	14651 Feb 07 06:31	21°♂44'07		morning max el	14651 Dec 31 13:53	0°♂43'30	22°37'50
	14651 Feb 11 05:26	0°♂		asc. node	14652 Jan 09 06:11	11°♂25'06	
					14652 Jan 19 14:54	0°♂	
superior conj	14651 Feb 14 15:39	7°♂06'44	1°11'41	morning set	14652 Jan 22 17:37	6°♂29'07	
minimum elong	14651 Feb 14 18:14	7°♂19'56	1°11'52				
max. Earth dist.	14651 Feb 19 15:42	17°♂08'53	1.35596 AU	superior conj	14652 Jan 29 17:21	21°♂28'50	1°26'49
evening rise	14651 Feb 23 14:25	24°♂40'28		minimum elong	14652 Jan 29 19:18	21°♂39'12	1°27'21
desc. node	14651 Feb 23 23:51	25°♂24'17		max. Earth dist.	14652 Feb 02 06:58	28°♂58'28	1.33771 AU
	14651 Feb 26 12:25	0°♂			14652 Feb 02 18:56	0°♂	

evening rise	14652 Feb 06 19:25	8° X 03'17		minimum elong	14653 Jan 13 01:29	6° \approx 08'53	1°36'19
desc. node	14652 Feb 10 20:26	15° X 43'21		max. Earth dist.	14653 Jan 15 06:03	10° \approx 54'50	1.32385 AU
	14652 Feb 19 02:04	0° Y		evening rise	14653 Jan 20 11:17	21° \approx 52'15	
evening max el	14652 Mar 12 13:08	29° Y 51'38	27°08'29		14653 Jan 24 14:15	0° X	
	14652 Mar 12 16:37	0° B		desc. node	14653 Jan 27 17:03	5° X 48'08	
retrograde	14652 Mar 26 00:21	7° B 21'13			14653 Feb 11 22:15	0° Y	
evening set	14652 Apr 01 14:58	4° B 49'41		evening max el	14653 Feb 23 01:32	13° Y 05'25	27°33'22
min. Earth dist.	14652 Apr 05 12:44	1° B 05'54	0.65366 AU	retrograde	14653 Mar 08 21:02	20° Y 33'43	
asc. node	14652 Apr 06 02:52	0° B 26'44		evening set	14653 Mar 15 16:51	18° Y 09'29	
	14652 Apr 06 12:23	30° R Y		min. Earth dist.	14653 Mar 19 11:36	14° Y 54'52	0.63469 AU
inferior conj	14652 Apr 07 20:03	28° Y 30'12	0°32'18	inferior conj	14653 Mar 22 06:00	12° Y 06'35	-0°34'07
minimum elong	14652 Apr 07 19:11	28° Y 32'39	0°31'34	minimum elong	14653 Mar 22 07:05	12° Y 03'48	0°33'46
morning rise	14652 Apr 14 01:05	22° Y 59'28		asc. node	14653 Mar 24 00:21	10° Y 21'41	
direct	14652 Apr 16 19:17	22° Y 18'45		morning rise	14653 Mar 28 23:47	6° Y 50'47	
morning max el	14652 Apr 23 03:07	25° Y 36'12	18°00'18	direct	14653 Mar 31 09:43	6° Y 22'20	
	14652 Apr 26 22:06	0° B		morning max el	14653 Apr 06 20:45	9° Y 40'29	17°46'47
desc. node	14652 May 08 22:38	18° B 31'58			14653 Apr 20 15:07	0° B	
morning set	14652 May 11 07:03	22° B 22'42		morning set	14653 Apr 23 07:46	4° B 36'44	
	14652 May 15 23:16	0° II		desc. node	14653 Apr 25 19:18	8° B 51'27	
superior conj	14652 May 25 18:40	15° II 41'19	-1°48'59	superior conj	14653 May 05 23:22	25° B 51'59	-1°14'31
minimum elong	14652 May 25 09:48	15° II 06'21	1°49'10	minimum elong	14653 May 05 16:07	25° B 22'23	1°14'21
max. Earth dist.	14652 May 29 00:25	20° II 46'44	1.45710 AU		14653 May 08 12:30	0° II	
	14652 Jun 03 22:32	0° B		max. Earth dist.	14653 May 11 19:05	5° II 14'24	1.44814 AU
evening rise	14652 Jun 10 20:47	10° B 41'34		evening rise	14653 May 21 07:36	20° II 05'05	
	14652 Jun 23 13:46	0° Q			14653 May 27 20:31	0° B	
greatest brilliancy	14652 Jun 24 05:52	0° Q 59'29	-0.7m		14653 Jun 18 21:31	0° Q	
asc. node	14652 Jul 03 00:59	13° Q 03'02		evening max el	14653 Jun 19 01:10	0° Q 09'10	20°32'56
evening max el	14652 Jul 05 23:20	16° Q 17'57	19°31'29	asc. node	14653 Jun 19 21:56	0° Q 59'24	
retrograde	14652 Jul 13 04:15	20° Q 20'03		retrograde	14653 Jun 27 03:11	4° Q 47'42	
evening set	14652 Jul 16 21:00	19° Q 00'40		evening set	14653 Jul 01 06:15	3° Q 10'58	
inferior conj	14652 Jul 22 05:45	13° Q 06'41	3°03'08		14653 Jul 04 07:44	30° R B	
minimum elong	14652 Jul 22 06:53	13° Q 02'54	3°02'12	inferior conj	14653 Jul 06 12:19	27° B 04'59	3°10'30
min. Earth dist.	14652 Jul 23 11:47	11° Q 27'15	0.67445 AU	minimum elong	14653 Jul 06 12:29	27° B 04'28	3°09'33
morning rise	14652 Jul 27 16:15	6° Q 41'33		min. Earth dist.	14653 Jul 07 04:27	26° B 09'29	0.68442 AU
direct	14652 Aug 02 14:10	4° Q 06'53		morning rise	14653 Jul 11 18:24	20° B 43'28	
desc. node	14652 Aug 04 21:26	4° Q 27'06		direct	14653 Jul 17 04:45	18° B 20'31	
morning max el	14652 Aug 14 19:06	11° Q 25'33	25°24'46	desc. node	14653 Jul 22 18:48	20° B 19'04	
	14652 Aug 29 15:54	0° P		morning max el	14653 Jul 28 05:32	24° B 56'20	23°57'47
	14652 Sep 17 12:50	0° Q			14653 Aug 01 19:12	0° Q	
morning set	14652 Sep 19 17:19	3° Q 53'40			14653 Aug 23 02:51	0° P	
max. Earth dist.	14652 Sep 23 07:16	10° Q 28'44	1.36221 AU	morning set	14653 Sep 01 11:43	15° P 20'50	
asc. node	14652 Sep 29 02:43	21° Q 42'15		max. Earth dist.	14653 Sep 05 05:35	21° P 51'34	1.38544 AU
					14653 Sep 09 17:37	0° Q	
superior conj	14652 Sep 29 13:58	22° Q 38'17	0°04'21	superior conj	14653 Sep 12 16:25	5° Q 31'14	-0°29'34
minimum elong	14652 Sep 29 13:41	22° Q 36'52	0°04'35	minimum elong	14653 Sep 12 18:30	5° Q 41'08	0°29'12
behind sun begin	14652 Sep 29 07:35	22° Q 06'29		asc. node	14653 Sep 15 23:18	11° Q 49'42	
behind sun end	14652 Sep 29 19:47	23° Q 07'19		evening rise	14653 Sep 21 14:28	22° Q 52'37	
	14652 Oct 03 05:25	0° M			14653 Sep 25 06:24	0° M	
evening rise	14652 Oct 07 14:02	8° M 55'47		evening max el	14653 Oct 07 22:45	19° M 35'25	18°57'47
	14652 Oct 18 22:45	0° X		retrograde	14653 Oct 16 16:42	23° M 59'21	
evening max el	14652 Oct 25 04:22	7° X 57'25	19°56'50	evening set	14653 Oct 18 13:45	23° M 48'01	
desc. node	14652 Oct 31 17:40	12° X 25'54		desc. node	14653 Oct 18 15:01	23° M 47'22	
retrograde	14652 Nov 04 12:27	13° X 06'28		inferior conj	14653 Oct 26 21:37	19° M 31'08	-2°37'22
evening set	14652 Nov 06 12:53	12° X 55'36		minimum elong	14653 Oct 26 15:02	19° M 42'39	2°34'07
inferior conj	14652 Nov 15 08:56	8° X 56'19	-4°21'55	min. Earth dist.	14653 Oct 29 19:27	17° M 29'26	0.56418 AU
minimum elong	14652 Nov 14 22:56	9° X 11'31	4°18'01	morning rise	14653 Nov 03 13:26	14° M 46'07	
min. Earth dist.	14652 Nov 17 07:33	7° X 45'25	0.55016 AU	direct	14653 Nov 09 07:03	13° M 28'36	
morning rise	14652 Nov 23 07:41	4° X 45'40		morning max el	14653 Nov 23 10:33	20° M 44'16	26°07'18
direct	14652 Nov 28 06:03	3° X 52'25			14653 Dec 01 10:42	0° X	
morning max el	14652 Dec 11 23:18	10° X 40'27	24°27'18	asc. node	14653 Dec 13 00:26	18° X 26'01	
asc. node	14652 Dec 26 03:22	29° X 35'48			14653 Dec 18 22:22	0° B	
	14652 Dec 26 09:02	21° B 12'31		morning set	14653 Dec 21 16:38	5° B 49'45	
morning set	14653 Jan 06 05:34	0° \approx					
	14653 Jan 10 06:20	0° \approx		superior conj	14653 Dec 28 10:51	20° B 44'28	1°37'58
superior conj	14653 Jan 13 00:30	6° \approx 03'33	1°35'28	minimum elong	14653 Dec 28 10:45	20° B 43'54	1°38'57

max. Earth dist.	14653 Dec 29 11:20	23°  00'29	1.31493 AU	superior conj	14654 Dec 12 22:23	5°  24'56	1°34'28
	14654 Jan 01 15:42	0° 		minimum elong	14654 Dec 12 21:16	5°  18'45	1°35'26
evening rise	14654 Jan 04 11:14	6°  00'20		max. Earth dist.	14654 Dec 12 19:23	5°  08'11	1.31116 AU
desc. node	14654 Jan 14 13:44	25°  32'32		evening rise	14654 Dec 19 16:46	20°  20'26	
	14654 Jan 17 04:00	0° 			14654 Dec 24 08:54	0° 	
evening max el	14654 Feb 05 10:24	25°  42'41	27°26'53	desc. node	14655 Jan 01 10:31	14°  47'36	
	14654 Feb 10 17:04	0° 			14655 Jan 11 18:24	0° 	
retrograde	14654 Feb 19 09:25	3°  03'22		evening max el	14655 Jan 18 12:47	7°  30'41	26°45'38
evening set	14654 Feb 26 05:39	0°  53'48		retrograde	14655 Feb 01 12:15	14°  41'28	
	14654 Feb 27 13:33	30°  4		evening set	14655 Feb 08 01:56	12°  53'44	
min. Earth dist.	14654 Mar 02 00:28	28°  42'20	0.61342 AU	min. Earth dist.	14655 Feb 12 02:37	10°  15'34	0.59131 AU
inferior conj	14654 Mar 05 02:58	25°  15'36	-1°52'15	inferior conj	14655 Feb 15 07:13	7°  46'27	-3°18'17
minimum elong	14654 Mar 05 06:58	25°  06'36	1°50'26	minimum elong	14655 Feb 15 14:32	7°  32'09	3°15'11
asc. node	14654 Mar 10 21:48	20°  55'36		morning rise	14655 Feb 23 06:25	3°  09'39	
morning rise	14654 Mar 12 11:23	20°  17'47		direct	14655 Feb 25 06:37	2°  55'03	
direct	14654 Mar 14 14:58	19°  58'01		asc. node	14655 Feb 25 19:15	2°  56'05	
morning max el	14654 Mar 21 13:27	23°  27'31	17°51'15	morning max el	14655 Mar 05 01:36	6°  46'39	18°15'01
	14654 Mar 26 18:32	0° 			14655 Mar 19 20:13	0° 	
morning set	14654 Apr 06 05:21	17°  49'15		morning set	14655 Mar 20 17:53	1°  42'04	
desc. node	14654 Apr 12 15:55	29°  19'55					
	14654 Apr 13 01:01	0° 		superior conj	14655 Mar 30 06:42	19°  27'05	0°01'58
				minimum elong	14655 Mar 30 06:49	19°  27'40	0°01'42
superior conj	14654 Apr 17 03:44	7°  08'35	-0°35'25	behind sun begin	14655 Mar 29 23:24	18°  54'03	
minimum elong	14654 Apr 17 00:28	6°  54'37	0°35'26	behind sun end	14655 Mar 30 14:15	20°  01'13	
max. Earth dist.	14654 Apr 24 10:29	19°  18'45	1.43289 AU	desc. node	14655 Mar 30 12:27	19°  53'05	
evening rise	14654 May 01 01:44	29°  54'39			14655 Apr 05 06:16	0° 	
	14654 May 01 03:06	0° 		max. Earth dist.	14655 Apr 06 21:07	2°  45'43	1.41288 AU
	14654 May 21 11:05	0° 		evening rise	14655 Apr 11 13:59	10°  34'23	
evening max el	14654 Jun 01 21:15	14°  00'15	21°45'58		14655 Apr 24 02:35	0° 	
asc. node	14654 Jun 06 18:57	18°  00'46		evening max el	14655 May 15 13:02	27°  15'20'3	23°05'56
retrograde	14654 Jun 11 01:28	19°  02'20'1			14655 May 17 19:52	0° 	
evening set	14654 Jun 15 15:30	17°  02'8'34		asc. node	14655 May 24 16:02	3°  51'06	
inferior conj	14654 Jun 20 21:28	11°  02'12'02	3°06'34	retrograde	14655 May 25 21:42	3°  57'53	
minimum elong	14654 Jun 20 20:40	11°  04'49	3°05'29	evening set	14655 May 30 23:08	1°  49'30	
min. Earth dist.	14654 Jun 21 00:13	11°  02'26	0.68957 AU		14655 Jun 01 18:43	30°  4	
morning rise	14654 Jun 26 01:39	4°  05'6'28		inferior conj	14655 Jun 05 07:13	25°  12'4'36	2°52'09
direct	14654 Jun 30 23:29	2°  05'0'21		minimum elong	14655 Jun 05 05:38	25°  13'0'04	2°50'52
desc. node	14654 Jul 09 16:05	7°  03'3'18		min. Earth dist.	14655 Jun 04 21:01	25°  15'9'56	0.68985 AU
morning max el	14654 Jul 10 17:28	8°  03'5'04	22°28'37	morning rise	14655 Jun 10 12:04	19°  16'2'0	
	14654 Jul 27 11:08	0° 		direct	14655 Jun 14 21:19	17°  16'2'9'52	
morning set	14654 Aug 13 06:41	25°  04'6'27		morning max el	14655 Jun 23 09:57	22°  16'2'4'01	21°05'12
	14654 Aug 15 20:31	0° 		desc. node	14655 Jun 26 13:17	25°  16'2'4'48'39	
max. Earth dist.	14654 Aug 18 05:51	3°  05'9'29	1.40903 AU		14655 Jun 29 22:55	0° 	
					14655 Jul 20 17:27	0° 	
superior conj	14654 Aug 26 02:08	17°  03'8'08	-1°05'24	morning set	14655 Jul 24 01:43	5°  11'0'4	
minimum elong	14654 Aug 26 07:11	18°  00'5'1	1°04'56	max. Earth dist.	14655 Jul 31 11:50	17°  16'2'0'23	1.43018 AU
	14654 Sep 01 19:53	0° 					
asc. node	14654 Sep 02 19:50	1°  05'2'04		superior conj	14655 Aug 07 14:46	28°  16'2'4'49'49	-1°39'04
evening rise	14654 Sep 05 05:37	6°  05'2'3'32		minimum elong	14655 Aug 07 22:07	29°  16'2'1'00	1°38'52
	14654 Sep 19 09:14	0° 			14655 Aug 08 07:17	0° 	
evening max el	14654 Sep 21 03:54	1°  05'7'21	18°20'29	evening rise	14655 Aug 19 07:19	19°  16'2'1'18'03	
retrograde	14654 Sep 28 16:27	5°  05'7'46'41		asc. node	14655 Aug 20 16:23	21°  16'2'1'45'51	
evening set	14654 Sep 30 17:49	5°  05'7'30'15			14655 Aug 25 08:22	0° 	
desc. node	14654 Oct 05 12:29	3°  05'7'03'30		evening max el	14655 Sep 04 15:41	14°  16'2'1'54'09	18°03'33
inferior conj	14654 Oct 08 07:58	0°  05'7'52'08	-0°53'42	retrograde	14655 Sep 11 09:30	18°  16'2'1'22'12	
minimum elong	14654 Oct 08 05:57	0°  05'7'56'17	0°52'26	evening set	14655 Sep 13 18:13	17°  16'2'1'56'41	
	14654 Oct 09 09:14	30°  4		inferior conj	14655 Sep 20 14:55	12°  16'2'1'58'29	0°33'04
min. Earth dist.	14654 Oct 11 14:26	28°  16'2'1'12'19	0.58401 AU	minimum elong	14655 Sep 20 15:57	12°  16'2'1'56'04	0°32'48
morning rise	14654 Oct 15 14:38	25°  16'2'1'30'06		desc. node	14655 Sep 22 09:59	11°  16'2'1'15'44	
direct	14654 Oct 21 21:50	23°  16'2'1'45'47		min. Earth dist.	14655 Sep 23 18:38	9°  16'2'1'59'57	0.60662 AU
	14654 Nov 03 17:23	0° 		morning rise	14655 Sep 27 10:37	7°  16'2'1'06'24	
morning max el	14654 Nov 05 05:11	1°  05'7'23'38	27°20'13	direct	14655 Oct 04 01:20	4°  16'2'1'56'56	
	14654 Nov 25 17:06	0° 		morning max el	14655 Oct 18 07:38	12°  16'2'1'50'54	27°55'45
asc. node	14654 Nov 29 21:23	7°  16'2'1'44'40			14655 Oct 31 23:31	0° 	
morning set	14654 Dec 06 01:00	20°  16'2'1'15'12		asc. node	14655 Nov 16 18:14	27°  16'2'1'16'23'59	
	14654 Dec 10 12:10	0° 			14655 Nov 18 01:22	0° 	
				morning set	14655 Nov 20 04:47	4°  16'2'1'17'24'27	

max. Earth dist.	14655 Nov 26 02:29	17° ♁ 09'21	1.31272 AU		14656 Nov 08 16:54	0° ♁	
superior conj	14655 Nov 27 09:16	20° ♁ 00'11	1°25'05	superior conj	14656 Nov 10 17:36	4° ♁ 24'39	1°09'50
minimum elong	14655 Nov 27 07:22	19° ♁ 49'41	1°25'53	minimum elong	14656 Nov 10 15:18	4° ♁ 12'07	1°10'23
	14655 Dec 01 21:10	0° ♁		evening rise	14656 Nov 17 12:43	19° ♁ 17'58	
evening rise	14655 Dec 04 01:54	4° ♁ 47'56			14656 Nov 22 16:06	0° ♁	
	14655 Dec 17 04:32	0° ♁		desc. node	14656 Dec 05 04:26	21° ♁ 02'51	
desc. node	14655 Dec 19 07:24	3° ♁ 22'39		evening max el	14656 Dec 11 17:57	28° ♁ 38'19	23°55'02
evening max el	14655 Dec 31 06:49	18° ♁ 25'32	25°31'38		14656 Dec 13 05:45	0° ♁	
retrograde	14656 Jan 14 04:06	25° ♁ 25'07		retrograde	14656 Dec 25 06:55	5° ♁ 21'59	
evening set	14656 Jan 20 01:50	24° ♁ 05'08		evening set	14656 Dec 30 02:31	4° ♁ 31'32	
min. Earth dist.	14656 Jan 24 19:21	21° ♁ 25'26	0.57071 AU	min. Earth dist.	14657 Jan 05 05:17	1° ♁ 32'14	0.55453 AU
inferior conj	14656 Jan 27 15:33	19° ♁ 30'11	-4°41'57	inferior conj	14657 Jan 07 03:12	0° ♁ 23'33	-5°43'32
minimum elong	14656 Jan 28 00:39	19° ♁ 14'47	4°38'47	minimum elong	14657 Jan 07 09:13	0° ♁ 14'32	5°41'49
morning rise	14656 Feb 05 02:14	15° ♁ 15'20			14657 Jan 07 18:58	30° ♁	
direct	14656 Feb 07 04:20	15° ♁ 02'13		morning rise	14657 Jan 15 17:41	26° ♁ 27'13	
asc. node	14656 Feb 12 16:41	16° ♁ 40'05		direct	14657 Jan 18 06:39	26° ♁ 10'54	
morning max el	14656 Feb 16 05:11	19° ♁ 26'32	18°59'50		14657 Jan 27 10:20	0° ♁	
	14656 Feb 24 01:47	0° ♁		morning max el	14657 Jan 28 20:08	1° ♁ 16'13	20°07'30
morning set	14656 Mar 03 16:43	16° ♁ 01'13		asc. node	14657 Jan 29 14:05	2° ♁ 01'00	
	14656 Mar 10 19:42	0° ♁		morning set	14657 Feb 15 22:23	0° ♁ 36'57	
					14657 Feb 15 15:08	0° ♁	
superior conj	14656 Mar 12 04:02	2° ♁ 35'06	0°34'12	superior conj	14657 Feb 23 15:21	16° ♁ 20'28	0°59'56
minimum elong	14656 Mar 12 06:05	2° ♁ 44'51	0°33'55	minimum elong	14657 Feb 23 18:00	16° ♁ 33'45	0°59'54
desc. node	14656 Mar 16 08:56	10° ♁ 27'10		max. Earth dist.	14657 Mar 01 10:23	27° ♁ 37'46	1.36801 AU
max. Earth dist.	14656 Mar 19 03:42	15° ♁ 28'50	1.39041 AU		14657 Mar 02 16:45	0° ♁	
evening rise	14656 Mar 22 23:29	22° ♁ 09'30		desc. node	14657 Mar 03 05:27	0° ♁ 58'53	
	14656 Mar 27 16:05	0° ♁		evening rise	14657 Mar 05 04:40	4° ♁ 34'32	
	14656 Apr 17 00:56	0° ♁			14657 Mar 20 15:05	0° ♁	
evening max el	14656 Apr 27 02:45	11° ♁ 45'12	24°26'46	evening max el	14657 Apr 09 16:22	25° ♁ 38'34	25°41'22
retrograde	14656 May 08 14:36	18° ♁ 28'58			14657 Apr 14 19:22	0° ♁	
asc. node	14656 May 10 13:15	18° ♁ 12'32		retrograde	14657 Apr 22 03:03	2° ♁ 48'54	
evening set	14656 May 14 03:33	16° ♁ 08'28		asc. node	14657 Apr 27 10:35	0° ♁ 53'01	
min. Earth dist.	14656 May 18 16:46	10° ♁ 55'28	0.68540 AU	evening set	14657 Apr 28 03:08	0° ♁ 20'13	
inferior conj	14656 May 19 15:41	9° ♁ 38'30	2°27'21		14657 Apr 28 12:27	30° ♁	
minimum elong	14656 May 19 13:37	9° ♁ 45'27	2°25'56	min. Earth dist.	14657 May 02 09:22	25° ♁ 43'06	0.67643 AU
morning rise	14656 May 24 23:49	3° ♁ 38'41		inferior conj	14657 May 03 20:56	23° ♁ 49'42	1°51'51
direct	14656 May 28 20:59	2° ♁ 12'29		minimum elong	14657 May 03 18:48	23° ♁ 56'29	1°50'25
morning max el	14656 Jun 05 09:11	6° ♁ 23'49	19°53'17	morning rise	14657 May 09 11:01	17° ♁ 59'40	
desc. node	14656 Jun 12 10:21	14° ♁ 48'22		direct	14657 May 12 20:58	16° ♁ 52'51	
	14656 Jun 23 00:15	0° ♁		morning max el	14657 May 19 15:47	20° ♁ 33'00	18°56'19
morning set	14656 Jul 02 05:16	13° ♁ 58'04			14657 May 27 07:14	0° ♁	
	14656 Jul 12 12:15	0° ♁		desc. node	14657 May 30 07:17	4° ♁ 20'42	
max. Earth dist.	14656 Jul 12 23:57	0° ♁ 46'23	1.44658 AU	greatest brilliancy	14657 Jun 02 00:50	8° ♁ 25'53	-0.7m
superior conj	14656 Jul 18 03:45	9° ♁ 01'49	-2°04'18	morning set	14657 Jun 11 13:00	23° ♁ 02'34	
minimum elong	14656 Jul 18 10:00	9° ♁ 27'08	2°04'49		14657 Jun 16 00:40	0° ♁	
	14656 Jul 30 18:55	0° ♁		max. Earth dist.	14657 Jun 25 17:19	15° ♁ 05'50	1.45657 AU
evening rise	14656 Jul 31 14:26	1° ♁ 22'48					
asc. node	14656 Aug 06 12:59	11° ♁ 26'09		superior conj	14657 Jun 27 20:21	18° ♁ 25'46	-2°13'50
evening max el	14656 Aug 18 06:11	28° ♁ 15'34	18°05'34	minimum elong	14657 Jun 27 20:20	18° ♁ 25'39	2°14'51
	14656 Aug 20 07:04	0° ♁			14657 Jul 05 04:03	0° ♁	
retrograde	14656 Aug 24 15:27	1° ♁ 35'55		evening rise	14657 Jul 12 22:12	12° ♁ 27'38	
evening set	14656 Aug 27 08:35	0° ♁ 57'57			14657 Jul 23 21:09	0° ♁	
	14656 Aug 29 00:10	30° ♁		asc. node	14657 Jul 24 09:40	0° ♁ 47'56	
inferior conj	14656 Sep 02 14:40	25° ♁ 41'46	1°38'40	evening max el	14657 Aug 01 20:04	11° ♁ 53'29	18°25'33
minimum elong	14656 Sep 02 16:58	25° ♁ 35'36	1°37'45	retrograde	14657 Aug 08 06:10	15° ♁ 19'41	
min. Earth dist.	14656 Sep 05 08:31	22° ♁ 45'42	0.62926 AU	evening set	14657 Aug 11 08:10	14° ♁ 26'37	
desc. node	14656 Sep 08 07:32	20° ♁ 00'24		inferior conj	14657 Aug 17 03:14	8° ♁ 54'25	2°24'23
morning rise	14656 Sep 08 23:10	19° ♁ 30'05		minimum elong	14657 Aug 17 05:33	8° ♁ 47'31	2°23'21
direct	14656 Sep 15 15:16	17° ♁ 01'51		min. Earth dist.	14657 Aug 19 07:45	6° ♁ 18'55	0.64978 AU
morning max el	14656 Sep 29 15:29	25° ♁ 02'34	27°52'22	morning rise	14657 Aug 23 01:38	2° ♁ 32'26	
	14656 Oct 04 04:23	0° ♁		desc. node	14657 Aug 26 05:04	0° ♁ 35'42	
	14656 Oct 24 10:54	0° ♁			14657 Aug 28 08:10	30° ♁	
asc. node	14656 Nov 02 15:00	17° ♁ 17'16		direct	14657 Aug 29 13:37	29° ♁ 54'41	
morning set	14656 Nov 03 01:47	18° ♁ 11'45			14657 Aug 30 19:45	0° ♁	
max. Earth dist.	14656 Nov 08 04:41	28° ♁ 54'13	1.31973 AU	morning max el	14657 Sep 12 02:05	7° ♁ 49'53	27°14'32


































































































































	14657 Sep 29 07:00	0°♄		morning set	14658 Sep 30 12:11	14°♄14'08	
	14657 Oct 16 18:38	0°♍		max. Earth dist.	14658 Oct 04 07:15	21°♄26'30	1.35010 AU
morning set	14657 Oct 17 13:20	1°♍30'36		asc. node	14658 Oct 07 08:20	27°♄26'59	
asc. node	14657 Oct 20 11:42	7°♍19'33			14658 Oct 08 14:41	0°♍	
max. Earth dist.	14657 Oct 21 22:46	10°♍18'06	1.33233 AU				
				superior conj	14658 Oct 09 17:39	2°♍17'28	0°22'03
superior conj	14657 Oct 25 21:14	18°♍32'23	0°48'45	minimum elong	14658 Oct 09 16:26	2°♍11'14	0°22'15
minimum elong	14657 Oct 25 19:06	18°♍21'02	0°49'04	evening rise	14658 Oct 17 08:04	18°♍06'40	
	14657 Oct 31 05:15	0°♎			14658 Oct 23 06:14	0°♎	
evening rise	14657 Nov 01 23:25	3°♎45'41		evening max el	14658 Nov 05 00:54	18°♎59'04	20°40'41
	14657 Nov 16 03:42	0°♏		desc. node	14658 Nov 08 22:50	22°♎12'39	
desc. node	14657 Nov 22 01:35	7°♏27'39		retrograde	14658 Nov 16 07:39	24°♎35'39	
evening max el	14657 Nov 23 04:49	8°♏36'57	22°12'30	evening set	14658 Nov 18 16:34	24°♎21'54	
retrograde	14657 Dec 05 21:16	14°♏53'49		inferior conj	14658 Nov 27 14:09	20°♎27'57	-5°11'23
evening set	14657 Dec 09 08:39	14°♏27'12		minimum elong	14658 Nov 27 04:41	20°♎41'33	5°08'18
inferior conj	14657 Dec 17 22:43	10°♏33'45	-5°57'46	min. Earth dist.	14658 Nov 28 17:05	19°♎49'09	0.54580 AU
minimum elong	14657 Dec 17 20:08	10°♏37'23	5°56'37	morning rise	14658 Dec 05 16:46	16°♎31'58	
min. Earth dist.	14657 Dec 17 11:18	10°♏49'46	0.54561 AU	direct	14658 Dec 10 02:07	15°♎50'41	
morning rise	14657 Dec 26 08:38	6°♏46'36		morning max el	14658 Dec 23 08:36	22°♎18'23	23°24'25
direct	14657 Dec 29 18:11	6°♏20'51			14658 Dec 30 00:49	0°♏	
morning max el	14658 Jan 10 20:11	12°♏09'20	21°37'50	asc. node	14659 Jan 03 08:39	6°♏23'07	
asc. node	14658 Jan 16 11:25	18°♏41'08		morning set	14659 Jan 15 19:53	0°♏05'35	
	14658 Jan 23 13:57	0°♐			14659 Jan 15 18:50	0°♐	
morning set	14658 Jan 31 08:10	15°♐20'27					
	14658 Feb 07 06:40	0°♑		superior conj	14659 Jan 22 17:01	14°♐59'40	1°31'15
				minimum elong	14659 Jan 22 18:34	15°♐08'05	1°31'56
superior conj	14658 Feb 07 12:42	0°♑31'30	1°18'54	max. Earth dist.	14659 Jan 25 16:52	21°♐23'15	1.33126 AU
minimum elong	14658 Feb 07 15:04	0°♑43'51	1°19'14		14659 Jan 29 21:17	0°♑	
max. Earth dist.	14658 Feb 11 21:57	9°♑30'37	1.34778 AU	evening rise	14659 Jan 30 11:58	1°♑13'20	
evening rise	14658 Feb 16 01:59	17°♑38'44		desc. node	14659 Feb 04 22:34	11°♑37'16	
desc. node	14658 Feb 18 01:59	21°♑23'41			14659 Feb 15 20:42	0°♒	
	14658 Feb 22 21:23	0°♓		evening max el	14659 Mar 05 19:32	22°♓53'13	27°22'24
	14658 Mar 14 21:42	0°♈			14659 Mar 16 16:07	0°♈	
evening max el	14658 Mar 23 06:16	9°♈24'44	26°42'23	retrograde	14659 Mar 19 10:30	0°♈22'39	
retrograde	14658 Apr 05 09:57	16°♈49'34			14659 Mar 22 02:15	30°♒♓	
evening set	14658 Apr 11 19:59	14°♈17'26		evening set	14659 Mar 26 04:02	27°♓53'12	
asc. node	14658 Apr 14 08:00	11°♈56'44		min. Earth dist.	14659 Mar 30 00:15	24°♓22'38	0.64606 AU
min. Earth dist.	14658 Apr 15 20:32	10°♈14'55	0.66318 AU	asc. node	14659 Apr 01 05:27	21°♓59'22	
inferior conj	14658 Apr 17 20:44	7°♈52'13	1°04'51	inferior conj	14659 Apr 01 12:34	21°♓40'05	0°05'39
minimum elong	14658 Apr 17 19:11	7°♈56'50	1°03'45	minimum elong	14659 Apr 01 12:24	21°♓40'30	0°05'20
morning rise	14658 Apr 23 19:32	2°♈13'45		transit middle	14659 Apr 01 12:24	21°♓40'30	0°05'20
direct	14658 Apr 26 19:15	1°♈24'13		transit begin	14659 Apr 01 09:30	21°♓48'21	
morning max el	14658 May 03 04:38	4°♈46'07	18°15'49	transit end	14659 Apr 01 15:18	21°♓32'40	
desc. node	14658 May 17 04:06	24°♈16'11		morning rise	14659 Apr 07 22:45	16°♓15'29	
	14658 May 20 18:29	0°♉		direct	14659 Apr 10 13:21	15°♓40'20	
morning set	14658 May 22 19:04	3°♉14'00		morning max el	14659 Apr 16 21:23	18°♓56'18	17°52'23
					14659 Apr 25 05:02	0°♉	
superior conj	14658 Jun 07 04:41	27°♉34'02	-2°03'21	morning set	14659 May 04 05:03	14°♉46'07	
minimum elong	14658 Jun 06 21:32	27°♉06'03	2°03'57	desc. node	14659 May 04 00:49	14°♉28'26	
max. Earth dist.	14658 Jun 08 13:38	29°♉42'42	1.45913 AU		14659 May 13 10:41	0°♉	
	14658 Jun 08 18:05	0°♊		superior conj	14659 May 17 22:07	7°♉12'27	-1°35'25
evening rise	14658 Jun 23 05:29	22°♊32'46		minimum elong	14659 May 17 13:23	6°♉37'33	1°35'24
	14658 Jun 28 00:25	0°♋		max. Earth dist.	14659 May 22 09:43	14°♉18'41	1.45417 AU
greatest brilliancy	14658 Jul 03 22:15	9°♋06'18	-0.8m		14659 Jun 01 12:14	0°♊	
asc. node	14658 Jul 11 06:28	19°♋44'19		evening rise	14659 Jun 02 19:30	1°♊59'53	
evening max el	14658 Jul 16 06:35	25°♋40'38	19°02'46	greatest brilliancy	14659 Jun 17 14:08	24°♊10'32	-0.6m
retrograde	14658 Jul 23 02:14	29°♋25'59			14659 Jun 21 16:55	0°♋	
evening set	14658 Jul 26 13:30	28°♋16'16		asc. node	14659 Jun 28 03:19	8°♋05'43	
inferior conj	14658 Aug 01 01:04	22°♋29'40	2°53'08	evening max el	14659 Jun 29 11:43	9°♋30'47	19°55'57
minimum elong	14658 Aug 01 02:44	22°♋24'19	2°52'11	retrograde	14659 Jul 07 00:51	13°♋47'29	
min. Earth dist.	14658 Aug 02 15:11	20°♋27'37	0.66667 AU	evening set	14659 Jul 10 21:56	12°♋20'32	
morning rise	14658 Aug 06 15:17	16°♋04'20		inferior conj	14659 Jul 16 05:11	6°♋21'00	3°07'44
direct	14658 Aug 12 19:03	13°♋26'25		minimum elong	14659 Jul 16 05:54	6°♋18'33	3°06'48
desc. node	14658 Aug 13 02:32	13°♋26'47		min. Earth dist.	14659 Jul 17 05:08	5°♋00'07	0.67924 AU
morning max el	14658 Aug 25 13:25	21°♋02'22	26°10'13	morning rise	14659 Jul 21 13:30	29°♊57'02	
	14658 Sep 02 07:45	0°♌			14659 Jul 21 12:10	30°♌♊	
	14658 Sep 22 11:14	0°♍					

direct	14659 Jul 27 06:30	27°☿26'54		inferior conj	14660 Jun 29 13:07	20°☿24'14	3°10'11
desc. node	14659 Jul 30 23:57	28°☿19'50		minimum elong	14660 Jun 29 12:52	20°☿25'08	3°09'10
	14659 Aug 02 20:44	0°♊		min. Earth dist.	14660 Jun 29 23:30	19°☿48'09	0.68717 AU
morning max el	14659 Aug 08 00:13	4°♊28'55	24°48'39	morning rise	14660 Jul 04 18:04	14°☿04'46	
	14659 Aug 27 15:19	0°♋		direct	14660 Jul 09 23:02	11°☿48'31	
morning set	14659 Sep 12 18:13	26°♋12'09		desc. node	14660 Jul 16 21:16	14°☿49'58	
	14659 Sep 14 21:22	0°♌		morning max el	14660 Jul 20 11:05	18°☿03'51	23°19'32
max. Earth dist.	14659 Sep 16 07:47	2°♌36'07	1.37187 AU		14660 Jul 30 10:46	0°♍	
					14660 Aug 19 17:08	0°♎	
superior conj	14659 Sep 23 03:39	15°♌31'24	-0°09'39	morning set	14660 Aug 24 03:03	7°♎14'26	
minimum elong	14659 Sep 23 04:16	15°♌34'24	0°09'22	max. Earth dist.	14660 Aug 28 05:49	14°♎14'23	1.39558 AU
behind sun begin	14659 Sep 22 22:50	15°♌07'55					
behind sun end	14659 Sep 23 09:41	16°♌00'57		superior conj	14660 Sep 04 23:27	28°♎05'46	-0°44'45
asc. node	14659 Sep 24 04:53	17°♌35'11		minimum elong	14660 Sep 05 02:47	28°♎21'10	0°44'19
	14659 Sep 30 09:38	0°♍			14660 Sep 06 00:02	0°♏	
evening rise	14659 Oct 01 12:14	2°♍14'03		asc. node	14660 Sep 10 01:26	7°♏40'56	
	14659 Oct 18 08:15	0°♎		evening rise	14660 Sep 14 09:09	16°♏00'51	
evening max el	14659 Oct 18 11:13	0°♎07'28	19°28'55		14660 Sep 21 21:13	0°♐	
desc. node	14659 Oct 26 20:11	4°♎52'13		evening max el	14660 Sep 30 10:40	12°♐05'16	18°39'21
retrograde	14659 Oct 28 02:40	4°♎57'04		retrograde	14660 Oct 08 14:58	16°♐12'53	
evening set	14659 Oct 30 00:04	4°♎46'44		evening set	14660 Oct 10 13:09	15°♐59'58	
inferior conj	14659 Nov 07 16:03	0°♎40'32	-3°39'05	desc. node	14660 Oct 12 17:35	15°♐16'19	
minimum elong	14659 Nov 07 07:04	0°♎55'00	3°35'08	inferior conj	14660 Oct 18 13:47	11°♐34'32	-1°51'57
	14659 Nov 08 17:06	30°♑♌		minimum elong	14660 Oct 18 09:14	11°♐43'03	1°49'32
min. Earth dist.	14659 Nov 10 02:13	29°♑07'03	0.55519 AU	min. Earth dist.	14660 Oct 21 17:09	9°♑14'10	0.57208 AU
morning rise	14659 Nov 15 11:59	26°♑16'04		morning rise	14660 Oct 26 01:57	6°♑33'03	
direct	14659 Nov 20 18:49	25°♑13'15		direct	14660 Nov 01 02:07	5°♑03'54	
	14659 Dec 02 04:51	0°♒		morning max el	14660 Nov 15 08:04	12°♑30'37	26°42'24
morning max el	14659 Dec 04 17:58	2°♒14'06	25°12'17		14660 Nov 29 00:57	0°♓	
asc. node	14659 Dec 21 05:45	24°♒51'30		asc. node	14660 Dec 07 02:45	13°♓54'37	
	14659 Dec 24 01:12	0°♓		morning set	14660 Dec 14 17:44	29°♓19'05	
morning set	14659 Dec 31 07:39	14°♓46'37			14660 Dec 15 01:21	0°♑	
superior conj	14660 Jan 07 01:45	29°♓37'26	1°37'16	superior conj	14660 Dec 21 12:49	14°♓18'47	1°37'12
minimum elong	14660 Jan 07 02:17	29°♓40'19	1°38'12	minimum elong	14660 Dec 21 12:16	14°♓15'45	1°38'13
	14660 Jan 07 05:51	0°♑		max. Earth dist.	14660 Dec 22 01:22	15°♓28'53	1.31261 AU
max. Earth dist.	14660 Jan 08 18:44	3°♑22'46	1.31937 AU	evening rise	14660 Dec 28 10:06	29°♓24'08	
evening rise	14660 Jan 14 07:32	15°♑10'30			14660 Dec 28 16:53	0°♑	
	14660 Jan 21 22:28	0°♒		desc. node	14661 Jan 08 15:59	21°♑06'59	
desc. node	14660 Jan 22 19:15	1°♒34'04			14661 Jan 14 02:30	0°♒	
	14660 Feb 10 19:13	0°♓		evening max el	14661 Jan 28 12:50	18°♒09'17	27°13'44
evening max el	14660 Feb 16 06:29	5°♓52'05	27°34'40	retrograde	14661 Feb 11 12:50	25°♒26'45	
retrograde	14660 Mar 01 03:58	13°♓18'26		evening set	14661 Feb 18 07:01	23°♒25'42	
evening set	14660 Mar 08 00:45	10°♓59'08		min. Earth dist.	14661 Feb 22 03:20	20°♒41'12	0.60387 AU
min. Earth dist.	14660 Mar 11 18:51	7°♓55'38	0.62582 AU	inferior conj	14661 Feb 25 07:41	17°♒59'43	-2°28'14
inferior conj	14660 Mar 14 17:23	5°♓05'47	-1°05'56	minimum elong	14661 Feb 25 13:07	17°♒48'11	2°25'49
minimum elong	14660 Mar 14 19:37	5°♓00'24	1°05'01	morning rise	14661 Mar 04 22:32	13°♒10'38	
asc. node	14660 Mar 18 02:54	2°♓03'10		asc. node	14661 Mar 05 00:21	13°♒09'26	
morning rise	14660 Mar 21 17:17	29°♒57'38		direct	14661 Mar 07 00:02	12°♒53'38	
	14660 Mar 21 14:38	30°♒♒		morning max el	14661 Mar 14 06:22	16°♒31'39	17°58'57
direct	14660 Mar 24 00:12	29°♒33'24			14661 Mar 23 17:41	0°♓	
	14660 Mar 26 09:04	0°♓		morning set	14661 Mar 29 20:04	10°♓59'17	
morning max el	14660 Mar 30 15:07	2°♓55'01	17°46'29	desc. node	14661 Apr 06 18:01	25°♓23'23	
morning set	14660 Apr 15 15:26	27°♓27'36					
	14660 Apr 17 02:17	0°♑		superior conj	14661 Apr 09 03:10	29°♓36'02	-0°19'07
desc. node	14660 Apr 19 21:27	4°♑52'29		minimum elong	14661 Apr 09 01:31	29°♓28'45	0°19'15
					14661 Apr 09 08:39	0°♑	
superior conj	14660 Apr 27 12:47	17°♑51'47	-0°58'03	max. Earth dist.	14661 Apr 16 15:58	12°♑26'00	1.42479 AU
minimum elong	14660 Apr 27 07:10	17°♑28'24	0°57'56	evening rise	14661 Apr 22 08:40	21°♑40'02	
max. Earth dist.	14660 May 04 03:00	28°♑37'49	1.44229 AU		14661 Apr 27 16:47	0°♒	
	14660 May 04 23:33	0°♒			14661 May 18 20:45	0°☿	
evening rise	14660 May 12 07:37	11°♒30'25		evening max el	14661 May 25 05:00	7°☿13'47	22°19'29
	14660 May 24 14:59	0°☿		asc. node	14661 May 31 21:21	12°☿14'33	
evening max el	14660 Jun 11 10:55	23°☿22'00	21°02'47	retrograde	14661 Jun 03 21:25	12°☿54'44	
asc. node	14660 Jun 14 00:17	25°☿40'55		evening set	14661 Jun 08 16:09	10°☿54'57	
retrograde	14660 Jun 19 23:50	28°☿19'00		inferior conj	14661 Jun 13 22:47	4°☿34'36	3°01'44
evening set	14660 Jun 24 07:24	26°☿35'07		minimum elong	14661 Jun 13 21:37	4°☿38'38	3°00'34

min. Earth dist.	14661 Jun 13 20:04	4°☿44'04	0.69030 AU	asc. node	14662 May 18 18:30	27°♊29'19	
	14661 Jun 17 11:14	30°♊11		evening set	14662 May 23 22:37	25°♊15'33	
morning rise	14661 Jun 19 02:55	28°♊21'45		min. Earth dist.	14662 May 28 16:40	19°♊41'38	0.68861 AU
direct	14661 Jun 23 19:25	26°♊23'34		inferior conj	14662 May 29 08:13	18°♊48'19	2°42'54
	14661 Jul 01 03:09	0°☿		minimum elong	14662 May 29 06:24	18°♊54'35	2°41'33
morning max el	14661 Jul 03 00:28	1°☿46'26	21°51'54	morning rise	14662 Jun 03 14:09	12°♊43'31	
desc. node	14661 Jul 03 18:30	2°☿32'32		direct	14662 Jun 07 18:18	11°♊05'29	
	14661 Jul 24 07:35	0°♊		morning max el	14662 Jun 15 19:31	15°♊39'39	20°32'54
morning set	14661 Aug 04 11:28	17°♊13'05		desc. node	14662 Jun 20 15:38	21°♊08'24	
max. Earth dist.	14661 Aug 10 07:46	26°♊43'11	1.41853 AU		14662 Jun 27 06:26	0°☿	
	14661 Aug 12 06:57	0°♊		morning set	14662 Jul 14 22:08	26°☿16'44	
					14662 Jul 17 07:37	0°♊	
superior conj	14661 Aug 18 00:44	9°♊50'38	-1°20'17	max. Earth dist.	14662 Jul 23 16:51	10°♊06'26	1.43795 AU
minimum elong	14661 Aug 18 06:58	10°♊17'59	1°19'52				
asc. node	14661 Aug 27 22:00	27°♊40'22		superior conj	14662 Jul 30 03:27	20°♊37'20	-1°51'14
evening rise	14661 Aug 28 19:07	29°♊17'37		minimum elong	14662 Jul 30 10:56	21°♊08'24	1°51'18
	14661 Aug 29 04:20	0°♊			14662 Aug 04 17:04	0°♊	
evening max el	14661 Sep 13 19:15	24°♊43'59	18°10'56	evening rise	14662 Aug 11 13:34	11°♊52'42	
retrograde	14661 Sep 20 22:21	28°♊22'07		asc. node	14662 Aug 14 18:35	17°♊29'13	
evening set	14661 Sep 23 02:45	28°♊02'12			14662 Aug 22 06:44	0°♊	
desc. node	14661 Sep 29 15:02	23°♊54'59		evening max el	14662 Aug 28 08:40	7°♊52'37	18°02'07
inferior conj	14661 Sep 30 09:15	23°♊15'30	-0°14'20	retrograde	14662 Sep 03 21:29	11°♊15'34	
minimum elong	14661 Sep 30 08:46	23°♊16'35	0°13'50	evening set	14662 Sep 06 09:49	10°♊44'59	
transit middle	14661 Sep 30 08:46	23°♊16'35	0°13'50	inferior conj	14662 Sep 12 23:51	5°♊38'35	1°03'30
transit begin	14661 Sep 30 07:00	23°♊20'26		minimum elong	14662 Sep 13 01:36	5°♊34'10	1°02'52
transit end	14661 Sep 30 10:32	23°♊12'43		min. Earth dist.	14662 Sep 15 23:52	2°♊38'57	0.61644 AU
min. Earth dist.	14661 Oct 03 15:49	20°♊25'05	0.59351 AU	desc. node	14662 Sep 16 12:33	2°♊09'01	
morning rise	14661 Oct 07 11:25	17°♊39'50			14662 Sep 19 01:56	30°♊	
direct	14661 Oct 13 22:53	15°♊44'02		morning rise	14662 Sep 19 14:45	29°♊37'09	
morning max el	14661 Oct 28 05:55	23°♊29'22	27°40'08	direct	14662 Sep 26 06:46	27°♊18'58	
	14661 Nov 03 02:41	0°♊			14662 Oct 04 02:12	0°♊	
	14661 Nov 22 05:28	0°♊		morning max el	14662 Oct 10 10:55	5°♊16'07	27°58'59
asc. node	14661 Nov 23 23:40	3°♊23'17			14662 Oct 29 01:04	0°♊	
morning set	14661 Nov 29 00:23	13°♊38'33		asc. node	14662 Nov 10 20:29	23°♊09'24	
max. Earth dist.	14661 Dec 05 09:27	27°♊35'15	1.31115 AU	morning set	14662 Nov 13 01:34	27°♊39'08	
					14662 Nov 14 04:39	0°♊	
superior conj	14661 Dec 06 00:20	28°♊58'21	1°31'12	max. Earth dist.	14662 Nov 18 15:08	9°♊31'34	1.31506 AU
minimum elong	14661 Dec 05 22:51	28°♊50'06	1°32'07				
	14661 Dec 06 11:21	0°♊		superior conj	14662 Nov 20 10:21	13°♊29'39	1°19'20
evening rise	14661 Dec 12 17:26	13°♊48'48		minimum elong	14662 Nov 20 08:14	13°♊17'56	1°20'02
	14661 Dec 20 17:55	0°♊		evening rise	14662 Nov 27 03:31	28°♊18'16	
desc. node	14661 Dec 26 12:50	10°♊07'02			14662 Nov 27 22:26	0°♊	
evening max el	14662 Jan 10 12:05	29°♊36'02	26°17'56	desc. node	14662 Dec 13 09:47	28°♊21'00	
	14662 Jan 10 22:20	0°♊			14662 Dec 14 13:15	0°♊	
retrograde	14662 Jan 24 11:10	6°♊41'44		evening max el	14662 Dec 23 02:49	10°♊10'51	24°52'26
evening set	14662 Jan 30 19:08	5°♊05'41		retrograde	14663 Jan 05 21:07	17°♊03'50	
min. Earth dist.	14662 Feb 04 01:32	2°♊28'38	0.58217 AU	evening set	14663 Jan 11 09:13	15°♊56'27	
inferior conj	14662 Feb 07 03:52	0°♊12'23	-3°55'01	min. Earth dist.	14663 Jan 16 14:42	13°♊11'02	0.56316 AU
minimum elong	14662 Feb 07 12:18	29°♊56'52	3°51'41	inferior conj	14663 Jan 19 03:14	11°♊34'33	-5°12'15
	14662 Feb 07 10:35	30°♊		minimum elong	14663 Jan 19 11:49	11°♊20'51	5°09'35
morning rise	14662 Feb 15 08:33	25°♊44'34		morning rise	14663 Jan 27 16:40	7°♊28'18	
direct	14662 Feb 17 08:43	25°♊31'02		direct	14663 Jan 29 22:23	7°♊14'21	
asc. node	14662 Feb 19 21:47	25°♊53'51		asc. node	14663 Feb 06 19:12	10°♊20'36	
morning max el	14662 Feb 25 15:20	29°♊35'41	18°31'21	morning max el	14663 Feb 08 13:55	11°♊54'56	19°25'48
	14662 Feb 26 01:03	0°♊			14663 Feb 20 18:20	0°♊	
morning set	14662 Mar 13 13:31	25°♊05'18		morning set	14663 Feb 25 15:38	9°♊32'45	
	14662 Mar 16 02:45	0°♊					
superior conj	14662 Mar 22 14:31	12°♊17'09	0°16'22	superior conj	14663 Mar 05 18:18	25°♊42'26	0°45'57
minimum elong	14662 Mar 22 15:38	12°♊22'21	0°16'04	minimum elong	14663 Mar 05 20:45	25°♊54'19	0°45'44
desc. node	14662 Mar 24 14:34	15°♊57'37			14663 Mar 07 23:41	0°♊	
max. Earth dist.	14662 Mar 30 00:47	25°♊35'07	1.40353 AU	desc. node	14663 Mar 11 11:06	6°♊31'10	
	14662 Apr 01 14:49	0°♊		max. Earth dist.	14663 Mar 12 07:17	8°♊03'42	1.38076 AU
evening rise	14662 Apr 03 06:01	2°♊44'11		evening rise	14663 Mar 16 00:12	14°♊41'10	
	14662 Apr 20 23:17	0°♊			14663 Mar 25 04:51	0°♊	
evening max el	14662 May 07 19:50	21°♊07'01	23°40'36		14663 Apr 15 17:49	0°♊	
retrograde	14662 May 18 16:14	27°♊29'21		evening max el	14663 Apr 20 09:22	5°♊00'53	24°59'40
				retrograde	14663 May 02 07:17	11°♊56'57	

asc. node	14663 May 05 15:46	11° Π 09'01		evening set	14664 Apr 20 22:11	23° \mathcal{B} 38'46	
evening set	14663 May 08 01:13	9° Π 32'14		asc. node	14664 Apr 21 13:08	23° \mathcal{B} 06'23	
min. Earth dist.	14663 May 12 11:13	4° Π 34'56	0.68216 AU	min. Earth dist.	14664 Apr 25 01:42	19° \mathcal{B} 16'50	0.67124 AU
inferior conj	14663 May 13 15:35	3° Π 01'37	2°13'38	inferior conj	14664 Apr 26 18:47	17° \mathcal{B} 09'37	1°33'21
minimum elong	14663 May 13 13:26	3° Π 08'43	2°12'11	minimum elong	14664 Apr 26 16:49	17° \mathcal{B} 15'44	1°32'02
	14663 May 16 01:07	30° \mathcal{R} 8		morning rise	14664 May 02 12:15	11° \mathcal{B} 24'31	
morning rise	14663 May 19 01:56	27° \mathcal{B} 06'04		direct	14664 May 05 17:38	10° \mathcal{B} 25'34	
direct	14663 May 22 18:16	25° \mathcal{B} 48'19		morning max el	14664 May 12 07:36	13° \mathcal{B} 56'32	18°37'06
morning max el	14663 May 29 22:02	29° \mathcal{B} 44'27	19°27'11	desc. node	14664 May 24 09:32	0° Π 06'31	
	14663 May 30 04:19	0° Π			14664 May 24 07:50	0° Π	
desc. node	14663 Jun 07 12:39	10° Π 23'24		morning set	14664 Jun 02 16:32	14° Π 33'30	
greatest brilliancy	14663 Jun 11 13:07	16° Π 10'57	-0.7m		14664 Jun 12 13:34	0° \mathcal{B}	
	14663 Jun 20 17:20	0° \mathcal{B}		max. Earth dist.	14664 Jun 18 02:44	8° \mathcal{B} 39'17	1.45849 AU
morning set	14663 Jun 24 00:57	5° \mathcal{B} 04'58					
max. Earth dist.	14663 Jul 06 08:05	24° \mathcal{B} 11'21	1.45168 AU	superior conj	14664 Jun 18 18:00	9° \mathcal{B} 38'51	-2°11'53
				minimum elong	14664 Jun 18 14:34	9° \mathcal{B} 25'29	2°12'49
superior conj	14663 Jul 10 06:56	0° \mathcal{Q} 26'49	-2°10'38		14664 Jul 01 16:47	0° \mathcal{Q}	
minimum elong	14663 Jul 10 11:05	0° \mathcal{Q} 43'23	2°11'27	evening rise	14664 Jul 04 08:29	4° \mathcal{Q} 12'48	
	14663 Jul 10 00:12	0° \mathcal{Q}		greatest brilliancy	14664 Jul 11 20:51	16° \mathcal{Q} 08'19	-0.9m
evening rise	14663 Jul 24 11:21	23° \mathcal{Q} 34'14		asc. node	14664 Jul 18 11:59	26° \mathcal{Q} 15'26	
	14663 Jul 28 08:08	0° \mathcal{P}			14664 Jul 21 04:23	0° \mathcal{P}	
asc. node	14663 Aug 01 15:15	7° \mathcal{P} 03'09		evening max el	14664 Jul 25 11:58	5° \mathcal{P} 05'11	18°39'18
evening max el	14663 Aug 11 23:17	21° \mathcal{P} 22'38	18°11'50	retrograde	14664 Aug 01 01:18	8° \mathcal{P} 38'21	
retrograde	14663 Aug 18 07:52	24° \mathcal{P} 44'06		evening set	14664 Aug 04 07:04	7° \mathcal{P} 38'31	
evening set	14663 Aug 21 04:40	23° \mathcal{P} 59'59		inferior conj	14664 Aug 09 22:33	2° \mathcal{P} 00'02	2°38'25
inferior conj	14663 Aug 27 05:37	18° \mathcal{P} 36'28	2°00'16	minimum elong	14664 Aug 10 00:38	1° \mathcal{P} 53'34	2°37'25
minimum elong	14663 Aug 27 08:01	18° \mathcal{P} 29'40	1°59'17		14664 Aug 11 13:30	30° \mathcal{R} 8	
min. Earth dist.	14663 Aug 29 17:55	15° \mathcal{P} 47'24	0.63832 AU	min. Earth dist.	14664 Aug 11 21:00	29° \mathcal{Q} 37'16	0.65741 AU
morning rise	14663 Sep 02 09:37	12° \mathcal{P} 19'12		morning rise	14664 Aug 15 17:10	25° \mathcal{Q} 35'37	
desc. node	14663 Sep 03 10:05	11° \mathcal{P} 35'14		desc. node	14664 Aug 20 07:35	23° \mathcal{Q} 08'11	
direct	14663 Sep 09 00:21	9° \mathcal{P} 46'04		direct	14664 Aug 22 01:59	22° \mathcal{Q} 56'34	
morning max el	14663 Sep 22 20:36	17° \mathcal{P} 46'07	27°40'08		14664 Sep 03 13:12	0° \mathcal{P}	
	14663 Oct 03 02:46	0° \mathcal{L}		morning max el	14664 Sep 04 07:52	0° \mathcal{P} 46'20	26°49'51
	14663 Oct 21 21:48	0° \mathcal{M}			14664 Sep 26 03:26	0° \mathcal{L}	
morning set	14663 Oct 27 18:57	11° \mathcal{M} 15'48		morning set	14664 Oct 10 01:34	24° \mathcal{L} 21'11	
asc. node	14663 Oct 28 17:15	13° \mathcal{M} 07'38			14664 Oct 12 23:17	0° \mathcal{M}	
max. Earth dist.	14663 Nov 01 14:29	21° \mathcal{M} 09'23	1.32447 AU	max. Earth dist.	14664 Oct 14 04:22	2° \mathcal{M} 24'54	1.33929 AU
				asc. node	14664 Oct 14 13:55	3° \mathcal{M} 12'55	
superior conj	14663 Nov 04 16:59	27° \mathcal{M} 47'58	1°01'36	superior conj	14664 Oct 18 17:52	11° \mathcal{M} 47'04	0°38'05
minimum elong	14663 Nov 04 14:40	27° \mathcal{M} 35'30	1°02'02	minimum elong	14664 Oct 18 16:01	11° \mathcal{M} 37'22	0°38'20
	14663 Nov 05 17:18	0° \mathcal{X}		evening rise	14664 Oct 26 00:37	27° \mathcal{M} 13'47	
evening rise	14663 Nov 11 14:33	12° \mathcal{X} 48'17			14664 Oct 27 08:18	0° \mathcal{X}	
	14663 Nov 20 04:12	0° \mathcal{Z}			14664 Nov 14 19:19	0° \mathcal{Z}	
desc. node	14663 Nov 30 06:51	15° \mathcal{Z} 32'04		evening max el	14664 Nov 15 02:08	0° \mathcal{Z} 17'00	21°31'22
evening max el	14663 Dec 04 12:26	20° \mathcal{Z} 12'14	23°10'54	desc. node	14664 Nov 16 04:02	1° \mathcal{Z} 18'00	
retrograde	14663 Dec 17 18:24	26° \mathcal{Z} 46'49		retrograde	14664 Nov 27 06:05	6° \mathcal{Z} 18'35	
evening set	14663 Dec 22 00:37	26° \mathcal{Z} 07'24		evening set	14664 Nov 30 04:20	5° \mathcal{Z} 59'02	
min. Earth dist.	14663 Dec 28 22:17	22° \mathcal{Z} 54'03	0.54972 AU	inferior conj	14664 Dec 08 22:58	2° \mathcal{Z} 07'01	-5°45'19
inferior conj	14663 Dec 30 06:56	22° \mathcal{Z} 07'02	-5°56'39	minimum elong	14664 Dec 08 16:42	2° \mathcal{Z} 15'49	5°43'30
minimum elong	14663 Dec 30 09:43	22° \mathcal{Z} 03'01	5°55'30	min. Earth dist.	14664 Dec 09 04:10	1° \mathcal{Z} 59'43	0.54448 AU
morning rise	14664 Jan 07 20:20	18° \mathcal{Z} 16'40			14664 Dec 12 21:23	30° \mathcal{R} 8	
direct	14664 Jan 10 17:01	17° \mathcal{Z} 57'16		morning rise	14664 Dec 17 05:41	28° \mathcal{X} 18'18	
morning max el	14664 Jan 21 22:37	23° \mathcal{Z} 20'39	20°43'27	direct	14664 Dec 21 01:07	27° \mathcal{X} 46'46	
asc. node	14664 Jan 24 16:35	26° \mathcal{Z} 17'20			14664 Dec 28 15:33	0° \mathcal{Z}	
	14664 Jan 27 13:24	0° \mathcal{A}		morning max el	14665 Jan 02 17:05	3° \mathcal{Z} 53'25	22°21'53
morning set	14664 Feb 09 23:18	24° \mathcal{A} 12'29		asc. node	14665 Jan 10 13:51	13° \mathcal{Z} 26'14	
	14664 Feb 12 18:10	0° \mathcal{H}			14665 Jan 20 01:40	0° \mathcal{A}	
superior conj	14664 Feb 17 10:18	9° \mathcal{H} 40'03	1°08'49	morning set	14665 Jan 24 10:08	8° \mathcal{A} 57'43	
minimum elong	14664 Feb 17 12:55	9° \mathcal{H} 53'23	1°08'55	superior conj	14665 Jan 31 10:59	24° \mathcal{A} 00'02	1°24'56
max. Earth dist.	14664 Feb 22 15:20	20° \mathcal{H} 02'35	1.35897 AU	minimum elong	14665 Jan 31 13:03	24° \mathcal{A} 11'01	1°25'24
desc. node	14664 Feb 26 07:37	27° \mathcal{H} 00'29			14665 Feb 03 07:38	0° \mathcal{H}	
evening rise	14664 Feb 26 12:37	27° \mathcal{H} 23'37		max. Earth dist.	14665 Feb 04 05:33	1° \mathcal{H} 52'48	1.34017 AU
	14664 Feb 27 22:49	0° \mathcal{Y}		evening rise	14665 Feb 08 15:46	10° \mathcal{H} 42'34	
	14664 Mar 17 13:35	0° \mathcal{B}		desc. node	14665 Feb 12 04:10	17° \mathcal{H} 21'39	
evening max el	14664 Apr 01 22:51	18° \mathcal{B} 51'18	26°09'27		14665 Feb 19 09:24	0° \mathcal{Y}	
retrograde	14664 Apr 14 17:35	26° \mathcal{B} 09'57					

	14665 Mar 13 01:04	0°♄				14666 Jan 26 01:12	0°♄	
evening max el	14665 Mar 15 12:36	2°♄31'43	27°02'28	desc. node		14666 Jan 30 00:46	7°♄29'08	
retrograde	14665 Mar 28 22:09	10°♄00'28				14666 Feb 12 22:29	0°♄	
evening set	14665 Apr 04 11:36	7°♄28'40		evening max el		14666 Feb 26 01:20	15°♄50'06	27°31'28
asc. node	14665 Apr 08 10:32	3°♄38'41		retrograde		14666 Mar 11 19:45	23°♄18'37	
min. Earth dist.	14665 Apr 08 10:04	3°♄40'01	0.65625 AU	evening set		14666 Mar 18 15:07	20°♄52'55	
inferior conj	14665 Apr 10 15:32	1°♄07'21	0°41'18	min. Earth dist.		14666 Mar 22 10:14	17°♄34'17	0.63776 AU
minimum elong	14665 Apr 10 14:28	1°♄10'27	0°40'28	inferior conj		14666 Mar 25 03:05	14°♄47'10	-0°23'11
	14665 Apr 11 15:20	30°♄		minimum elong		14666 Mar 25 03:48	14°♄45'17	0°23'03
morning rise	14665 Apr 16 18:51	25°♄34'26		asc. node		14666 Mar 26 07:58	13°♄33'33	
direct	14665 Apr 19 14:26	24°♄51'32		morning rise		14666 Mar 31 18:49	9°♄28'52	
morning max el	14665 Apr 25 22:26	28°♄09'52	18°03'44	direct		14666 Apr 03 05:57	8°♄58'45	
	14665 Apr 27 15:52	0°♄		morning max el		14666 Apr 09 15:53	12°♄15'56	17°47'38
desc. node	14665 May 11 06:19	20°♄10'17				14666 Apr 21 22:56	0°♄	
morning set	14665 May 14 10:30	25°♄19'41		morning set		14666 Apr 26 07:34	7°♄23'39	
	14665 May 17 07:37	0°♄		desc. node		14666 Apr 28 03:00	10°♄28'11	
superior conj	14665 May 29 04:14	18°♄55'24	-1°53'14	superior conj		14666 May 09 05:42	28°♄57'01	-1°20'12
minimum elong	14665 May 28 19:37	18°♄21'27	1°53'32	minimum elong		14666 May 08 21:58	28°♄25'35	1°20'04
max. Earth dist.	14665 May 31 22:44	23°♄16'02	1.45789 AU			14666 May 09 21:15	0°♄	
	14665 Jun 05 06:25	0°♄		max. Earth dist.		14666 May 14 17:55	7°♄46'48	1.44996 AU
evening rise	14665 Jun 14 06:53	13°♄57'18		evening rise		14666 May 24 17:58	23°♄20'33	
	14665 Jun 24 18:30	0°♄				14666 May 29 03:00	0°♄	
greatest brilliancy	14665 Jun 27 00:45	3°♄22'54	-0.7m			14666 Jun 19 10:02	0°♄	
asc. node	14665 Jul 05 08:47	14°♄58'22		evening max el		14666 Jun 21 23:06	2°♄45'35	20°22'58
evening max el	14665 Jul 08 20:24	18°♄54'22	19°23'34	asc. node		14666 Jun 22 05:40	3°♄01'51	
retrograde	14665 Jul 15 22:39	22°♄51'36		retrograde		14666 Jun 29 21:31	7°♄18'04	
evening set	14665 Jul 19 13:58	21°♄34'45		evening set		14666 Jul 03 23:03	5°♄43'46	
inferior conj	14665 Jul 24 23:21	15°♄42'46	3°00'54			14666 Jul 08 23:20	30°♄	
minimum elong	14665 Jul 25 00:39	15°♄38'31	2°59'57	inferior conj		14666 Jul 09 05:21	29°♄39'26	3°10'10
min. Earth dist.	14665 Jul 26 07:30	13°♄57'11	0.67260 AU	minimum elong		14666 Jul 09 05:39	29°♄38'24	3°09'12
morning rise	14665 Jul 30 10:45	9°♄17'28		min. Earth dist.		14666 Jul 09 23:29	28°♄37'20	0.68323 AU
direct	14665 Aug 05 10:18	6°♄41'39		morning rise		14666 Jul 14 11:56	23°♄17'19	
desc. node	14665 Aug 07 05:02	6°♄53'43		direct		14666 Jul 20 00:03	20°♄52'22	
morning max el	14665 Aug 17 18:49	14°♄05'11	25°36'57	desc. node		14666 Jul 25 02:24	22°♄31'15	
	14665 Aug 30 18:10	0°♄		morning max el		14666 Jul 31 05:16	27°♄35'04	24°11'08
	14665 Sep 18 22:17	0°♄				14666 Aug 02 11:51	0°♄	
morning set	14665 Sep 22 17:46	6°♄46'43				14666 Aug 24 09:35	0°♄	
max. Earth dist.	14665 Sep 26 08:34	13°♄28'59	1.35895 AU	morning set		14666 Sep 04 15:19	18°♄22'23	
asc. node	14665 Oct 01 10:31	23°♄21'22		max. Earth dist.		14666 Sep 08 07:22	24°♄48'21	1.38188 AU
						14666 Sep 11 04:14	0°♄	
superior conj	14665 Oct 02 10:17	25°♄20'13	0°09'10	superior conj		14666 Sep 15 14:49	8°♄19'14	-0°24'14
minimum elong	14665 Oct 02 09:44	25°♄17'25	0°09'23	minimum elong		14666 Sep 15 16:30	8°♄27'14	0°23'53
behind sun begin	14665 Oct 02 04:37	24°♄51'46		asc. node		14666 Sep 18 07:05	13°♄29'25	
behind sun end	14665 Oct 02 14:51	25°♄43'06		evening rise		14666 Sep 24 09:08	25°♄29'52	
	14665 Oct 04 17:32	0°♄				14666 Sep 26 16:05	0°♄	
evening rise	14665 Oct 10 07:38	11°♄29'41		evening max el		14666 Oct 10 20:37	22°♄28'55	19°05'10
	14665 Oct 20 00:43	0°♄		retrograde		14666 Oct 19 19:52	26°♄59'17	
evening max el	14665 Oct 28 04:15	10°♄58'14	20°07'31	desc. node		14666 Oct 20 22:40	26°♄55'21	
desc. node	14665 Nov 03 01:18	15°♄12'47		evening set		14666 Oct 21 16:45	26°♄48'20	
retrograde	14665 Nov 07 18:10	16°♄14'17		inferior conj		14666 Oct 30 02:56	22°♄34'15	-2°53'42
evening set	14665 Nov 09 20:21	16°♄02'54		minimum elong		14666 Oct 29 19:39	22°♄46'42	2°50'13
inferior conj	14665 Nov 18 17:14	12°♄05'28	-4°36'06	min. Earth dist.		14666 Nov 01 22:08	20°♄39'40	0.56164 AU
minimum elong	14665 Nov 18 07:08	12°♄20'33	4°32'19	morning rise		14666 Nov 06 19:53	17°♄54'49	
min. Earth dist.	14665 Nov 20 11:08	11°♄02'48	0.54875 AU	direct		14666 Nov 12 10:51	16°♄41'19	
morning rise	14665 Nov 26 16:58	7°♄59'16		morning max el		14666 Nov 26 13:25	23°♄53'01	25°53'48
direct	14665 Dec 01 12:10	7°♄09'13				14666 Dec 02 02:58	0°♄	
morning max el	14665 Dec 15 02:52	13°♄52'09	24°11'10	asc. node		14666 Dec 15 08:07	20°♄14'57	
	14665 Dec 27 13:16	0°♄				14666 Dec 20 09:42	0°♄	
asc. node	14665 Dec 28 11:02	1°♄29'58		morning set		14666 Dec 24 09:22	8°♄20'14	
morning set	14666 Jan 08 22:04	23°♄41'49						
	14666 Jan 11 19:46	0°♄		superior conj		14666 Dec 31 03:25	23°♄13'29	1°37'57
superior conj	14666 Jan 15 17:26	8°♄33'18	1°34'33	minimum elong		14666 Dec 31 03:29	23°♄13'50	1°38'57
minimum elong	14666 Jan 15 18:34	8°♄39'30	1°35'21	max. Earth dist.		14667 Jan 01 08:10	25°♄52'54	1.31595 AU
max. Earth dist.	14666 Jan 18 03:38	13°♄48'30	1.32563 AU			14667 Jan 03 05:06	0°♄	
evening rise	14666 Jan 23 06:12	24°♄28'13		evening rise		14667 Jan 07 05:04	8°♄33'32	

desc. node	14667 Jan 16 21:28	27°  17'03	evening rise	14667 Dec 22 09:54	22°  52'10	
	14667 Jan 18 10:47	0° 		14667 Dec 25 20:03	0° 	
evening max el	14667 Feb 08 10:48	28°  33'05 27°29'57	desc. node	14668 Jan 03 18:16	16°   37'24	
	14667 Feb 10 00:51	0° 		14668 Jan 12 13:00	0° 	
retrograde	14667 Feb 22 09:23	5°  55'11	evening max el	14668 Jan 21 14:15	10°  28'55 26°54'00	
evening set	14667 Mar 01 06:02	3°  42'51	retrograde	14668 Feb 04 13:58	17°  41'45	
min. Earth dist.	14667 Mar 05 00:30	0°  48'38 0.61670 AU	evening set	14668 Feb 11 05:05	15°  50'15	
	14667 Mar 05 22:15	30°  48'38	min. Earth dist.	14668 Feb 15 04:17	13°  41'056 0.59452 AU	
inferior conj	14667 Mar 08 02:10	28°  00'35 -1°39'44	inferior conj	14668 Feb 18 09:10	10°  43'759 -3°05'07	
minimum elong	14667 Mar 08 05:41	27°  52'31 1°38'10	minimum elong	14668 Feb 18 16:01	10°  43'18 3°02'09	
asc. node	14667 Mar 13 05:25	23°  57'24	morning rise	14668 Feb 26 06:17	5°  58'05	
morning rise	14667 Mar 15 08:22	23°  00'04	direct	14668 Feb 28 06:38	5°  43'00	
direct	14667 Mar 17 12:47	22°  39'12	asc. node	14668 Feb 28 02:52	5°  43'05	
morning max el	14667 Mar 24 08:56	26°  06'11 17°49'25	morning max el	14668 Mar 06 22:05	9°  30'43 18°10'14	
	14667 Mar 27 17:13	0° 		14668 Mar 20 06:03	0° 	
morning set	14667 Apr 09 02:24	20°  28'40	morning set	14668 Mar 22 13:05	4°  16'51	
	14667 Apr 14 10:56	0° 	desc. node	14668 Mar 31 20:11	21°  28'47	
desc. node	14667 Apr 14 23:36	0°  55'40				
			superior conj	14668 Apr 01 06:25	22°  14'45 -0°03'29	
superior conj	14667 Apr 20 06:30	10°  04'04 -0°41'21	minimum elong	14668 Apr 01 06:07	22°  13'25 0°03'43	
minimum elong	14667 Apr 20 02:38	9°  47'38 0°41'19	behind sun begin	14668 Mar 31 22:41	21°  40'04	
max. Earth dist.	14667 Apr 27 10:00	21°  56'06 1.43550 AU	behind sun end	14668 Apr 01 13:33	22°  46'41	
	14667 May 02 11:04	0° 		14668 Apr 05 16:03	0° 	
evening rise	14667 May 04 10:07	3°  04'15	max. Earth dist.	14668 Apr 08 21:14	5°  29'10 1.41605 AU	
	14667 May 22 13:29	0° 	evening rise	14668 Apr 13 19:23	13°  36'30	
evening max el	14667 Jun 04 19:54	16°  36'40 21°34'30		14668 Apr 24 08:22	0° 	
asc. node	14667 Jun 09 02:39	20°  12'45		14668 May 17 00:50	0° 	
retrograde	14667 Jun 13 20:02	21°  52'00	evening max el	14668 May 17 12:13	0°  28'46 22°53'45	
evening set	14667 Jun 18 08:24	20°  00'53	asc. node	14668 May 25 23:45	6°  15'32	
inferior conj	14667 Jun 23 14:14	13°  45'41 3°07'53	retrograde	14668 May 27 16:45	6°  28'32	
minimum elong	14667 Jun 23 13:34	13°  47'59 3°06'49	evening set	14668 Jun 01 16:25	4°  22'18	
min. Earth dist.	14667 Jun 23 18:54	13°  29'20 0.68909 AU		14668 Jun 05 12:41	30°  48'11	
morning rise	14667 Jun 28 18:32	7°  29'04	min. Earth dist.	14668 Jun 06 15:46	28°  27'08 0.69013 AU	
direct	14667 Jul 03 18:11	5°  20'22	inferior conj	14668 Jun 07 00:02	27°  58'24 2°55'00	
desc. node	14667 Jul 11 23:42	9°  23'41	minimum elong	14668 Jun 06 22:34	28°  03'31 2°53'46	
morning max el	14667 Jul 13 16:54	11°  21'04 22°41'41	morning rise	14668 Jun 12 04:38	21°  48'49	
	14667 Jul 28 14:53	0° 	direct	14668 Jun 16 15:43	19°  59'19	
morning set	14667 Aug 16 13:55	28°  05'735	morning max el	14668 Jun 25 08:33	25°  00'55 21°16'57	
	14667 Aug 17 05:09	0° 	desc. node	14668 Jun 27 20:53	27°  42'18	
max. Earth dist.	14667 Aug 21 06:59	6°  48'34 1.40559 AU		14668 Jun 29 19:39	0° 	
				14668 Jul 21 00:18	0° 	
superior conj	14667 Aug 29 03:14	20°  33'18 -1°00'00	morning set	14668 Jul 26 12:16	8°  30'47	
minimum elong	14667 Aug 29 07:51	20°  54'11 0°59'32	max. Earth dist.	14668 Aug 02 11:44	19°  40'48 1.42733 AU	
	14667 Sep 03 06:20	0° 		14668 Aug 08 16:33	0° 	
asc. node	14667 Sep 05 03:37	3°  32'49				
evening rise	14667 Sep 08 01:53	9°  05'11	superior conj	14668 Aug 09 19:16	1°  53'49 -1°34'20	
	14667 Sep 20 02:27	0° 	minimum elong	14668 Aug 10 02:25	2°  24'22 1°34'05	
evening max el	14667 Sep 24 00:23	4°  44'39 18°24'45	evening rise	14668 Aug 21 05:55	22°  05'52	
retrograde	14667 Oct 01 16:46	8°  38'31	asc. node	14668 Aug 22 00:12	23°  28'16	
evening set	14667 Oct 03 17:08	8°  23'09		14668 Aug 25 15:43	0° 	
desc. node	14667 Oct 07 20:07	6°  27'52	evening max el	14668 Sep 06 11:27	17°  36'53 18°04'51	
inferior conj	14667 Oct 11 10:02	3°  48'17 -1°08'30	retrograde	14668 Sep 13 07:23	21°  07'06	
minimum elong	14667 Oct 11 07:23	3°  53'35 1°06'58	evening set	14668 Sep 15 14:54	20°  43'11	
min. Earth dist.	14667 Oct 14 16:03	1°  12'54 0.58078 AU	inferior conj	14668 Sep 22 14:05	15°  48'01 0°21'16	
	14667 Oct 16 08:05	30°  48'11	minimum elong	14668 Sep 22 14:46	15°  46'25 0°21'11	
morning rise	14667 Oct 18 18:09	28°  31'18	desc. node	14668 Sep 23 17:36	14°  43'38	
direct	14667 Oct 24 23:38	26°  50'56	min. Earth dist.	14668 Sep 25 18:50	12°  50'46 0.60321 AU	
	14667 Nov 02 21:54	0° 	morning rise	14668 Sep 29 11:28	9°  59'48	
morning max el	14667 Nov 08 06:56	4°  26'16 27°11'35	direct	14668 Oct 06 01:34	7°  53'32	
	14667 Nov 26 23:55	0° 	morning max el	14668 Oct 20 08:15	15°  45'50 27°52'58	
asc. node	14667 Dec 02 05:05	9°  29'53		14668 Oct 31 23:59	0° 	
morning set	14667 Dec 08 18:15	22°  29'47'50	asc. node	14668 Nov 18 01:59	29°  06'32	
	14667 Dec 12 01:43	0° 		14668 Nov 18 12:45	0° 	
			morning set	14668 Nov 21 22:51	6°  59'49	
superior conj	14667 Dec 15 14:54	7°  54'29 1°35'23	max. Earth dist.	14668 Nov 27 23:22	20°  29'47 1.31208 AU	
minimum elong	14667 Dec 15 13:56	7°  49'05 1°36'22				
max. Earth dist.	14667 Dec 15 15:59	8°  00'36 1.31135 AU	superior conj	14668 Nov 29 02:01	22°  31'02 1°26'54	

minimum elong	14668 Nov 29 00:13	22° ♊ 21'03	1°27'44	minimum elong	14669 Nov 13 08:37	6° ♊ 45'22	1°13'08
	14668 Dec 02 10:35	0° ♋		evening rise	14669 Nov 20 05:21	21° ♊ 49'20	
evening rise	14668 Dec 05 18:37	7° ♋ 18'58			14669 Nov 24 02:36	0° ♋	
	14668 Dec 17 09:18	0° ♌		desc. node	14669 Dec 07 12:10	23° ♋ 09'16	
desc. node	14668 Dec 20 15:10	5° ♌ 19'32			14669 Dec 13 02:05	0° ♌	
evening max el	14669 Jan 02 09:39	21° ♌ 32'04	25°44'35	evening max el	14669 Dec 14 21:38	1° ♌ 50'15	24°10'20
retrograde	14669 Jan 16 07:42	28° ♌ 33'34		retrograde	14669 Dec 28 12:20	8° ♌ 36'24	
evening set	14669 Jan 22 08:20	27° ♌ 09'23		evening set	14670 Jan 02 12:27	7° ♌ 41'46	
min. Earth dist.	14669 Jan 26 22:29	24° ♌ 30'51	0.57352 AU	min. Earth dist.	14670 Jan 08 09:12	4° ♌ 46'43	0.55652 AU
inferior conj	14669 Jan 29 20:40	22° ♌ 29'41	-4°30'12	inferior conj	14670 Jan 10 11:18	3° ♌ 30'39	-5°36'40
minimum elong	14669 Jan 30 05:44	22° ♌ 14'00	4°26'55	minimum elong	14670 Jan 10 18:12	3° ♌ 20'09	5°34'44
morning rise	14669 Feb 07 06:01	18° ♌ 11'30			14670 Jan 17 08:38	30° ♌	
direct	14669 Feb 09 07:17	17° ♌ 58'28		morning rise	14670 Jan 19 01:48	29° ♌ 31'54	
asc. node	14669 Feb 14 00:20	19° ♌ 11'36		direct	14670 Jan 21 12:36	29° ♌ 16'21	
morning max el	14669 Feb 18 03:15	22° ♌ 17'34	18°51'44		14670 Jan 25 12:03	0° ♍	
	14669 Feb 24 04:37	0° ♍		asc. node	14670 Jan 31 21:44	4° ♍ 18'49	
morning set	14669 Mar 06 10:40	18° ♍ 33'06		morning max el	14670 Jan 31 20:16	4° ♍ 15'15	19°55'55
	14669 Mar 12 07:14	0° ♎			14670 Feb 17 02:28	0° ♍	
				morning set	14670 Feb 18 15:32	3° ♍ 07'05	
superior conj	14669 Mar 15 01:19	5° ♎ 16'18	0°29'41	superior conj	14670 Feb 26 10:48	18° ♍ 56'45	0°56'28
minimum elong	14669 Mar 15 03:10	5° ♎ 25'02	0°29'23	minimum elong	14670 Feb 26 13:25	19° ♍ 09'50	0°56'21
desc. node	14669 Mar 18 16:43	12° ♎ 03'11			14670 Mar 04 03:50	0° ♎	
max. Earth dist.	14669 Mar 22 04:08	18° ♎ 18'18	1.39383 AU	max. Earth dist.	14670 Mar 04 10:42	0° ♎ 32'13	1.37129 AU
evening rise	14669 Mar 26 01:48	25° ♎ 03'59		desc. node	14670 Mar 05 13:15	2° ♎ 35'36	
	14669 Mar 29 00:33	0° ♏		evening rise	14670 Mar 08 04:14	7° ♎ 22'06	
	14669 Apr 18 01:15	0° ♐			14670 Mar 21 20:36	0° ♏	
evening max el	14669 Apr 30 02:12	14° ♐ 22'17	24°14'55	evening max el	14670 Apr 12 15:50	28° ♏ 16'03	25°30'56
retrograde	14669 May 11 10:14	21° ♐ 00'52			14670 Apr 14 12:06	0° ♐	
asc. node	14669 May 12 20:58	20° ♐ 51'43		retrograde	14670 Apr 24 23:19	5° ♐ 22'45	
evening set	14669 May 16 21:27	18° ♐ 42'07		asc. node	14670 Apr 29 18:16	3° ♐ 47'35	
min. Earth dist.	14669 May 21 11:53	13° ♐ 23'35	0.68640 AU	evening set	14670 Apr 30 21:51	2° ♐ 55'00	
inferior conj	14669 May 22 08:52	12° ♐ 12'42	2°31'47		14670 May 03 18:10	30° ♏	
minimum elong	14669 May 22 06:51	12° ♐ 19'32	2°30'24	min. Earth dist.	14670 May 05 05:03	28° ♏ 12'41	0.67810 AU
morning rise	14669 May 27 16:20	6° ♐ 11'27		inferior conj	14670 May 06 14:43	26° ♏ 24'23	1°57'56
direct	14669 May 31 15:18	4° ♐ 42'10		minimum elong	14670 May 06 12:34	26° ♏ 31'18	1°56'31
morning max el	14669 Jun 08 06:39	8° ♐ 59'07	20°03'03	morning rise	14670 May 12 03:45	20° ♏ 32'49	
desc. node	14669 Jun 14 17:58	16° ♐ 36'17		direct	14670 May 15 15:22	19° ♏ 23'09	
	14669 Jun 24 05:23	0° ♑		morning max el	14670 May 22 12:10	23° ♏ 06'55	19°03'44
morning set	14669 Jul 05 17:08	17° ♑ 20'50			14670 May 28 07:30	0° ♐	
	14669 Jul 13 20:13	0° ♒		desc. node	14670 Jun 01 14:56	6° ♐ 04'07	
max. Earth dist.	14669 Jul 15 23:00	3° ♒ 21'04	1.44459 AU	greatest brilliancy	14670 Jun 04 14:03	10° ♐ 27'30	-0.7m
				morning set	14670 Jun 14 22:53	26° ♐ 19'00	
superior conj	14669 Jul 21 11:52	12° ♒ 15'14	-2°01'20		14670 Jun 17 08:03	0° ♑	
minimum elong	14669 Jul 21 18:37	12° ♒ 42'43	2°01'43	max. Earth dist.	14670 Jun 28 16:03	17° ♑ 37'50	1.45556 AU
	14669 Aug 01 03:27	0° ♒					
evening rise	14669 Aug 03 16:10	4° ♒ 19'10		superior conj	14670 Jul 01 06:54	21° ♑ 44'39	-2°13'40
asc. node	14669 Aug 08 20:50	13° ♒ 11'18		minimum elong	14670 Jul 01 08:04	21° ♑ 49'15	2°14'38
	14669 Aug 20 04:24	0° ♓			14670 Jul 06 12:02	0° ♒	
evening max el	14669 Aug 21 01:50	0° ♓ 55'44	18°04'05	evening rise	14670 Jul 16 03:37	15° ♒ 33'34	
retrograde	14669 Aug 27 11:40	4° ♓ 16'11			14670 Jul 25 01:34	0° ♓	
evening set	14669 Aug 30 03:33	3° ♓ 40'11		asc. node	14670 Jul 26 17:30	2° ♓ 36'29	
	14669 Sep 03 23:23	30° ♒		evening max el	14670 Aug 04 16:01	14° ♓ 32'01	18°21'26
inferior conj	14669 Sep 05 11:36	28° ♓ 26'32	1°30'00	retrograde	14670 Aug 11 01:22	17° ♓ 56'28	
minimum elong	14669 Sep 05 13:48	28° ♓ 20'44	1°29'10	evening set	14670 Aug 14 02:02	17° ♓ 05'43	
min. Earth dist.	14669 Sep 08 07:13	25° ♓ 28'55	0.62603 AU	inferior conj	14670 Aug 19 22:31	11° ♓ 35'39	2°18'33
desc. node	14669 Sep 10 15:06	23° ♓ 17'51		minimum elong	14670 Aug 20 00:53	11° ♓ 28'42	2°17'32
morning rise	14669 Sep 11 21:45	22° ♓ 17'19		min. Earth dist.	14670 Aug 22 05:03	8° ♓ 56'19	0.64693 AU
direct	14669 Sep 18 14:05	19° ♓ 51'19		morning rise	14670 Aug 25 22:19	5° ♓ 14'44	
morning max el	14669 Oct 02 15:22	27° ♓ 51'19	27°55'14	desc. node	14670 Aug 28 12:36	3° ♓ 33'55	
	14669 Oct 04 16:45	0° ♔		direct	14670 Sep 01 11:09	2° ♓ 37'59	
	14669 Oct 25 18:43	0° ♕		morning max el	14670 Sep 15 01:46	10° ♓ 34'34	27°22'05
asc. node	14669 Nov 04 22:48	18° ♕ 58'27			14670 Sep 30 10:13	0° ♔	
morning set	14669 Nov 05 21:03	20° ♕ 50'58			14670 Oct 18 05:28	0° ♕	
	14669 Nov 10 05:58	0° ♌		morning set	14670 Oct 20 10:09	4° ♕ 14'29	
max. Earth dist.	14669 Nov 11 02:35	1° ♌ 50'57	1.31831 AU	asc. node	14670 Oct 22 19:30	8° ♕ 59'50	
				max. Earth dist.	14670 Oct 24 22:08	13° ♕ 18'42	1.33015 AU
superior conj	14669 Nov 13 10:53	6° ♌ 57'47	1°12'33				

superior conj	14670 Oct 28 15:20	21° \mathbb{M} 08'22	0°52'20	superior conj	14671 Oct 12 12:58	4° \mathbb{M} 57'06	0°26'26
minimum elong	14670 Oct 28 13:08	20° \mathbb{M} 56'36	0°52'40	minimum elong	14671 Oct 12 11:33	4° \mathbb{M} 49'49	0°26'40
	14670 Nov 01 17:58	0° \mathbb{X}		evening rise	14671 Oct 20 01:13	20° \mathbb{M} 40'03	
evening rise	14670 Nov 04 16:10	6° \mathbb{X} 17'48			14671 Oct 24 15:13	0° \mathbb{X}	
	14670 Nov 17 03:15	0° \mathbb{Z}		evening max el	14671 Nov 08 01:54	22° \mathbb{X} 04'07	20°53'08
desc. node	14670 Nov 24 09:16	9° \mathbb{Z} 46'45		desc. node	14671 Nov 11 06:27	24° \mathbb{X} 48'13	
evening max el	14670 Nov 26 07:48	11° \mathbb{Z} 48'00	22°27'22	retrograde	14671 Nov 19 14:27	27° \mathbb{X} 47'39	
retrograde	14670 Dec 09 04:05	18° \mathbb{Z} 09'50		evening set	14671 Nov 22 02:20	27° \mathbb{X} 32'43	
evening set	14670 Dec 12 20:23	17° \mathbb{Z} 40'10		inferior conj	14671 Nov 30 23:32	23° \mathbb{X} 39'32	-5°22'00
min. Earth dist.	14670 Dec 20 15:21	14° \mathbb{Z} 09'35	0.54639 AU	minimum elong	14671 Nov 30 14:39	23° \mathbb{X} 52'12	5°19'14
inferior conj	14670 Dec 21 08:31	13° \mathbb{Z} 45'27	-5°59'27	min. Earth dist.	14671 Dec 01 20:59	23° \mathbb{X} 08'55	0.54517 AU
minimum elong	14670 Dec 21 07:22	13° \mathbb{Z} 47'04	5°58'25	morning rise	14671 Dec 09 03:11	19° \mathbb{X} 46'04	
morning rise	14670 Dec 29 19:31	9° \mathbb{Z} 58'06		direct	14671 Dec 13 08:53	19° \mathbb{X} 07'34	
direct	14671 Jan 02 01:35	9° \mathbb{Z} 34'11		morning max el	14671 Dec 26 12:08	25° \mathbb{X} 30'01	23°08'06
morning max el	14671 Jan 13 22:26	15° \mathbb{Z} 16'04	21°23'10		14671 Dec 30 16:09	0° \mathbb{Z}	
asc. node	14671 Jan 18 19:04	20° \mathbb{Z} 47'46		asc. node	14672 Jan 05 16:18	8° \mathbb{Z} 21'10	
	14671 Jan 24 20:05	0° \approx			14672 Jan 17 07:06	0° \approx	
morning set	14671 Feb 03 00:49	17° \approx 49'42		morning set	14672 Jan 18 12:18	2° \approx 34'36	
	14671 Feb 08 19:30	0° \mathbb{H}					
superior conj	14671 Feb 10 06:50	3° \mathbb{H} 04'22	1°16'27	superior conj	14672 Jan 25 10:15	17° \approx 30'19	1°29'47
minimum elong	14671 Feb 10 09:17	3° \mathbb{H} 17'05	1°16'43	minimum elong	14672 Jan 25 11:57	17° \approx 39'28	1°30'25
max. Earth dist.	14671 Feb 14 21:20	12° \mathbb{H} 26'20	1.35055 AU	max. Earth dist.	14672 Jan 28 14:53	24° \approx 17'09	1.33338 AU
evening rise	14671 Feb 18 23:19	20° \mathbb{H} 20'40			14672 Jan 31 09:26	0° \mathbb{H}	
desc. node	14671 Feb 20 09:47	23° \mathbb{H} 01'41		evening rise	14672 Feb 02 07:35	3° \mathbb{H} 50'57	
	14671 Feb 24 06:34	0° \mathbb{Y}		desc. node	14672 Feb 07 06:22	13° \mathbb{H} 17'07	
	14671 Mar 15 19:42	0° \mathbb{B}			14672 Feb 17 01:44	0° \mathbb{Y}	
evening max el	14671 Mar 26 05:37	12° \mathbb{B} 03'38	26°34'28	evening max el	14672 Mar 07 18:56	25° \mathbb{Y} 35'03	27°18'07
retrograde	14671 Apr 08 07:04	19° \mathbb{B} 27'05			14672 Mar 13 02:11	0° \mathbb{B}	
evening set	14671 Apr 14 15:50	16° \mathbb{B} 54'57		retrograde	14672 Mar 21 08:43	3° \mathbb{B} 04'54	
asc. node	14671 Apr 16 15:38	15° \mathbb{B} 04'46		evening set	14672 Mar 28 01:19	0° \mathbb{B} 34'29	
min. Earth dist.	14671 Apr 18 17:06	12° \mathbb{B} 47'35	0.66541 AU		14672 Mar 28 18:46	30° \mathbb{R} \mathbb{Y}	
inferior conj	14671 Apr 20 15:29	10° \mathbb{B} 28'35	1°12'48	min. Earth dist.	14672 Mar 31 21:59	26° \mathbb{Y} 59'30	0.64876 AU
minimum elong	14671 Apr 20 13:47	10° \mathbb{B} 33'40	1°11'37	asc. node	14672 Apr 02 13:02	25° \mathbb{Y} 13'03	
morning rise	14671 Apr 26 12:48	4° \mathbb{B} 48'25		inferior conj	14672 Apr 03 08:38	24° \mathbb{Y} 18'58	0°15'30
direct	14671 Apr 29 14:00	3° \mathbb{B} 56'30		minimum elong	14672 Apr 03 08:12	24° \mathbb{Y} 20'10	0°15'00
morning max el	14671 May 06 00:15	7° \mathbb{B} 20'12	18°20'48	transit middle	14672 Apr 03 08:12	24° \mathbb{Y} 20'10	0°15'00
desc. node	14671 May 19 11:48	25° \mathbb{B} 56'45		transit begin	14672 Apr 03 07:09	24° \mathbb{Y} 23'05	
	14671 May 22 01:27	0° \mathbb{II}		transit end	14672 Apr 03 09:16	24° \mathbb{Y} 17'15	
morning set	14671 May 26 00:57	6° \mathbb{II} 18'58		morning rise	14672 Apr 09 16:58	18° \mathbb{Y} 52'17	
	14671 Jun 10 01:55	0° \mathbb{E}		direct	14672 Apr 12 08:48	18° \mathbb{Y} 15'16	
superior conj	14671 Jun 10 15:23	0° \mathbb{E} 52'32	-2°06'12	morning max el	14672 Apr 18 16:36	21° \mathbb{Y} 31'29	17°54'49
minimum elong	14671 Jun 10 09:02	0° \mathbb{E} 27'46	2°06'55		14672 Apr 25 08:19	0° \mathbb{B}	
max. Earth dist.	14671 Jun 11 12:10	2° \mathbb{E} 13'40	1.45921 AU	desc. node	14672 May 05 08:33	16° \mathbb{B} 06'58	
evening rise	14671 Jun 26 14:22	25° \mathbb{E} 47'12		morning set	14672 May 06 06:52	17° \mathbb{B} 39'26	
	14671 Jun 29 06:59	0° \mathbb{Q}			14672 May 13 19:07	0° \mathbb{II}	
greatest brilliancy	14671 Jul 06 12:45	11° \mathbb{Q} 15'07	-0.8m	superior conj	14672 May 20 06:32	10° \mathbb{II} 24'20	-1°40'28
asc. node	14671 Jul 13 14:14	21° \mathbb{Q} 37'20		minimum elong	14672 May 19 21:38	9° \mathbb{II} 48'59	1°40'31
evening max el	14671 Jul 19 03:08	28° \mathbb{Q} 18'12	18°56'08	max. Earth dist.	14672 May 24 08:14	16° \mathbb{II} 50'07	1.45534 AU
	14671 Jul 21 00:57	0° \mathbb{P}			14672 Jun 01 19:28	0° \mathbb{E}	
retrograde	14671 Jul 25 20:54	2° \mathbb{P} 00'04		evening rise	14672 Jun 05 06:06	5° \mathbb{E} 17'33	
evening set	14671 Jul 29 06:43	0° \mathbb{P} 52'56		greatest brilliancy	14672 Jun 19 15:22	26° \mathbb{E} 57'14	-0.6m
	14671 Jul 30 10:43	30° \mathbb{R} \mathbb{Q}			14672 Jun 21 18:09	0° \mathbb{Q}	
inferior conj	14671 Aug 03 19:11	25° \mathbb{Q} 08'16	2°49'43	asc. node	14672 Jun 29 11:04	10° \mathbb{Q} 04'41	
minimum elong	14671 Aug 03 20:58	25° \mathbb{Q} 02'34	2°48'44	evening max el	14672 Jul 01 09:07	12° \mathbb{Q} 08'02	19°47'04
min. Earth dist.	14671 Aug 05 11:25	23° \mathbb{Q} 00'39	0.66440 AU	retrograde	14672 Jul 08 19:16	16° \mathbb{Q} 19'30	
morning rise	14671 Aug 09 10:28	18° \mathbb{Q} 42'58		evening set	14672 Jul 12 14:48	14° \mathbb{Q} 55'13	
desc. node	14671 Aug 15 10:04	16° \mathbb{Q} 04'48		inferior conj	14672 Jul 17 22:31	8° \mathbb{Q} 57'35	3°06'20
direct	14671 Aug 15 15:34	16° \mathbb{Q} 04'36		minimum elong	14672 Jul 17 23:24	8° \mathbb{Q} 54'38	3°05'23
morning max el	14671 Aug 28 13:12	23° \mathbb{Q} 44'38	26°21'07	min. Earth dist.	14672 Jul 19 00:35	7° \mathbb{Q} 30'04	0.67767 AU
	14671 Sep 03 03:27	0° \mathbb{P}		morning rise	14672 Jul 23 07:33	2° \mathbb{Q} 33'01	
	14671 Sep 23 19:01	0° \mathbb{L}		direct	14672 Jul 29 02:16	0° \mathbb{Q} 01'13	
morning set	14671 Oct 03 11:05	17° \mathbb{L} 03'55		desc. node	14672 Aug 01 07:30	0° \mathbb{Q} 40'43	
max. Earth dist.	14671 Oct 07 08:04	24° \mathbb{L} 28'55	1.34720 AU	morning max el	14672 Aug 10 00:05	7° \mathbb{Q} 09'30	25°01'26
asc. node	14671 Oct 09 16:08	29° \mathbb{L} 06'53			14672 Aug 27 19:47	0° \mathbb{P}	
	14671 Oct 10 02:42	0° \mathbb{M}		morning set	14672 Sep 14 19:54	29° \mathbb{P} 09'25	
					14672 Sep 15 07:16	0° \mathbb{L}	

max. Earth dist.	14672 Sep 18 09:18	5°♄35'47	1.36844 AU		14673 Jul 31 10:01	0°♄	
					14673 Aug 21 00:46	0°♄	
superior conj	14672 Sep 25 00:44	18°♄16'11	-0°04'36	morning set	14673 Aug 27 08:09	10°♄20'21	
minimum elong	14672 Sep 25 01:00	18°♄17'32	0°04'19	max. Earth dist.	14673 Aug 31 07:08	17°♄07'15	1.39205 AU
behind sun begin	14672 Sep 24 18:42	17°♄46'32			14673 Sep 07 10:42	0°♄	
behind sun end	14672 Sep 25 07:19	18°♄48'35					
asc. node	14672 Sep 25 12:42	19°♄15'13		superior conj	14673 Sep 07 22:57	0°♄57'03	-0°39'19
	14672 Sep 30 21:05	0°♄		minimum elong	14673 Sep 08 01:49	1°♄10'28	0°38'54
evening rise	14672 Oct 03 06:12	4°♄48'42		asc. node	14673 Sep 12 09:15	9°♄21'25	
	14672 Oct 17 16:32	0°♄		evening rise	14673 Sep 17 04:24	18°♄39'55	
evening max el	14672 Oct 20 10:06	3°♄05'26	19°38'13		14673 Sep 23 03:45	0°♄	
desc. node	14672 Oct 28 03:45	7°♄48'11		evening max el	14673 Oct 03 07:54	14°♄56'29	18°45'23
retrograde	14672 Oct 30 07:22	8°♄01'48		retrograde	14673 Oct 11 16:45	19°♄09'28	
evening set	14672 Nov 01 05:30	7°♄51'26		evening set	14673 Oct 13 14:25	18°♄57'11	
inferior conj	14672 Nov 09 23:09	3°♄47'53	-3°54'44	desc. node	14673 Oct 15 01:09	18°♄32'21	
minimum elong	14672 Nov 09 13:41	4°♄02'47	3°50'44	inferior conj	14673 Oct 21 17:40	14°♄34'51	-2°07'56
min. Earth dist.	14672 Nov 12 05:35	2°♄22'06	0.55325 AU	minimum elong	14673 Oct 21 12:24	14°♄44'29	2°05'13
	14672 Nov 16 13:22	30°♄		min. Earth dist.	14673 Oct 24 19:26	12°♄20'41	0.56921 AU
morning rise	14672 Nov 17 20:02	29°♄28'25		morning rise	14673 Oct 29 07:08	9°♄39'11	
direct	14672 Nov 23 00:00	28°♄29'01		direct	14673 Nov 04 05:13	8°♄14'02	
	14672 Nov 29 08:07	0°♄		morning max el	14673 Nov 18 10:21	15°♄37'01	26°30'46
morning max el	14672 Dec 06 21:23	5°♄25'46	24°56'53		14673 Nov 30 01:48	0°♄	
asc. node	14672 Dec 22 13:27	26°♄43'43		asc. node	14673 Dec 09 10:30	15°♄42'27	
	14672 Dec 24 09:23	0°♄			14673 Dec 16 13:53	0°♄	
morning set	14673 Jan 02 00:10	17°♄16'46		morning set	14673 Dec 17 10:38	1°♄50'44	
	14673 Jan 07 19:23	0°♄					
				superior conj	14673 Dec 24 05:20	16°♄48'32	1°37'36
superior conj	14673 Jan 08 18:30	2°♄07'26	1°36'44	minimum elong	14673 Dec 24 04:57	16°♄46'22	1°38'36
minimum elong	14673 Jan 08 19:11	2°♄11'12	1°37'39	max. Earth dist.	14673 Dec 24 21:59	18°♄21'24	1.31331 AU
max. Earth dist.	14673 Jan 10 15:48	6°♄15'40	1.32080 AU		14673 Dec 30 05:31	0°♄	
evening rise	14673 Jan 16 01:56	17°♄45'39		evening rise	14673 Dec 31 03:36	1°♄57'18	
	14673 Jan 22 08:00	0°♄		desc. node	14674 Jan 10 23:42	22°♄53'52	
desc. node	14673 Jan 24 02:59	3°♄16'55			14674 Jan 15 05:52	0°♄	
	14673 Feb 10 12:21	0°♄		evening max el	14674 Jan 31 13:45	21°♄03'46	27°19'06
evening max el	14673 Feb 18 06:25	8°♄39'27	27°34'54	retrograde	14674 Feb 14 13:32	28°♄22'24	
retrograde	14673 Mar 04 03:24	16°♄06'51		evening set	14674 Feb 21 08:31	26°♄18'21	
evening set	14673 Mar 10 23:54	13°♄45'39		min. Earth dist.	14674 Feb 25 04:14	23°♄31'32	0.60720 AU
min. Earth dist.	14673 Mar 14 18:09	10°♄38'23	0.62894 AU	inferior conj	14674 Feb 28 08:02	20°♄47'55	-2°15'17
inferior conj	14673 Mar 17 15:19	7°♄48'41	-0°54'17	minimum elong	14674 Feb 28 12:57	20°♄37'15	2°13'04
minimum elong	14673 Mar 17 17:07	7°♄44'15	0°53'35	asc. node	14674 Mar 07 07:58	16°♄05'36	
asc. node	14673 Mar 20 10:29	5°♄12'15		morning rise	14674 Mar 07 20:38	15°♄55'39	
morning rise	14673 Mar 24 13:03	2°♄37'50		direct	14674 Mar 09 22:47	15°♄37'45	
direct	14673 Mar 26 20:56	2°♄12'13		morning max el	14674 Mar 17 02:12	19°♄12'39	17°55'51
morning max el	14673 Apr 02 10:23	5°♄32'29	17°46'14		14674 Mar 24 23:43	0°♄	
	14673 Apr 18 11:19	0°♄		morning set	14674 Apr 01 16:17	13°♄36'51	
morning set	14673 Apr 18 14:01	0°♄11'46		desc. node	14674 Apr 09 01:49	26°♄59'27	
desc. node	14673 Apr 22 05:13	6°♄29'34			14674 Apr 10 18:42	0°♄	
superior conj	14673 Apr 30 17:40	20°♄53'40	-1°03'59	superior conj	14674 Apr 12 04:34	2°♄28'02	-0°24'53
minimum elong	14673 Apr 30 11:27	20°♄27'56	1°03'51	minimum elong	14674 Apr 12 02:22	2°♄18'26	0°24'59
	14673 May 06 07:55	0°♄		max. Earth dist.	14674 Apr 19 15:41	15°♄05'42	1.42772 AU
max. Earth dist.	14673 May 07 01:54	1°♄12'01	1.44447 AU	evening rise	14674 Apr 25 15:52	24°♄46'52	
evening rise	14673 May 15 17:26	14°♄44'48			14674 Apr 28 23:59	0°♄	
	14673 May 25 20:08	0°♄			14674 May 19 19:03	0°♄	
evening max el	14673 Jun 14 09:14	25°♄59'14	20°52'06	evening max el	14674 May 28 04:02	9°♄50'57	22°07'39
asc. node	14673 Jun 16 07:59	27°♄47'38		asc. node	14674 Jun 03 05:02	14°♄31'41	
	14673 Jun 19 13:34	0°♄		retrograde	14674 Jun 06 16:07	15°♄25'04	
retrograde	14673 Jun 22 18:16	0°♄49'38		evening set	14674 Jun 11 09:13	13°♄27'28	
	14673 Jun 25 17:58	30°♄		inferior conj	14674 Jun 16 15:34	7°♄08'30	3°03'40
evening set	14673 Jun 27 00:13	29°♄08'18		minimum elong	14674 Jun 16 14:33	7°♄12'06	3°02'33
inferior conj	14673 Jul 02 06:02	22°♄59'06	3°10'31	min. Earth dist.	14674 Jun 16 14:47	7°♄11'15	0.69015 AU
minimum elong	14673 Jul 02 05:55	22°♄59'30	3°09'32	morning rise	14674 Jun 21 19:41	0°♄54'40	
min. Earth dist.	14673 Jul 02 18:26	22°♄16'07	0.68633 AU		14674 Jun 23 00:54	30°♄	
morning rise	14673 Jul 07 11:20	16°♄38'49		direct	14674 Jun 26 14:04	28°♄53'37	
direct	14673 Jul 12 18:12	14°♄20'04			14674 Jun 30 10:55	0°♄	
desc. node	14673 Jul 19 04:53	16°♄57'36		morning max el	14674 Jul 05 23:32	4°♄23'57	22°04'36
morning max el	14673 Jul 23 10:44	20°♄42'47	23°32'51	desc. node	14674 Jul 06 02:09	4°♄30'30	

	14674 Jul 25 12:55	0°♎		minimum elong	14675 May 31 23:26	21°♊27'40	2°45'06
morning set	14674 Aug 07 20:19	20°♎28'42		morning rise	14675 Jun 06 06:41	15°♊15'43	
max. Earth dist.	14674 Aug 13 08:34	29°♎29'22	1.41529 AU	direct	14675 Jun 10 12:37	13°♊34'43	
	14674 Aug 13 15:54	0°♏		morning max el	14675 Jun 18 17:41	18°♊15'36	20°43'58
				desc. node	14675 Jun 22 23:19	22°♊59'11	
superior conj	14674 Aug 21 03:20	12°♏50'14	-1°15'02		14675 Jun 28 08:26	0°♋	
minimum elong	14674 Aug 21 09:11	13°♏16'04	1°14'36	morning set	14675 Jul 18 09:43	29°♋39'06	
asc. node	14674 Aug 30 05:49	29°♏22'06			14675 Jul 18 15:07	0°♌	
	14674 Aug 30 14:00	0°♐		max. Earth dist.	14675 Jul 26 16:47	12°♌45'44	1.43536 AU
evening rise	14674 Aug 31 16:21	2°♐02'09					
evening max el	14674 Sep 16 15:26	27°♐29'47	18°13'52	superior conj	14675 Aug 02 09:36	23°♌45'44	-1°47'06
	14674 Sep 19 19:12	0°♑		minimum elong	14675 Aug 02 17:07	24°♌17'12	1°47'04
retrograde	14674 Sep 23 21:33	1°♑11'31			14675 Aug 06 02:12	0°♒	
evening set	14674 Sep 26 00:53	0°♑52'51		evening rise	14675 Aug 14 13:29	14°♒44'27	
	14674 Sep 28 04:01	30°♒♐		asc. node	14675 Aug 17 02:24	19°♒12'47	
desc. node	14674 Oct 01 22:38	27°♐23'14			14675 Aug 23 09:52	0°♑	
inferior conj	14674 Oct 03 10:03	26°♐09'04	-0°28'00	evening max el	14675 Aug 31 04:21	10°♑34'20	18°02'11
minimum elong	14674 Oct 03 09:03	26°♐11'12	0°27'14	retrograde	14675 Sep 06 18:43	13°♑58'49	
min. Earth dist.	14674 Oct 06 16:46	23°♐22'00	0.59017 AU	evening set	14675 Sep 09 05:45	13°♑30'05	
morning rise	14674 Oct 10 13:49	20°♐38'04		inferior conj	14675 Sep 15 22:03	8°♑26'24	0°53'01
direct	14674 Oct 16 23:57	18°♐46'15		minimum elong	14675 Sep 15 23:35	8°♑22'38	0°52'31
morning max el	14674 Oct 31 07:06	26°♐28'50	27°33'57	desc. node	14675 Sep 18 20:09	5°♑34'33	
	14674 Nov 03 15:13	0°♑		min. Earth dist.	14675 Sep 18 23:26	5°♑26'47	0.61303 AU
	14674 Nov 23 14:41	0°♒		morning rise	14675 Sep 22 14:38	2°♑27'59	
asc. node	14674 Nov 26 07:27	5°♒07'42		direct	14675 Sep 29 06:17	0°♑12'46	
morning set	14674 Dec 01 17:57	16°♒12'17		morning max el	14675 Oct 13 11:20	8°♑08'55	27°58'40
	14674 Dec 08 01:06	0°♓			14675 Oct 30 05:34	0°♑	
				asc. node	14675 Nov 13 04:18	24°♑51'24	
superior conj	14674 Dec 08 16:55	1°♓28'23	1°32'30	morning set	14675 Nov 15 20:07	0°♒15'55	
minimum elong	14674 Dec 08 15:34	1°♓20'50	1°33'26		14675 Nov 15 17:02	0°♒	
max. Earth dist.	14674 Dec 08 06:13	0°♓28'36	1.31106 AU	max. Earth dist.	14675 Nov 21 12:30	12°♒26'43	1.31413 AU
evening rise	14674 Dec 15 10:23	16°♓20'24					
	14674 Dec 22 03:08	0°♈		superior conj	14675 Nov 23 03:18	16°♒01'00	1°21'32
desc. node	14674 Dec 28 20:32	11°♈59'18		minimum elong	14675 Nov 23 01:15	15°♒49'40	1°22'15
	14675 Jan 10 23:54	0°♉			14675 Nov 29 11:07	0°♓	
evening max el	14675 Jan 13 14:12	2°♉37'54	26°28'16	evening rise	14675 Nov 29 20:11	0°♓49'07	
retrograde	14675 Jan 27 13:24	9°♉45'10			14675 Dec 15 11:54	0°♈	
evening set	14675 Feb 02 23:34	8°♉04'58		desc. node	14675 Dec 15 17:28	0°♈20'56	
min. Earth dist.	14675 Feb 07 03:46	5°♉27'51	0.58534 AU	evening max el	14675 Dec 26 06:00	13°♈19'12	25°06'32
inferior conj	14675 Feb 10 07:06	3°♉06'49	-3°42'06	retrograde	14676 Jan 09 01:26	20°♈14'40	
minimum elong	14675 Feb 10 15:11	2°♉51'38	3°38'48	evening set	14676 Jan 14 17:10	19°♈02'49	
	14675 Feb 14 21:32	30°♈♏		min. Earth dist.	14676 Jan 19 18:04	16°♈19'50	0.56567 AU
morning rise	14675 Feb 18 09:57	28°♈35'48		inferior conj	14676 Jan 22 09:37	14°♈36'32	-5°02'04
direct	14675 Feb 20 10:03	28°♈21'57		minimum elong	14676 Jan 22 18:30	14°♈22'04	4°59'12
asc. node	14675 Feb 22 05:27	28°♈33'44		morning rise	14676 Jan 30 22:17	10°♈27'28	
	14675 Feb 25 14:16	0°♉		direct	14676 Feb 02 02:32	10°♈13'56	
morning max el	14675 Feb 28 12:21	2°♉21'46	18°25'11	asc. node	14676 Feb 09 02:53	12°♈45'29	
morning set	14675 Mar 16 08:06	27°♉38'11		morning max el	14676 Feb 11 12:47	14°♈48'34	19°16'16
	14675 Mar 17 13:46	0°♊			14676 Feb 22 02:39	0°♉	
				morning set	14676 Feb 28 09:09	12°♉03'04	
superior conj	14675 Mar 25 13:03	15°♊01'04	0°11'21				
minimum elong	14675 Mar 25 13:51	15°♊04'45	0°11'02	superior conj	14676 Mar 07 14:42	28°♉20'48	0°41'52
behind sun begin	14675 Mar 25 08:36	14°♊40'37		minimum elong	14676 Mar 07 17:02	28°♉32'02	0°41'37
behind sun end	14675 Mar 25 19:06	15°♊28'50			14676 Mar 08 11:17	0°♊	
desc. node	14675 Mar 26 22:21	17°♊33'03		desc. node	14676 Mar 12 18:53	8°♊06'59	
max. Earth dist.	14675 Apr 02 01:15	28°♊21'24	1.40684 AU	max. Earth dist.	14676 Mar 14 07:45	10°♊55'07	1.38410 AU
	14675 Apr 03 00:20	0°♋		evening rise	14676 Mar 18 01:13	17°♊31'41	
evening rise	14675 Apr 06 09:59	5°♋42'03			14676 Mar 25 12:29	0°♋	
	14675 Apr 22 03:32	0°♌			14676 Apr 15 12:55	0°♌	
evening max el	14675 May 10 19:11	23°♌43'32	23°28'31	evening max el	14676 Apr 22 08:42	7°♌37'04	24°48'19
retrograde	14675 May 21 11:27	0°♍00'09		retrograde	14676 May 04 03:12	14°♌29'15	
asc. node	14675 May 21 02:12	29°♌59'30		asc. node	14676 May 06 23:27	13°♌54'30	
	14675 May 21 07:02	0°♍		evening set	14676 May 09 19:26	12°♌05'49	
	14675 May 21 15:52	30°♌♌		min. Earth dist.	14676 May 14 06:29	7°♌03'05	0.68339 AU
evening set	14675 May 26 16:09	27°♌48'07		inferior conj	14676 May 15 08:58	5°♌35'18	2°18'47
min. Earth dist.	14675 May 31 11:28	22°♌08'48	0.68914 AU	minimum elong	14676 May 15 06:50	5°♌42'23	2°17'21
inferior conj	14675 Jun 01 01:10	21°♌21'40	2°46'25		14676 May 20 07:04	30°♌♋	

morning rise	14676 May 20 18:29	29°♄38'16		minimum elong	14677 Apr 29 10:51	19°♄50'39	1°38'52
direct	14676 May 24 12:28	28°♄17'39		morning rise	14677 May 05 05:07	13°♄57'22	
	14676 May 29 01:40	0°♄		direct	14677 May 08 12:04	12°♄55'44	
morning max el	14676 May 31 19:04	2°♄18'52	19°36'01	morning max el	14677 May 15 03:36	16°♄29'45	18°43'26
desc. node	14676 Jun 08 20:20	12°♄08'55			14677 May 25 12:25	0°♄	
greatest brilliancy	14676 Jun 13 10:53	18°♄43'30	-0.6m	desc. node	14677 May 26 17:14	1°♄48'06	
	14676 Jun 20 23:52	0°♄		morning set	14677 Jun 06 00:46	17°♄44'22	
morning set	14676 Jun 26 12:22	8°♄25'45			14677 Jun 13 21:28	0°♄	
max. Earth dist.	14676 Jul 08 06:54	26°♄44'03	1.45004 AU	max. Earth dist.	14677 Jun 21 00:56	11°♄08'21	1.45797 AU
	14676 Jul 10 08:25	0°♄					
				superior conj	14677 Jun 22 04:55	12°♄57'39	-2°13'00
superior conj	14676 Jul 12 16:18	3°♄42'42	-2°08'46	minimum elong	14677 Jun 22 02:40	12°♄48'55	2°14'00
minimum elong	14676 Jul 12 21:19	4°♄02'49	2°09'27		14677 Jul 03 00:38	0°♄	
evening rise	14676 Jul 26 14:39	26°♄34'23		evening rise	14677 Jul 07 15:24	7°♄21'30	
	14676 Jul 28 15:43	0°♄		greatest brilliancy	14677 Jul 14 00:16	17°♄32'18	-0.9m
asc. node	14676 Aug 02 23:03	8°♄49'08		asc. node	14677 Jul 20 19:44	28°♄04'47	
evening max el	14676 Aug 13 18:58	24°♄01'19	18°09'13		14677 Jul 22 03:26	0°♄	
retrograde	14676 Aug 20 03:39	27°♄22'13		evening max el	14677 Jul 28 08:07	7°♄42'17	18°34'10
evening set	14676 Aug 22 23:07	26°♄40'21		retrograde	14677 Aug 03 20:10	11°♄12'44	
inferior conj	14676 Aug 29 01:47	21°♄19'21	1°52'53	evening set	14677 Aug 07 00:35	10°♄15'21	
minimum elong	14676 Aug 29 04:11	21°♄12'42	1°51'55	inferior conj	14677 Aug 12 17:15	4°♄39'07	2°33'42
min. Earth dist.	14676 Aug 31 16:05	18°♄27'25	0.63522 AU	minimum elong	14677 Aug 12 19:26	4°♄32'27	2°32'40
morning rise	14676 Sep 04 07:20	15°♄03'45		min. Earth dist.	14677 Aug 14 17:53	2°♄11'33	0.65480 AU
desc. node	14676 Sep 04 17:39	14°♄44'38			14677 Aug 16 16:46	30°♄	
direct	14676 Sep 10 22:37	12°♄32'05		morning rise	14677 Aug 18 13:09	28°♄15'25	
morning max el	14676 Sep 24 20:27	20°♄32'47	27°45'04	desc. node	14677 Aug 22 15:08	25°♄56'43	
	14676 Oct 03 00:21	0°♄		direct	14677 Aug 24 23:11	25°♄36'33	
	14676 Oct 22 07:16	0°♄			14677 Sep 03 12:40	0°♄	
morning set	14676 Oct 29 14:49	13°♄56'20		morning max el	14677 Sep 07 07:30	3°♄28'42	26°59'01
asc. node	14676 Oct 30 01:04	14°♄47'53			14677 Sep 27 09:17	0°♄	
max. Earth dist.	14676 Nov 03 12:53	24°♄06'47	1.32269 AU	morning set	14677 Oct 12 23:14	27°♄06'58	
					14677 Oct 14 10:53	0°♄	
superior conj	14676 Nov 06 10:33	0°♄21'25	1°04'41	asc. node	14677 Oct 16 21:44	4°♄52'28	
minimum elong	14676 Nov 06 08:14	0°♄08'51	1°05'09	max. Earth dist.	14677 Oct 17 04:14	5°♄25'19	1.33672 AU
	14676 Nov 06 06:36	0°♄					
evening rise	14676 Nov 13 07:10	15°♄19'00		superior conj	14677 Oct 21 12:28	14°♄24'04	0°42'01
	14676 Nov 20 12:02	0°♄		minimum elong	14677 Oct 21 10:30	14°♄13'42	0°42'19
desc. node	14676 Dec 01 14:30	17°♄42'37		evening rise	14677 Oct 28 17:30	29°♄45'41	
evening max el	14676 Dec 06 15:54	23°♄23'29	23°26'20		14677 Oct 28 20:12	0°♄	
	14676 Dec 19 04:01	0°♄			14677 Nov 15 01:27	0°♄	
retrograde	14676 Dec 20 00:41	0°♄01'41		evening max el	14677 Nov 18 04:30	3°♄26'00	21°45'30
	14676 Dec 20 21:27	30°♄		desc. node	14677 Nov 18 11:38	3°♄43'18	
evening set	14676 Dec 24 11:38	29°♄18'34		retrograde	14677 Nov 30 13:07	9°♄33'05	
min. Earth dist.	14676 Dec 31 02:24	26°♄10'29	0.55119 AU	evening set	14677 Dec 03 15:45	9°♄11'20	
inferior conj	14677 Jan 01 15:55	25°♄15'48	-5°53'09	inferior conj	14677 Dec 12 08:57	5°♄19'11	-5°51'04
minimum elong	14677 Jan 01 19:58	25°♄09'53	5°51'51	minimum elong	14677 Dec 12 03:54	5°♄26'15	5°49'32
morning rise	14677 Jan 10 05:53	21°♄23'37		min. Earth dist.	14677 Dec 12 08:22	5°♄20'01	0.54468 AU
direct	14677 Jan 12 23:36	21°♄05'29		morning rise	14677 Dec 20 16:48	1°♄31'21	
morning max el	14677 Jan 23 23:43	26°♄22'41	20°30'28	direct	14677 Dec 24 08:47	1°♄01'55	
asc. node	14677 Jan 26 00:16	28°♄29'39		morning max el	14678 Jan 05 20:04	7°♄02'29	22°06'08
	14677 Jan 27 06:50	0°♄		asc. node	14678 Jan 12 21:33	15°♄28'46	
morning set	14677 Feb 11 16:09	26°♄41'22			14678 Jan 21 11:31	0°♄	
	14677 Feb 13 06:36	0°♄		morning set	14678 Jan 27 02:39	11°♄26'06	
superior conj	14677 Feb 19 05:07	12°♄14'12	1°05'45	superior conj	14678 Feb 03 04:41	26°♄31'16	1°22'53
minimum elong	14677 Feb 19 07:45	12°♄27'36	1°05'48	minimum elong	14678 Feb 03 06:52	26°♄42'47	1°23'19
max. Earth dist.	14677 Feb 24 15:05	22°♄56'28	1.36204 AU		14678 Feb 04 20:30	0°♄	
desc. node	14677 Feb 27 15:22	28°♄37'05		max. Earth dist.	14678 Feb 07 04:19	4°♄47'14	1.34276 AU
evening rise	14677 Feb 28 11:08	0°♄08'03		evening rise	14678 Feb 11 12:20	13°♄22'10	
	14677 Feb 28 09:23	0°♄		desc. node	14678 Feb 14 11:55	18°♄59'40	
	14677 Mar 18 17:02	0°♄			14678 Feb 20 17:23	0°♄	
evening max el	14677 Apr 04 22:09	21°♄28'20	25°59'57		14678 Mar 13 15:15	0°♄	
retrograde	14677 Apr 17 14:18	28°♄44'31		evening max el	14678 Mar 18 12:00	5°♄10'59	26°55'55
evening set	14677 Apr 23 17:19	26°♄14'06		retrograde	14678 Mar 31 19:39	12°♄38'31	
asc. node	14677 Apr 23 20:46	26°♄06'49		evening set	14678 Apr 07 07:56	10°♄06'34	
min. Earth dist.	14677 Apr 27 21:44	21°♄46'52	0.67314 AU	asc. node	14678 Apr 10 18:09	6°♄49'18	
inferior conj	14677 Apr 29 12:54	19°♄44'15	1°40'14	min. Earth dist.	14678 Apr 11 07:08	6°♄13'02	0.65877 AU

inferior conj	14678 Apr 13 10:45	3°♄43'41	0°50'03	min. Earth dist.	14679 Mar 25 08:35	20°♄12'19	0.64072 AU
minimum elong	14678 Apr 13 09:29	3°♄47'22	0°49'05	inferior conj	14679 Mar 27 23:52	17°♄26'36	-0°12'34
	14678 Apr 16 22:47	30°♄		minimum elong	14679 Mar 28 00:16	17°♄25'34	0°12'37
morning rise	14678 Apr 19 12:25	28°♄08'42		transit middle	14679 Mar 28 00:16	17°♄25'34	0°12'37
direct	14678 Apr 22 09:26	27°♄23'32		transit begin	14679 Mar 27 22:21	17°♄30'36	
	14678 Apr 27 23:13	0°♄		transit end	14679 Mar 28 02:10	17°♄20'33	
morning max el	14678 Apr 28 17:44	0°♄42'51	18°07'33	asc. node	14679 Mar 28 15:35	16°♄45'34	
desc. node	14678 May 13 14:03	21°♄48'58		morning rise	14679 Apr 03 13:37	12°♄06'01	
morning set	14678 May 17 14:29	28°♄18'01		direct	14679 Apr 06 01:58	11°♄34'09	
	14678 May 18 15:45	0°♄		morning max el	14679 Apr 12 11:01	14°♄50'36	17°48'57
					14679 Apr 23 06:04	0°♄	
superior conj	14678 Jun 01 14:04	22°♄09'58	-1°57'09	morning set	14679 Apr 29 07:53	10°♄11'41	
minimum elong	14678 Jun 01 05:48	21°♄37'37	1°57'34	desc. node	14679 Apr 30 10:47	12°♄05'15	
max. Earth dist.	14678 Jun 03 21:02	25°♄45'05	1.45850 AU		14679 May 11 06:05	0°♄	
	14678 Jun 06 14:24	0°♄					
evening rise	14678 Jun 17 16:38	17°♄12'10		superior conj	14679 May 12 12:37	2°♄03'28	-1°25'47
	14678 Jun 26 00:02	0°♄		minimum elong	14679 May 12 04:27	1°♄30'29	1°25'40
greatest brilliancy	14678 Jun 29 18:06	5°♄40'49	-0.7m	max. Earth dist.	14679 May 17 16:49	10°♄19'00	1.45159 AU
asc. node	14678 Jul 07 16:29	16°♄52'25		evening rise	14679 May 28 04:30	26°♄36'29	
evening max el	14678 Jul 11 17:17	21°♄30'39	19°16'02		14679 May 30 09:52	0°♄	
retrograde	14678 Jul 18 17:03	25°♄23'24			14679 Jun 20 04:32	0°♄	
evening set	14678 Jul 22 06:58	24°♄09'02		asc. node	14679 Jun 24 13:21	5°♄02'43	
inferior conj	14678 Jul 27 17:03	18°♄18'57	2°58'23	evening max el	14679 Jun 24 20:53	5°♄21'47	20°13'13
minimum elong	14678 Jul 27 18:29	18°♄14'17	2°57'26	retrograde	14679 Jul 02 15:52	9°♄48'28	
min. Earth dist.	14678 Jul 29 03:17	16°♄27'29	0.67060 AU	evening set	14679 Jul 06 15:52	8°♄16'40	
morning rise	14678 Aug 02 05:24	11°♄53'37		inferior conj	14679 Jul 11 22:26	2°♄13'58	3°09'30
direct	14678 Aug 08 06:29	9°♄16'55		minimum elong	14679 Jul 11 22:54	2°♄12'25	3°08'34
desc. node	14678 Aug 09 12:36	9°♄22'54		min. Earth dist.	14679 Jul 12 18:35	1°♄05'17	0.68195 AU
morning max el	14678 Aug 20 18:30	16°♄44'59	25°48'55		14679 Jul 13 14:03	30°♄	
	14678 Aug 31 19:10	0°♄		morning rise	14679 Jul 17 05:36	25°♄51'11	
	14678 Sep 20 07:24	0°♄		direct	14679 Jul 22 19:26	23°♄24'23	
morning set	14678 Sep 25 17:48	9°♄38'39		desc. node	14679 Jul 27 10:02	24°♄45'14	
max. Earth dist.	14678 Sep 29 09:49	16°♄30'06	1.35576 AU		14679 Aug 02 23:34	0°♄	
asc. node	14678 Oct 03 18:19	25°♄00'28		morning max el	14679 Aug 03 05:05	0°♄13'53	24°24'22
					14679 Aug 25 15:55	0°♄	
superior conj	14678 Oct 05 06:20	28°♄01'26	0°13'52	morning set	14679 Sep 07 18:23	21°♄22'04	
minimum elong	14678 Oct 05 05:31	27°♄57'18	0°14'06	max. Earth dist.	14679 Sep 11 09:12	27°♄45'44	1.37836 AU
behind sun begin	14678 Oct 05 02:31	27°♄42'08			14679 Sep 12 14:51	0°♄	
behind sun end	14678 Oct 05 08:31	28°♄12'29					
	14678 Oct 06 05:41	0°♄		superior conj	14679 Sep 18 12:51	11°♄05'34	-0°18'58
evening rise	14678 Oct 13 01:06	14°♄03'20		minimum elong	14679 Sep 18 14:07	11°♄11'44	0°18'38
	14678 Oct 21 05:29	0°♄		asc. node	14679 Sep 20 14:53	15°♄08'29	
evening max el	14678 Oct 31 04:27	14°♄00'14	20°18'44	evening rise	14679 Sep 27 03:36	28°♄06'01	
desc. node	14678 Nov 05 08:54	17°♄56'37			14679 Sep 28 02:34	0°♄	
retrograde	14678 Nov 11 00:15	19°♄23'26		evening max el	14679 Oct 13 18:43	25°♄22'42	19°13'02
evening set	14678 Nov 13 04:32	19°♄11'21		retrograde	14679 Oct 22 23:30	29°♄59'46	
inferior conj	14678 Nov 22 01:56	15°♄15'22	-4°49'28	desc. node	14679 Oct 23 06:15	29°♄59'31	
minimum elong	14678 Nov 21 15:53	15°♄30'08	4°45'53	evening set	14679 Oct 24 20:23	29°♄49'07	
min. Earth dist.	14678 Nov 23 14:48	14°♄21'04	0.54755 AU	inferior conj	14679 Nov 02 08:44	25°♄37'48	-3°10'00
morning rise	14678 Nov 30 02:39	11°♄13'12		minimum elong	14679 Nov 02 00:47	25°♄51'05	3°06'18
direct	14678 Dec 04 18:33	10°♄26'16		min. Earth dist.	14679 Nov 05 01:01	23°♄50'28	0.55924 AU
morning max el	14678 Dec 18 06:30	17°♄03'50	23°54'49	morning rise	14679 Nov 10 02:44	21°♄03'45	
	14678 Dec 28 15:16	0°♄		direct	14679 Nov 15 14:55	19°♄54'08	
asc. node	14678 Dec 30 18:45	3°♄24'59		morning max el	14679 Nov 29 16:31	27°♄02'03	25°39'45
morning set	14679 Jan 11 14:33	26°♄10'36			14679 Dec 02 13:33	0°♄	
	14679 Jan 13 09:04	0°♄		asc. node	14679 Dec 17 15:52	22°♄04'17	
					14679 Dec 21 20:30	0°♄	
superior conj	14679 Jan 18 10:27	11°♄02'43	1°33'29	morning set	14679 Dec 27 02:04	10°♄50'02	
minimum elong	14679 Jan 18 11:45	11°♄09'45	1°34'15				
max. Earth dist.	14679 Jan 21 01:22	16°♄41'51	1.32754 AU	superior conj	14680 Jan 02 20:03	25°♄42'06	1°37'51
evening rise	14679 Jan 26 01:18	27°♄04'03		minimum elong	14680 Jan 02 20:17	25°♄43'21	1°38'48
	14679 Jan 27 12:41	0°♄		max. Earth dist.	14680 Jan 04 05:06	28°♄44'50	1.31705 AU
desc. node	14679 Feb 01 08:31	9°♄09'19			14680 Jan 04 18:45	0°♄	
	14679 Feb 14 00:34	0°♄		evening rise	14680 Jan 09 23:04	11°♄06'32	
evening max el	14679 Mar 01 01:02	18°♄33'20	27°28'54	desc. node	14680 Jan 19 05:12	29°♄00'21	
retrograde	14679 Mar 14 18:18	26°♄02'07			14680 Jan 19 18:39	0°♄	
evening set	14679 Mar 21 13:06	23°♄35'02			14680 Feb 10 01:47	0°♄	

evening max el	14680 Feb 11 11:04	1° Υ 22'01	27°32'16		14681 Jan 12 10:58	0° H	
retrograde	14680 Feb 25 09:15	8° Υ 45'39		evening max el	14681 Jan 23 15:35	13° H 25'51	27°01'40
evening set	14680 Mar 03 06:07	6° Υ 30'39		retrograde	14681 Feb 06 15:32	20° H 40'37	
min. Earth dist.	14680 Mar 07 00:21	3° Υ 33'27	0.61991 AU	evening set	14681 Feb 13 07:53	18° H 45'35	
inferior conj	14680 Mar 10 01:03	0° Υ 44'25	-1°27'28	min. Earth dist.	14681 Feb 17 05:51	16° H 04'42	0.59778 AU
minimum elong	14680 Mar 10 04:06	0° Υ 37'18	1°26'07	inferior conj	14681 Feb 20 10:46	13° H 28'18	-2°51'54
	14680 Mar 10 20:14	30° R H		minimum elong	14681 Feb 20 17:07	13° H 15'20	2°49'06
asc. node	14680 Mar 14 13:04	27° H 00'45		morning rise	14681 Feb 28 05:44	8° H 45'14	
morning rise	14680 Mar 17 05:02	25° H 41'14		asc. node	14681 Mar 01 10:35	8° H 32'12	
direct	14680 Mar 19 10:17	25° H 19'15		direct	14681 Mar 02 06:22	8° H 29'34	
morning max el	14680 Mar 26 04:25	28° H 44'03	17°48'04	morning max el	14681 Mar 09 18:27	12° H 13'40	18°05'50
	14680 Mar 27 09:24	0° Υ			14681 Mar 21 15:20	0° Υ	
morning set	14680 Apr 10 23:54	23° Υ 08'49		morning set	14681 Mar 25 08:34	6° Υ 51'41	
	14680 Apr 14 20:51	0° B		desc. node	14681 Apr 03 03:58	23° Υ 04'00	
desc. node	14680 Apr 16 07:25	2° B 31'34					
superior conj	14680 Apr 22 09:54	13° B 00'56	-0°47'18	superior conj	14681 Apr 04 06:35	25° Υ 02'49	-0°08'59
minimum elong	14680 Apr 22 05:25	12° B 42'01	0°47'15	minimum elong	14681 Apr 04 05:49	24° Υ 59'28	0°09'12
max. Earth dist.	14680 Apr 29 09:27	24° B 32'23	1.43797 AU	behind sun begin	14681 Apr 03 23:26	24° Υ 31'02	
	14680 May 02 19:21	0° II		behind sun end	14681 Apr 04 12:12	25° Υ 27'50	
evening rise	14680 May 06 18:59	6° II 14'56		max. Earth dist.	14681 Apr 11 21:08	8° B 10'22	1.41919 AU
	14680 May 22 17:00	0° B		evening rise	14681 Apr 17 01:17	16° B 39'08	
evening max el	14680 Jun 06 18:31	19° B 12'54	21°23'10		14681 Apr 25 14:51	0° II	
asc. node	14680 Jun 10 10:20	22° B 22'45			14681 May 17 14:11	0° B	
retrograde	14680 Jun 15 14:39	24° B 21'48		evening max el	14681 May 20 11:23	3° B 04'48	22°41'39
evening set	14680 Jun 20 01:20	22° B 33'10		asc. node	14681 May 28 07:27	8° B 37'03	
inferior conj	14680 Jun 25 07:04	16° B 19'21	3°08'54	retrograde	14681 May 30 11:45	8° B 58'13	
minimum elong	14680 Jun 25 06:33	16° B 21'10	3°07'52	evening set	14681 Jun 04 09:40	6° B 54'12	
min. Earth dist.	14680 Jun 25 13:43	15° B 56'11	0.68854 AU	inferior conj	14681 Jun 09 16:53	0° B 31'27	2°57'37
morning rise	14680 Jun 30 11:33	10° B 01'41		minimum elong	14681 Jun 09 15:32	0° B 36'11	2°56'25
direct	14680 Jul 05 13:02	7° B 50'21		min. Earth dist.	14681 Jun 09 10:34	0° B 53'27	0.69031 AU
desc. node	14680 Jul 13 07:22	11° B 37'21			14681 Jun 10 01:56	30° R II	
morning max el	14680 Jul 15 16:29	13° B 51'07	22°54'51	morning rise	14681 Jun 14 21:16	24° II 20'37	
	14680 Jul 28 17:53	0° Ω		direct	14681 Jun 19 10:13	22° II 28'02	
	14680 Aug 17 13:42	0° M		morning max el	14681 Jun 28 07:17	27° II 37'05	21°28'54
morning set	14680 Aug 18 20:39	2° M 06'51		desc. node	14681 Jun 30 04:36	29° II 36'25	
max. Earth dist.	14680 Aug 23 08:10	9° M 37'50	1.40214 AU		14681 Jun 30 13:05	0° B	
					14681 Jul 22 07:03	0° Ω	
superior conj	14680 Aug 31 03:57	23° M 26'45	-0°54'34	morning set	14681 Jul 29 22:26	11° Ω 48'44	
minimum elong	14680 Aug 31 08:06	23° M 45'43	0°54'07	max. Earth dist.	14681 Aug 05 11:45	22° Ω 21'19	1.42437 AU
	14680 Sep 03 17:05	0° Ω			14681 Aug 10 01:56	0° M	
asc. node	14680 Sep 06 11:25	5° Ω 12'36					
evening rise	14680 Sep 09 21:54	11° Ω 45'25		superior conj	14681 Aug 12 23:17	4° M 55'55	-1°29'28
	14680 Sep 20 01:58	0° M		minimum elong	14681 Aug 13 06:10	5° M 25'33	1°29'08
evening max el	14680 Sep 25 21:02	7° M 32'02	18°29'26	evening rise	14681 Aug 24 04:08	24° M 51'56	
retrograde	14680 Oct 03 17:27	11° M 30'32		asc. node	14681 Aug 24 07:59	25° M 09'26	
evening set	14680 Oct 05 16:54	11° M 16'09			14681 Aug 27 00:09	0° Ω	
desc. node	14680 Oct 09 03:41	9° M 49'29		evening max el	14681 Sep 09 07:19	20° Ω 19'39	18°06'33
inferior conj	14680 Oct 13 12:33	6° M 44'38	-1°23'44	retrograde	14681 Sep 16 05:32	23° Ω 52'18	
minimum elong	14680 Oct 13 09:15	6° M 51'05	1°21'52	evening set	14681 Sep 18 11:55	23° Ω 29'53	
min. Earth dist.	14680 Oct 16 17:54	4° M 14'04	0.57762 AU	inferior conj	14681 Sep 25 13:38	18° Ω 37'41	0°09'00
morning rise	14680 Oct 20 22:05	1° M 32'54		minimum elong	14681 Sep 25 13:56	18° Ω 37'00	0°09'06
	14680 Oct 25 21:31	30° R Ω		transit middle	14681 Sep 25 13:56	18° Ω 37'00	0°09'06
direct	14680 Oct 27 01:50	29° Ω 56'26		transit begin	14681 Sep 25 11:10	18° Ω 43'18	
	14680 Oct 28 06:18	0° M		transit end	14681 Sep 25 16:42	18° Ω 30'41	
morning max el	14680 Nov 10 08:52	7° M 29'10	27°02'13	desc. node	14681 Sep 26 01:11	18° Ω 11'18	
	14680 Nov 27 05:43	0° J		min. Earth dist.	14681 Sep 28 19:15	15° Ω 42'19	0.59982 AU
asc. node	14680 Dec 03 12:54	11° J 15'21		morning rise	14681 Oct 02 12:41	12° Ω 53'42	
morning set	14680 Dec 10 11:27	25° J 19'46		direct	14681 Oct 09 02:02	10° Ω 50'51	
	14680 Dec 12 15:12	0° B		morning max el	14681 Oct 23 08:55	18° Ω 41'00	27°49'20
					14681 Nov 01 22:25	0° M	
superior conj	14680 Dec 17 07:27	10° B 23'41	1°36'10		14681 Nov 19 23:49	0° J	
minimum elong	14680 Dec 17 06:38	10° B 19'06	1°37'09	asc. node	14681 Nov 20 09:47	0° J 48'59	
max. Earth dist.	14680 Dec 17 12:35	10° B 52'22	1.31162 AU	morning set	14681 Nov 24 16:47	9° J 34'03	
evening rise	14680 Dec 24 03:10	25° B 23'45		max. Earth dist.	14681 Nov 30 20:10	22° J 55'24	1.31158 AU
	14680 Dec 26 07:51	0° \approx					
desc. node	14681 Jan 05 01:57	18° \approx 25'32		superior conj	14681 Dec 01 18:43	25° J 01'02	1°28'35

minimum elong	14681 Dec 01 17:02	24° ♄ 51'38	1°29'26	superior conj	14682 Nov 16 04:01	9° ♄ 29'28	1°15'06
	14681 Dec 04 00:16	0° ♄		minimum elong	14682 Nov 16 01:48	9° ♄ 17'15	1°15'44
evening rise	14681 Dec 08 11:24	9° ♄ 49'31		evening rise	14682 Nov 22 21:55	24° ♄ 19'38	
	14681 Dec 18 15:47	0° ♄			14682 Nov 25 14:00	0° ♄	
desc. node	14681 Dec 22 22:49	7° ♄ 14'03		desc. node	14682 Dec 09 19:47	25° ♄ 12'32	
evening max el	14682 Jan 05 12:21	24° ♄ 37'04	25°56'57		14682 Dec 13 10:58	0° ♄	
	14682 Jan 12 21:07	0° ♄		evening max el	14682 Dec 18 01:11	5° ♄ 00'15	24°25'18
retrograde	14682 Jan 19 10:59	1° ♄ 40'11		retrograde	14682 Dec 31 17:16	11° ♄ 48'45	
evening set	14682 Jan 25 14:18	0° ♄ 11'51		evening set	14683 Jan 05 21:47	10° ♄ 49'45	
	14682 Jan 26 00:12	30° ♄		min. Earth dist.	14683 Jan 11 12:53	7° ♄ 58'28	0.55870 AU
min. Earth dist.	14682 Jan 30 01:27	27° ♄ 34'11	0.57644 AU	inferior conj	14683 Jan 13 18:53	6° ♄ 35'12	-5°28'51
inferior conj	14682 Feb 02 01:21	25° ♄ 27'25	-4°17'57	minimum elong	14683 Jan 14 02:31	6° ♄ 23'24	5°26'38
minimum elong	14682 Feb 02 10:16	25° ♄ 11'39	4°14'37	morning rise	14683 Jan 22 09:12	2° ♄ 33'56	
morning rise	14682 Feb 10 09:11	21° ♄ 05'50		direct	14683 Jan 24 18:02	2° ♄ 19'02	
direct	14682 Feb 12 09:51	20° ♄ 52'44		asc. node	14683 Feb 03 05:26	6° ♄ 37'19	
asc. node	14682 Feb 16 08:03	21° ♄ 44'45		morning max el	14683 Feb 03 19:57	7° ♄ 11'28	19°44'55
morning max el	14682 Feb 21 01:02	25° ♄ 06'43	18°44'05		14683 Feb 18 13:22	0° ♄	
	14682 Feb 25 03:49	0° ♄		morning set	14683 Feb 21 08:42	5° ♄ 36'11	
morning set	14682 Mar 09 04:47	21° ♄ 04'31					
	14682 Mar 13 18:51	0° ♄		superior conj	14683 Mar 01 06:26	21° ♄ 32'26	0°52'49
superior conj	14682 Mar 17 22:54	7° ♄ 57'20	0°25'02	minimum elong	14683 Mar 01 09:00	21° ♄ 45'10	0°52'41
minimum elong	14682 Mar 18 00:31	8° ♄ 04'56	0°24'44		14683 Mar 05 15:18	0° ♄	
desc. node	14682 Mar 21 00:29	13° ♄ 38'12		max. Earth dist.	14683 Mar 07 11:06	3° ♄ 25'12	1.37457 AU
max. Earth dist.	14682 Mar 25 04:36	21° ♄ 06'18	1.39727 AU	desc. node	14683 Mar 07 20:58	4° ♄ 10'53	
evening rise	14682 Mar 29 04:32	27° ♄ 58'33		evening rise	14683 Mar 11 04:06	10° ♄ 09'16	
	14682 Mar 30 09:31	0° ♄			14683 Mar 23 02:59	0° ♄	
	14682 Apr 19 03:13	0° ♄			14683 Apr 14 18:21	0° ♄	
evening max el	14682 May 03 01:40	16° ♄ 58'21	24°02'59	evening max el	14683 Apr 15 15:14	0° ♄ 52'20	25°20'14
retrograde	14682 May 14 05:43	23° ♄ 31'21		retrograde	14683 Apr 27 19:25	7° ♄ 55'23	
asc. node	14682 May 15 04:40	23° ♄ 27'20		asc. node	14683 May 02 01:57	6° ♄ 38'55	
evening set	14682 May 19 15:13	21° ♄ 14'20		evening set	14683 May 03 16:24	5° ♄ 28'35	
min. Earth dist.	14682 May 24 06:55	15° ♄ 50'22	0.68729 AU	min. Earth dist.	14683 May 08 00:34	0° ♄ 41'05	0.67964 AU
inferior conj	14682 May 25 01:58	14° ♄ 45'38	2°36'00		14683 May 08 13:17	30° ♄	
minimum elong	14682 May 25 00:01	14° ♄ 52'17	2°34'37	inferior conj	14683 May 09 08:22	28° ♄ 57'56	2°03'50
morning rise	14682 May 30 08:50	8° ♄ 43'03		minimum elong	14683 May 09 06:12	29° ♄ 04'58	2°02'23
direct	14682 Jun 03 09:37	7° ♄ 10'40		morning rise	14683 May 14 20:24	23° ♄ 04'57	
morning max el	14682 Jun 11 04:14	11° ♄ 33'23	20°13'09	direct	14683 May 18 09:40	21° ♄ 52'27	
desc. node	14682 Jun 17 01:41	18° ♄ 24'08		morning max el	14683 May 25 08:42	25° ♄ 40'09	19°11'35
	14682 Jun 25 10:06	0° ♄			14683 May 29 05:04	0° ♄	
morning set	14682 Jul 09 05:00	20° ♄ 42'46		desc. node	14683 Jun 03 22:39	7° ♄ 47'30	
	14682 Jul 15 04:17	0° ♄		greatest brilliancy	14683 Jun 07 05:15	12° ♄ 35'49	-0.7m
max. Earth dist.	14682 Jul 18 22:19	5° ♄ 56'20	1.44240 AU	morning set	14683 Jun 18 09:14	29° ♄ 36'09	
					14683 Jun 18 15:25	0° ♄	
superior conj	14682 Jul 24 19:27	15° ♄ 26'35	-1°58'01	max. Earth dist.	14683 Jul 01 14:51	20° ♄ 09'35	1.45437 AU
minimum elong	14682 Jul 25 02:35	15° ♄ 55'48	1°58'17				
	14682 Aug 02 12:22	0° ♄		superior conj	14683 Jul 04 17:12	25° ♄ 02'14	-2°13'00
evening rise	14682 Aug 06 17:23	7° ♄ 13'31		minimum elong	14683 Jul 04 19:31	25° ♄ 11'22	2°13'56
asc. node	14682 Aug 11 04:35	14° ♄ 54'56			14683 Jul 07 20:17	0° ♄	
	14682 Aug 20 19:03	0° ♄		evening rise	14683 Jul 19 08:28	18° ♄ 37'23	
evening max el	14682 Aug 23 21:29	3° ♄ 35'42	18°02'59		14683 Jul 26 07:19	0° ♄	
retrograde	14682 Aug 30 08:05	6° ♄ 56'37		asc. node	14683 Jul 29 01:14	4° ♄ 23'19	
evening set	14682 Sep 01 22:45	6° ♄ 22'33		evening max el	14683 Aug 07 11:51	17° ♄ 09'50	18°17'41
inferior conj	14682 Sep 08 08:50	1° ♄ 11'24	1°20'56	retrograde	14683 Aug 13 20:44	20° ♄ 32'58	
minimum elong	14682 Sep 08 10:53	1° ♄ 06'02	1°20'09	evening set	14683 Aug 16 20:03	19° ♄ 44'33	
	14682 Sep 09 12:10	30° ♄		inferior conj	14683 Aug 22 18:00	14° ♄ 16'39	2°12'22
min. Earth dist.	14682 Sep 11 06:04	28° ♄ 12'44	0.62274 AU	minimum elong	14683 Aug 22 20:24	14° ♄ 09'41	2°11'20
desc. node	14682 Sep 12 22:41	26° ♄ 36'59		min. Earth dist.	14683 Aug 25 02:32	11° ♄ 33'43	0.64399 AU
morning rise	14682 Sep 14 20:38	25° ♄ 04'45		morning rise	14683 Aug 28 19:15	7° ♄ 56'53	
direct	14682 Sep 21 13:02	22° ♄ 41'20		desc. node	14683 Aug 30 20:13	6° ♄ 34'20	
	14682 Oct 04 22:51	0° ♄		direct	14683 Sep 04 08:48	5° ♄ 21'18	
morning max el	14682 Oct 05 15:19	0° ♄ 40'19	27°57'16	morning max el	14683 Sep 18 01:30	13° ♄ 19'10	27°29'01
	14682 Oct 27 01:54	0° ♄			14683 Oct 01 12:26	0° ♄	
asc. node	14682 Nov 07 06:34	20° ♄ 38'52			14683 Oct 19 16:05	0° ♄	
morning set	14682 Nov 08 16:01	23° ♄ 28'29		morning set	14683 Oct 23 06:40	6° ♄ 56'44	
	14682 Nov 11 19:01	0° ♄		asc. node	14683 Oct 25 03:15	10° ♄ 39'11	
max. Earth dist.	14682 Nov 14 00:18	4° ♄ 46'29	1.31708 AU	max. Earth dist.	14683 Oct 27 21:17	16° ♄ 18'03	1.32809 AU

superior conj	14683 Oct 31 09:15	23° \mathbb{M} 42'50	0°55'46	superior conj	14684 Oct 14 08:04	7° \mathbb{M} 35'18	0°30'42
minimum elong	14683 Oct 31 07:00	23° \mathbb{M} 30'44	0°56'09	minimum elong	14684 Oct 14 06:29	7° \mathbb{M} 27'03	0°30'57
	14683 Nov 03 07:02	0° \mathbb{A}		evening rise	14684 Oct 21 18:18	23° \mathbb{M} 12'19	
evening rise	14683 Nov 07 08:51	8° \mathbb{A} 48'48			14684 Oct 25 01:22	0° \mathbb{A}	
	14683 Nov 18 06:07	0° \mathbb{B}		evening max el	14684 Nov 10 03:16	25° \mathbb{A} 09'45	21°06'06
desc. node	14683 Nov 26 16:52	12° \mathbb{B} 02'23		desc. node	14684 Nov 12 14:04	27° \mathbb{A} 20'29	
evening max el	14683 Nov 29 10:52	14° \mathbb{B} 58'09	22°42'22		14684 Nov 17 00:10	0° \mathbb{B}	
retrograde	14683 Dec 12 10:45	21° \mathbb{B} 24'44		retrograde	14684 Nov 21 21:27	0° \mathbb{B} 59'58	
evening set	14683 Dec 16 07:58	20° \mathbb{B} 51'49		evening set	14684 Nov 24 12:38	0° \mathbb{B} 43'39	
min. Earth dist.	14683 Dec 23 19:20	17° \mathbb{B} 27'37	0.54737 AU		14684 Nov 27 01:12	30° \mathbb{R} \mathbb{A}	
inferior conj	14683 Dec 24 18:04	16° \mathbb{B} 55'27	-5°59'46	inferior conj	14684 Dec 03 09:10	26° \mathbb{A} 51'06	-5°31'25
minimum elong	14683 Dec 24 18:21	16° \mathbb{B} 55'04	5°58'45	minimum elong	14684 Dec 03 01:04	27° \mathbb{A} 02'34	5°29'01
morning rise	14684 Jan 02 06:03	13° \mathbb{B} 07'28		min. Earth dist.	14684 Dec 04 01:00	26° \mathbb{A} 28'39	0.54472 AU
direct	14684 Jan 05 08:43	12° \mathbb{B} 45'17		morning rise	14684 Dec 11 13:51	22° \mathbb{A} 59'41	
morning max el	14684 Jan 17 00:20	18° \mathbb{B} 20'40	21°08'58	direct	14684 Dec 15 15:56	22° \mathbb{A} 23'47	
asc. node	14684 Jan 21 02:45	22° \mathbb{B} 54'59		morning max el	14684 Dec 28 15:37	28° \mathbb{A} 40'59	22°51'50
	14684 Jan 26 00:16	0° \approx			14684 Dec 29 23:31	0° \mathbb{B}	
morning set	14684 Feb 05 17:28	20° \approx 18'03		asc. node	14685 Jan 06 24:00	10° \mathbb{B} 20'05	
	14684 Feb 10 08:25	0° \mathbb{H}			14685 Jan 17 18:56	0° \approx	
				morning set	14685 Jan 20 04:45	5° \approx 03'09	
superior conj	14684 Feb 13 01:07	5° \mathbb{H} 36'50	1°13'51	superior conj	14685 Jan 27 03:37	20° \approx 00'54	1°28'11
minimum elong	14684 Feb 13 03:38	5° \mathbb{H} 49'50	1°14'03	minimum elong	14685 Jan 27 05:27	20° \approx 10'44	1°28'45
max. Earth dist.	14684 Feb 17 20:46	15° \mathbb{H} 20'47	1.35338 AU	max. Earth dist.	14685 Jan 30 13:05	27° \approx 10'56	1.33562 AU
evening rise	14684 Feb 21 20:55	23° \mathbb{H} 02'27			14685 Jan 31 21:52	0° \mathbb{H}	
desc. node	14684 Feb 22 17:30	24° \mathbb{H} 38'18		evening rise	14685 Feb 04 03:26	6° \mathbb{H} 28'51	
	14684 Feb 25 16:22	0° \mathbb{Y}		desc. node	14685 Feb 08 14:03	14° \mathbb{H} 55'49	
	14684 Mar 15 19:45	0° \mathbb{B}			14685 Feb 17 07:49	0° \mathbb{Y}	
evening max el	14684 Mar 28 04:54	14° \mathbb{B} 41'20	26°26'06	evening max el	14685 Mar 10 18:20	28° \mathbb{Y} 15'56	27°13'12
retrograde	14684 Apr 10 04:04	22° \mathbb{B} 03'22			14685 Mar 12 15:27	0° \mathbb{B}	
evening set	14684 Apr 16 11:28	19° \mathbb{B} 31'23		retrograde	14685 Mar 24 06:49	5° \mathbb{B} 45'52	
asc. node	14684 Apr 17 23:18	18° \mathbb{B} 10'25		evening set	14685 Mar 30 22:22	3° \mathbb{B} 14'45	
min. Earth dist.	14684 Apr 20 13:27	15° \mathbb{B} 19'05	0.66753 AU		14685 Apr 03 10:19	30° \mathbb{R} \mathbb{Y}	
inferior conj	14684 Apr 22 10:01	13° \mathbb{B} 03'56	1°20'28	min. Earth dist.	14685 Apr 03 19:36	29° \mathbb{Y} 35'08	0.65142 AU
minimum elong	14684 Apr 22 08:13	13° \mathbb{B} 09'26	1°19'12	asc. node	14685 Apr 04 20:43	28° \mathbb{Y} 25'58	
morning rise	14684 Apr 28 05:57	7° \mathbb{B} 22'06		inferior conj	14685 Apr 06 04:30	26° \mathbb{Y} 57'01	0°25'01
direct	14684 May 01 08:36	6° \mathbb{B} 27'47		minimum elong	14685 Apr 06 03:49	26° \mathbb{Y} 58'55	0°24'23
morning max el	14684 May 07 19:58	9° \mathbb{B} 53'41	18°26'11	morning rise	14685 Apr 12 11:01	21° \mathbb{Y} 28'09	
desc. node	14684 May 20 19:31	27° \mathbb{B} 37'10		direct	14685 Apr 15 04:06	20° \mathbb{Y} 49'10	
	14684 May 22 08:06	0° \mathbb{II}		morning max el	14685 Apr 21 11:52	24° \mathbb{Y} 05'59	17°57'37
morning set	14684 May 28 07:29	9° \mathbb{II} 25'11			14685 Apr 26 09:15	0° \mathbb{B}	
	14684 Jun 10 09:56	0° \mathbb{E}		desc. node	14685 May 07 16:17	17° \mathbb{B} 45'11	
				morning set	14685 May 09 09:16	20° \mathbb{B} 33'50	
superior conj	14684 Jun 13 02:15	4° \mathbb{E} 11'00	-2°08'38		14685 May 15 03:37	0° \mathbb{II}	
minimum elong	14684 Jun 12 20:51	3° \mathbb{E} 49'56	2°09'26	superior conj	14685 May 23 15:25	13° \mathbb{II} 36'59	-1°45'18
max. Earth dist.	14684 Jun 13 10:37	4° \mathbb{E} 43'37	1.45914 AU	minimum elong	14685 May 23 06:30	13° \mathbb{II} 01'40	1°45'25
evening rise	14684 Jun 28 22:48	28° \mathbb{E} 59'49		max. Earth dist.	14685 May 27 06:38	19° \mathbb{II} 20'19	1.45638 AU
	14684 Jun 29 14:06	0° \mathbb{O}			14685 Jun 03 03:02	0° \mathbb{E}	
greatest brilliancy	14684 Jul 08 02:02	13° \mathbb{O} 18'34	-0.8m	evening rise	14685 Jun 08 16:36	8° \mathbb{E} 34'29	
asc. node	14684 Jul 14 21:58	23° \mathbb{O} 28'35		greatest brilliancy	14685 Jun 22 13:28	29° \mathbb{E} 32'21	-0.6m
	14684 Jul 20 02:20	0° \mathbb{P}			14685 Jun 22 21:02	0° \mathbb{O}	
evening max el	14684 Jul 20 23:32	0° \mathbb{P} 54'52	18°49'52	asc. node	14685 Jul 01 18:48	12° \mathbb{O} 02'01	
retrograde	14684 Jul 27 15:37	4° \mathbb{P} 33'30		evening max el	14685 Jul 04 06:25	14° \mathbb{O} 44'45	19°38'32
evening set	14684 Jul 30 23:59	3° \mathbb{P} 28'57		retrograde	14685 Jul 11 13:42	18° \mathbb{O} 51'05	
	14684 Aug 03 17:42	30° \mathbb{R} \mathbb{O}		evening set	14685 Jul 15 07:43	17° \mathbb{O} 29'28	
inferior conj	14684 Aug 05 13:26	27° \mathbb{O} 46'22	2°45'57	inferior conj	14685 Jul 20 15:58	11° \mathbb{O} 33'47	3°04'35
minimum elong	14684 Aug 05 15:21	27° \mathbb{O} 40'21	2°44'58	minimum elong	14685 Jul 20 17:00	11° \mathbb{O} 30'21	3°03'40
min. Earth dist.	14684 Aug 07 07:51	25° \mathbb{O} 33'14	0.66205 AU	min. Earth dist.	14685 Jul 21 20:11	9° \mathbb{O} 59'46	0.67600 AU
morning rise	14684 Aug 11 05:51	21° \mathbb{O} 21'09		morning rise	14685 Jul 26 01:47	5° \mathbb{O} 08'49	
desc. node	14684 Aug 16 17:43	18° \mathbb{O} 44'42		direct	14685 Jul 31 22:14	2° \mathbb{O} 35'25	
direct	14684 Aug 17 12:15	18° \mathbb{O} 42'27		desc. node	14685 Aug 03 15:10	3° \mathbb{O} 03'21	
morning max el	14684 Aug 30 12:59	26° \mathbb{O} 26'17	26°31'33	morning max el	14685 Aug 12 23:57	9° \mathbb{O} 49'33	25°14'02
	14684 Sep 02 20:20	0° \mathbb{P}			14685 Aug 28 23:36	0° \mathbb{P}	
	14684 Sep 24 02:32	0° \mathbb{E}			14685 Sep 16 17:04	0° \mathbb{E}	
morning set	14684 Oct 05 09:40	19° \mathbb{E} 51'57		morning set	14685 Sep 17 21:12	2° \mathbb{E} 05'08	
max. Earth dist.	14684 Oct 09 08:38	27° \mathbb{E} 30'06	1.34434 AU	max. Earth dist.	14685 Sep 21 10:43	8° \mathbb{E} 35'18	1.36504 AU
asc. node	14684 Oct 10 23:53	0° \mathbb{M} 45'40					
	14684 Oct 10 14:47	0° \mathbb{M}					

superior conj	14685 Sep 27 21:34	20° Ω 59'51	0°00'25		14686 Sep 08 21:21	0° Ω	
minimum elong	14685 Sep 27 21:32	20° Ω 59'40	0°00'41				
behind sun begin	14685 Sep 27 15:08	20° Ω 27'59		superior conj	14686 Sep 10 22:07	3° Ω 47'28	-0°33'53
behind sun end	14685 Sep 28 03:56	21° Ω 31'24		minimum elong	14686 Sep 11 00:33	3° Ω 58'55	0°33'30
asc. node	14685 Sep 27 20:29	20° Ω 54'25		asc. node	14686 Sep 14 17:03	11° Ω 01'30	
	14685 Oct 02 08:53	0° \mathbb{M}		evening rise	14686 Sep 19 23:31	21° Ω 18'33	
evening rise	14685 Oct 06 00:04	7° \mathbb{M} 24'38			14686 Sep 24 11:48	0° \mathbb{M}	
	14685 Oct 18 10:32	0° \mathbb{J}		evening max el	14686 Oct 06 05:24	17° \mathbb{M} 48'42	18°51'52
evening max el	14685 Oct 23 09:26	6° \mathbb{J} 04'41	19°48'05	retrograde	14686 Oct 14 19:03	22° \mathbb{M} 07'27	
desc. node	14685 Oct 30 11:23	10° \mathbb{J} 41'05		evening set	14686 Oct 16 16:20	21° \mathbb{M} 55'42	
retrograde	14685 Nov 02 12:31	11° \mathbb{J} 07'51		desc. node	14686 Oct 17 08:48	21° \mathbb{M} 45'52	
evening set	14685 Nov 04 11:46	10° \mathbb{J} 57'17		inferior conj	14686 Oct 24 22:06	17° \mathbb{M} 36'20	-2°24'10
inferior conj	14685 Nov 13 06:47	6° \mathbb{J} 56'10	-4°09'59	minimum elong	14686 Oct 24 16:06	17° \mathbb{M} 47'02	2°21'08
minimum elong	14685 Nov 12 20:59	7° \mathbb{J} 11'19	4°06'00	min. Earth dist.	14686 Oct 27 21:55	15° \mathbb{M} 28'45	0.56645 AU
min. Earth dist.	14685 Nov 15 09:09	5° \mathbb{J} 38'20	0.55149 AU	morning rise	14686 Nov 01 12:50	12° \mathbb{M} 46'29	
morning rise	14685 Nov 21 04:39	2° \mathbb{J} 41'35		direct	14686 Nov 07 08:37	11° \mathbb{M} 25'23	
direct	14685 Nov 26 05:40	1° \mathbb{J} 45'29		morning max el	14686 Nov 21 12:52	18° \mathbb{M} 44'25	26°18'27
morning max el	14685 Dec 10 00:55	8° \mathbb{J} 37'42	24°41'05		14686 Dec 01 00:07	0° \mathbb{J}	
asc. node	14685 Dec 24 21:10	28° \mathbb{J} 36'35		asc. node	14686 Dec 11 18:14	17° \mathbb{J} 30'39	
	14685 Dec 25 16:20	0° \mathbb{Z}			14686 Dec 18 02:04	0° \mathbb{Z}	
morning set	14686 Jan 04 16:43	19° \mathbb{Z} 46'27		morning set	14686 Dec 20 03:31	4° \mathbb{Z} 22'05	
	14686 Jan 09 08:58	0° \approx					
superior conj	14686 Jan 11 11:19	4° \approx 37'10	1°36'05	superior conj	14686 Dec 26 21:55	19° \mathbb{Z} 18'08	1°37'51
minimum elong	14686 Jan 11 12:10	4° \approx 41'50	1°36'57	minimum elong	14686 Dec 26 21:41	19° \mathbb{Z} 16'52	1°38'51
max. Earth dist.	14686 Jan 13 13:02	9° \approx 08'32	1.32240 AU	max. Earth dist.	14686 Dec 27 18:45	21° \mathbb{Z} 14'06	1.31414 AU
evening rise	14686 Jan 18 20:31	20° \approx 20'57			14686 Dec 31 18:31	0° \approx	
	14686 Jan 23 18:12	0° \mathbb{H}		evening rise	14687 Jan 02 21:17	4° \approx 30'37	
desc. node	14686 Jan 26 10:42	4° \mathbb{H} 58'40		desc. node	14687 Jan 13 07:25	24° \approx 39'43	
	14686 Feb 11 08:53	0° \mathbb{Y}			14687 Jan 16 10:46	0° \mathbb{H}	
evening max el	14686 Feb 21 06:20	11° \mathbb{Y} 25'29	27°34'21	evening max el	14687 Feb 03 14:33	23° \mathbb{H} 56'55	27°23'38
retrograde	14686 Mar 07 02:35	18° \mathbb{Y} 53'32			14687 Feb 12 01:37	0° \mathbb{Y}	
evening set	14686 Mar 13 22:45	16° \mathbb{Y} 30'42		retrograde	14687 Feb 17 13:57	1° \mathbb{Y} 16'36	
min. Earth dist.	14686 Mar 17 17:15	13° \mathbb{Y} 19'28	0.63206 AU		14687 Feb 22 20:51	30° \mathbb{R} \mathbb{H}	
inferior conj	14686 Mar 20 12:57	10° \mathbb{Y} 30'22	-0°42'56	evening set	14687 Feb 24 09:38	29° \mathbb{H} 09'36	
minimum elong	14686 Mar 20 14:21	10° \mathbb{Y} 26'52	0°42'26	min. Earth dist.	14687 Feb 28 04:50	26° \mathbb{H} 20'21	0.61053 AU
asc. node	14686 Mar 22 18:11	8° \mathbb{Y} 21'59		inferior conj	14687 Mar 03 07:59	23° \mathbb{H} 34'56	-2°02'25
morning rise	14686 Mar 27 08:32	5° \mathbb{Y} 16'50		minimum elong	14687 Mar 03 12:24	23° \mathbb{H} 25'10	2°00'27
direct	14686 Mar 29 17:31	4° \mathbb{Y} 49'44		asc. node	14687 Mar 09 15:40	19° \mathbb{H} 03'49	
morning max el	14686 Apr 05 05:35	8° \mathbb{Y} 08'46	17°46'21	morning rise	14687 Mar 10 18:20	18° \mathbb{H} 39'36	
	14686 Apr 19 20:04	0° \mathbb{B}		direct	14687 Mar 12 21:13	18° \mathbb{H} 20'43	
morning set	14686 Apr 21 13:00	2° \mathbb{B} 56'25		morning max el	14687 Mar 19 21:54	21° \mathbb{H} 52'40	17°53'12
desc. node	14686 Apr 24 12:58	8° \mathbb{B} 06'08			14687 Mar 26 03:47	0° \mathbb{Y}	
				morning set	14687 Apr 04 12:48	16° \mathbb{Y} 15'00	
superior conj	14686 May 03 23:02	23° \mathbb{B} 56'11	-1°09'50	desc. node	14687 Apr 11 09:34	28° \mathbb{Y} 35'19	
minimum elong	14686 May 03 16:14	23° \mathbb{B} 28'15	1°09'42		14687 Apr 12 04:45	0° \mathbb{B}	
	14686 May 07 16:32	0° \mathbb{I}		superior conj	14687 Apr 15 06:26	5° \mathbb{B} 21'10	-0°30'42
max. Earth dist.	14686 May 10 00:43	3° \mathbb{I} 44'59	1.44652 AU	minimum elong	14687 Apr 15 03:40	5° \mathbb{B} 09'11	0°30'46
evening rise	14686 May 19 03:28	17° \mathbb{I} 59'22		max. Earth dist.	14687 Apr 22 15:28	17° \mathbb{B} 45'02	1.43052 AU
	14686 May 27 01:56	0° \mathbb{E}		evening rise	14687 Apr 28 23:31	27° \mathbb{B} 54'48	
evening max el	14686 Jun 17 07:28	28° \mathbb{E} 36'13	20°41'41		14687 Apr 30 07:30	0° \mathbb{I}	
asc. node	14686 Jun 18 15:44	29° \mathbb{E} 52'50			14687 May 20 19:15	0° \mathbb{E}	
	14686 Jun 18 18:57	0° \mathbb{Q}		evening max el	14687 May 31 03:00	12° \mathbb{E} 28'11	21°55'55
retrograde	14686 Jun 25 12:41	3° \mathbb{Q} 20'08		asc. node	14687 Jun 05 12:46	16° \mathbb{E} 47'16	
evening set	14686 Jun 29 17:05	1° \mathbb{Q} 41'17		retrograde	14687 Jun 09 10:47	17° \mathbb{E} 55'34	
	14686 Jul 01 11:45	30° \mathbb{R} \mathbb{E}		evening set	14687 Jun 14 02:15	16° \mathbb{E} 00'10	
inferior conj	14686 Jul 04 23:01	25° \mathbb{E} 33'51	3°10'34	inferior conj	14687 Jun 19 08:22	9° \mathbb{E} 42'32	3°05'23
minimum elong	14686 Jul 04 23:03	25° \mathbb{E} 33'44	3°09'37	minimum elong	14687 Jun 19 07:28	9° \mathbb{E} 45'41	3°04'17
min. Earth dist.	14686 Jul 05 13:26	24° \mathbb{E} 44'03	0.68536 AU	min. Earth dist.	14687 Jun 19 09:29	9° \mathbb{E} 38'38	0.68989 AU
morning rise	14686 Jul 10 04:43	19° \mathbb{E} 12'52		morning rise	14687 Jun 24 12:30	3° \mathbb{E} 27'46	
direct	14686 Jul 15 13:28	16° \mathbb{E} 51'47		direct	14687 Jun 29 08:45	1° \mathbb{E} 23'58	
desc. node	14686 Jul 21 12:33	19° \mathbb{E} 06'51		desc. node	14687 Jul 08 09:50	6° \mathbb{E} 30'01	
morning max el	14686 Jul 26 10:26	23° \mathbb{E} 21'36	23°46'14	morning max el	14687 Jul 08 22:47	7° \mathbb{E} 01'59	22°17'28
	14686 Aug 01 07:21	0° \mathbb{Q}			14687 Jul 26 17:39	0° \mathbb{Q}	
	14686 Aug 22 08:06	0° \mathbb{P}		morning set	14687 Aug 11 04:41	23° \mathbb{Q} 43'11	
morning set	14686 Aug 30 12:48	13° \mathbb{P} 24'58			14687 Aug 15 00:43	0° \mathbb{P}	
max. Earth dist.	14686 Sep 03 08:42	20° \mathbb{P} 01'50	1.38850 AU	max. Earth dist.	14687 Aug 16 09:39	2° \mathbb{P} 17'21	1.41199 AU

superior conj	14687 Aug 24 05:27	15° \mathbb{M} 48'40	-1°09'43	morning set	14688 Jul 20 21:00	3° \mathcal{O} 01'05	
minimum elong	14687 Aug 24 10:53	16° \mathbb{M} 12'49	1°09'15	max. Earth dist.	14688 Jul 28 16:40	15° \mathcal{O} 25'37	1.43266 AU
	14687 Aug 31 23:59	0° \mathcal{E}					
asc. node	14687 Sep 01 13:37	1° \mathcal{E} 03'35		superior conj	14688 Aug 04 15:08	26° \mathcal{O} 52'54	-1°42'45
evening rise	14687 Sep 03 13:16	4° \mathcal{E} 46'01		minimum elong	14688 Aug 04 22:37	27° \mathcal{O} 24'23	1°42'36
	14687 Sep 19 05:20	0° \mathbb{M}			14688 Aug 06 11:19	0° \mathbb{M}	
evening max el	14687 Sep 19 11:42	0° \mathbb{M} 16'08	18°17'10	evening rise	14688 Aug 16 12:54	17° \mathbb{M} 35'09	
retrograde	14687 Sep 26 21:09	4° \mathbb{M} 01'49		asc. node	14688 Aug 18 10:11	20° \mathbb{M} 56'12	
evening set	14687 Sep 28 23:24	3° \mathbb{M} 44'22			14688 Aug 23 14:57	0° \mathcal{E}	
desc. node	14687 Oct 04 06:15	0° \mathbb{M} 50'25		evening max el	14688 Sep 02 00:01	13° \mathcal{E} 16'36	18°02'40
	14687 Oct 05 07:53	30° \mathcal{R} \mathcal{E}		retrograde	14688 Sep 08 16:10	16° \mathcal{E} 42'54	
inferior conj	14687 Oct 06 11:15	29° \mathcal{E} 03'34	-0°42'04	evening set	14688 Sep 11 01:55	16° \mathcal{E} 15'58	
minimum elong	14687 Oct 06 09:42	29° \mathcal{E} 06'48	0°41'02	inferior conj	14688 Sep 17 20:34	11° \mathcal{E} 15'09	0°42'06
min. Earth dist.	14687 Oct 09 17:55	26° \mathcal{E} 20'14	0.58687 AU	minimum elong	14688 Sep 17 21:50	11° \mathcal{E} 12'06	0°41'43
morning rise	14687 Oct 13 16:34	23° \mathcal{E} 37'20		desc. node	14688 Sep 20 03:45	9° \mathcal{E} 01'34	
direct	14687 Oct 20 01:13	21° \mathcal{E} 49'32		min. Earth dist.	14688 Sep 20 23:14	8° \mathcal{E} 15'56	0.60962 AU
morning max el	14687 Nov 03 08:31	29° \mathcal{E} 29'30	27°26'57	morning rise	14688 Sep 24 14:49	5° \mathcal{E} 20'01	
	14687 Nov 03 20:52	0° \mathbb{M}		direct	14688 Oct 01 06:01	3° \mathcal{E} 07'48	
	14687 Nov 24 23:05	0° \mathcal{A}		morning max el	14688 Oct 15 11:49	11° \mathcal{E} 02'52	27°57'30
asc. node	14687 Nov 28 15:13	6° \mathcal{A} 52'24			14688 Oct 30 08:39	0° \mathbb{M}	
morning set	14687 Dec 04 11:24	18° \mathcal{A} 45'46		asc. node	14688 Nov 14 12:03	26° \mathbb{M} 33'51	
	14687 Dec 09 14:49	0° \mathcal{Z}			14688 Nov 16 04:58	0° \mathcal{A}	
				morning set	14688 Nov 17 14:28	2° \mathcal{A} 52'41	
superior conj	14687 Dec 11 09:28	3° \mathcal{Z} 58'18	1°33'39	max. Earth dist.	14688 Nov 23 09:41	15° \mathcal{A} 21'40	1.31327 AU
minimum elong	14687 Dec 11 08:15	3° \mathcal{Z} 51'30	1°34'36				
max. Earth dist.	14687 Dec 11 02:56	3° \mathcal{Z} 21'44	1.31105 AU	superior conj	14688 Nov 24 20:09	18° \mathcal{A} 32'35	1°23'34
evening rise	14687 Dec 18 03:24	18° \mathcal{Z} 52'08		minimum elong	14688 Nov 24 18:11	18° \mathcal{A} 21'41	1°24'21
	14687 Dec 23 13:10	0° \approx			14688 Nov 30 00:04	0° \mathcal{Z}	
desc. node	14687 Dec 31 04:13	13° \approx 50'38		evening rise	14688 Dec 01 12:51	3° \mathcal{Z} 20'24	
	14688 Jan 11 10:14	0° \mathcal{H}			14688 Dec 15 13:11	0° \approx	
evening max el	14688 Jan 16 16:04	5° \mathcal{H} 38'42	26°37'58	desc. node	14688 Dec 17 01:07	2° \approx 20'10	
retrograde	14688 Jan 30 15:23	12° \mathcal{H} 47'49		evening max el	14688 Dec 28 09:03	16° \approx 27'34	25°20'21
evening set	14688 Feb 06 03:33	11° \mathcal{H} 03'32		retrograde	14689 Jan 11 05:34	23° \approx 25'28	
min. Earth dist.	14688 Feb 10 05:46	8° \mathcal{H} 26'01	0.58850 AU	evening set	14689 Jan 17 00:38	22° \approx 09'13	
inferior conj	14688 Feb 13 09:54	6° \mathcal{H} 00'31	-3°28'59	min. Earth dist.	14689 Jan 21 21:22	19° \approx 28'13	0.56829 AU
minimum elong	14688 Feb 13 17:35	5° \mathcal{H} 45'46	3°25'47	inferior conj	14689 Jan 24 15:35	17° \approx 38'20	-4°51'16
morning rise	14688 Feb 21 10:49	1° \mathcal{H} 26'24		minimum elong	14689 Jan 25 00:39	17° \approx 23'16	4°48'12
direct	14688 Feb 23 10:55	1° \mathcal{H} 12'11		morning rise	14689 Feb 02 03:17	13° \approx 26'16	
asc. node	14688 Feb 24 13:08	1° \mathcal{H} 16'34		direct	14689 Feb 04 06:16	13° \approx 13'01	
morning max el	14688 Mar 02 09:10	5° \mathcal{H} 07'26	18°19'31	asc. node	14689 Feb 10 10:34	15° \approx 13'27	
morning set	14688 Mar 18 02:52	0° \mathcal{Y} 12'00		morning max el	14689 Feb 13 11:23	17° \approx 42'03	19°07'12
	14688 Mar 18 00:20	0° \mathcal{Y}			14689 Feb 22 09:14	0° \mathcal{H}	
				morning set	14689 Mar 02 02:47	14° \mathcal{H} 34'24	
superior conj	14688 Mar 27 11:58	17° \mathcal{Y} 46'34	0°06'10		14689 Mar 09 22:47	0° \mathcal{Y}	
minimum elong	14688 Mar 27 12:25	17° \mathcal{Y} 48'35	0°05'53				
behind sun begin	14688 Mar 27 05:32	17° \mathcal{Y} 17'14		superior conj	14689 Mar 10 11:23	1° \mathcal{Y} 00'40	0°37'37
behind sun end	14688 Mar 27 19:17	18° \mathcal{Y} 19'51		minimum elong	14689 Mar 10 13:34	1° \mathcal{Y} 11'07	0°37'22
desc. node	14688 Mar 28 06:04	19° \mathcal{Y} 08'40		desc. node	14689 Mar 15 02:34	9° \mathcal{Y} 43'02	
	14688 Apr 03 09:55	0° \mathcal{B}		max. Earth dist.	14689 Mar 17 08:09	13° \mathcal{Y} 46'11	1.38750 AU
max. Earth dist.	14688 Apr 04 01:39	1° \mathcal{B} 07'12	1.41009 AU	evening rise	14689 Mar 21 02:39	20° \mathcal{Y} 24'00	
evening rise	14688 Apr 08 14:26	8° \mathcal{B} 41'38			14689 Mar 26 20:23	0° \mathcal{B}	
	14688 Apr 22 08:20	0° \mathbb{I}			14689 Apr 16 10:20	0° \mathbb{I}	
evening max el	14688 May 12 18:26	26° \mathbb{I} 20'18	23°16'22	evening max el	14689 Apr 25 08:01	10° \mathbb{I} 13'41	24°36'44
	14688 May 16 23:17	0° \mathcal{E}		retrograde	14689 May 06 22:59	17° \mathbb{I} 01'30	
asc. node	14688 May 22 09:55	2° \mathcal{E} 27'54		asc. node	14689 May 09 07:08	16° \mathbb{I} 37'49	
retrograde	14688 May 23 06:36	2° \mathcal{E} 31'12		evening set	14689 May 12 13:28	14° \mathbb{I} 39'35	
evening set	14688 May 28 09:34	0° \mathcal{E} 21'03		min. Earth dist.	14689 May 17 01:39	9° \mathbb{I} 31'20	0.68455 AU
	14688 May 28 18:59	30° \mathcal{R} \mathbb{I}		inferior conj	14689 May 18 02:13	8° \mathbb{I} 09'16	2°23'42
inferior conj	14688 Jun 02 18:03	23° \mathbb{I} 55'25	2°49'44	minimum elong	14689 May 18 00:07	8° \mathbb{I} 16'17	2°22'16
minimum elong	14688 Jun 02 16:24	24° \mathbb{I} 01'07	2°48'26	morning rise	14689 May 23 10:58	2° \mathbb{I} 10'43	
min. Earth dist.	14688 Jun 02 06:14	24° \mathbb{I} 36'15	0.68957 AU	direct	14689 May 27 06:39	0° \mathbb{I} 47'08	
morning rise	14688 Jun 07 23:11	17° \mathbb{I} 48'15		morning max el	14689 Jun 03 16:12	4° \mathbb{I} 53'40	19°45'06
direct	14688 Jun 12 06:54	16° \mathbb{I} 04'19		desc. node	14689 Jun 11 03:59	13° \mathbb{I} 55'32	
morning max el	14688 Jun 20 16:00	20° \mathbb{I} 52'15	20°55'17	greatest brilliancy	14689 Jun 16 15:28	21° \mathbb{I} 41'06	-0.6m
desc. node	14688 Jun 24 06:58	24° \mathbb{I} 51'21			14689 Jun 22 05:53	0° \mathcal{E}	
	14688 Jun 28 08:46	0° \mathcal{E}		morning set	14689 Jun 29 23:52	11° \mathcal{E} 47'11	
	14688 Jul 18 22:16	0° \mathcal{O}		max. Earth dist.	14689 Jul 11 05:36	29° \mathcal{E} 17'01	1.44826 AU

	14689 Jul 11 16:28	0°♈		desc. node	14690 May 29 00:55	3°♊30'48	
				greatest brilliancy	14690 May 31 17:09	7°♊33'07	-0.8m
superior conj	14689 Jul 16 01:07	6°♈57'39 -2°06'27		morning set	14690 Jun 09 09:35	20°♊57'37	
minimum elong	14689 Jul 16 06:53	7°♈20'50 2°07'03			14690 Jun 15 05:07	0°♊	
evening rise	14689 Jul 29 17:16	29°♈33'04		max. Earth dist.	14690 Jun 23 23:15	13°♊38'39	1.45727 AU
	14689 Jul 29 23:39	0°♊					
asc. node	14689 Aug 05 06:47	10°♊34'53		superior conj	14690 Jun 25 15:44	16°♊17'02 -2°13'40	
evening max el	14689 Aug 16 14:35	26°♊40'45 18°07'04		minimum elong	14690 Jun 25 14:43	16°♊13'02 2°14'41	
	14689 Aug 22 11:43	0°♊			14690 Jul 04 08:25	0°♊	
retrograde	14689 Aug 22 23:31	0°♊01'17		evening rise	14690 Jul 10 21:47	10°♊29'40	
	14689 Aug 23 11:19	30°♊		asc. node	14690 Jul 23 03:29	29°♊54'13	
evening set	14689 Aug 25 17:42	29°♊21'33			14690 Jul 23 05:01	0°♊	
inferior conj	14689 Aug 31 22:12	24°♊03'08 1°45'05		evening max el	14690 Jul 31 04:11	10°♊20'26 18°29'25	
minimum elong	14689 Sep 01 00:32	23°♊56'44 1°44'08		retrograde	14690 Aug 06 15:06	13°♊48'27	
min. Earth dist.	14689 Sep 03 14:26	21°♊08'48 0.63204 AU		evening set	14690 Aug 09 18:12	12°♊53'26	
morning rise	14689 Sep 07 05:19	17°♊49'33		inferior conj	14690 Aug 15 12:08	7°♊19'24 2°28'34	
desc. node	14689 Sep 07 01:16	17°♊57'16		minimum elong	14690 Aug 15 14:24	7°♊12'35 2°27'33	
direct	14689 Sep 13 21:03	15°♊19'37		min. Earth dist.	14690 Aug 17 14:52	4°♊47'27 0.65210 AU	
morning max el	14689 Sep 27 20:15	23°♊20'30 27°49'18		morning rise	14690 Aug 21 09:23	0°♊56'35	
	14689 Oct 03 19:02	0°♊			14690 Aug 22 15:42	30°♊	
	14689 Oct 23 16:02	0°♊		desc. node	14690 Aug 24 22:46	28°♊49'13	
morning set	14689 Nov 01 10:25	16°♊36'58		direct	14690 Aug 27 20:30	28°♊18'14	
asc. node	14689 Nov 01 08:47	16°♊28'44			14690 Sep 02 13:53	0°♊	
max. Earth dist.	14689 Nov 06 11:04	27°♊04'30 1.32104 AU		morning max el	14690 Sep 10 07:05	6°♊12'12 27°07'38	
	14689 Nov 07 19:43	0°♊			14690 Sep 28 14:05	0°♊	
				morning set	14690 Oct 15 20:34	29°♊52'27	
superior conj	14689 Nov 09 04:00	2°♊55'21 1°07'37			14690 Oct 15 22:07	0°♊	
minimum elong	14689 Nov 09 01:41	2°♊42'46 1°08'08		asc. node	14690 Oct 19 05:27	6°♊32'22	
evening rise	14689 Nov 15 23:46	17°♊50'29		max. Earth dist.	14690 Oct 20 03:54	8°♊26'13 1.33433 AU	
	14689 Nov 21 20:58	0°♊					
desc. node	14689 Dec 03 22:09	19°♊52'17		superior conj	14690 Oct 24 06:53	17°♊01'12 0°45'51	
evening max el	14689 Dec 09 19:30	26°♊35'53 23°41'49		minimum elong	14690 Oct 24 04:48	16°♊50'14 0°46'09	
	14689 Dec 13 22:07	0°♊			14690 Oct 30 08:24	0°♊	
retrograde	14689 Dec 23 06:44	3°♊17'10		evening rise	14690 Oct 31 10:20	2°♊18'08	
evening set	14689 Dec 27 22:20	2°♊30'11			14690 Nov 15 16:46	0°♊	
	14690 Jan 02 07:37	30°♊		desc. node	14690 Nov 20 19:19	6°♊06'48	
min. Earth dist.	14690 Jan 03 06:30	29°♊27'01 0.55288 AU		evening max el	14690 Nov 21 07:07	6°♊36'13 21°59'52	
inferior conj	14690 Jan 05 00:38	28°♊24'46 -5°48'25		retrograde	14690 Dec 03 20:00	12°♊48'30	
minimum elong	14690 Jan 05 05:50	28°♊17'05 5°46'54		evening set	14690 Dec 07 03:19	12°♊24'13	
morning rise	14690 Jan 13 14:59	24°♊30'26		inferior conj	14690 Dec 15 18:53	8°♊31'33 -5°55'19	
direct	14690 Jan 16 06:00	24°♊13'22		minimum elong	14690 Dec 15 15:09	8°♊36'46 5°54'02	
morning max el	14690 Jan 27 00:29	29°♊24'18 20°17'55		min. Earth dist.	14690 Dec 15 12:30	8°♊40'29 0.54514 AU	
	14690 Jan 27 14:55	0°♊		morning rise	14690 Dec 24 03:52	4°♊44'11	
asc. node	14690 Jan 28 07:56	0°♊44'29		direct	14690 Dec 27 16:23	4°♊16'46	
morning set	14690 Feb 14 09:05	29°♊11'10		morning max el	14691 Jan 08 22:44	10°♊10'53 21°50'46	
	14690 Feb 14 18:37	0°♊		asc. node	14691 Jan 15 05:13	17°♊33'00	
					14691 Jan 22 20:07	0°♊	
superior conj	14690 Feb 22 00:09	14°♊49'39 1°02'33		morning set	14691 Jan 29 19:13	13°♊55'03	
minimum elong	14690 Feb 22 02:48	15°♊03'01 1°02'32					
max. Earth dist.	14690 Feb 27 15:02	25°♊51'06 1.36523 AU		superior conj	14691 Feb 05 22:33	29°♊03'15 1°20'43	
desc. node	14690 Mar 01 23:05	0°♊13'58		minimum elong	14691 Feb 06 00:50	29°♊15'16 1°21'04	
	14690 Mar 01 20:04	0°♊			14691 Feb 06 09:23	0°♊	
evening rise	14690 Mar 03 10:02	2°♊54'13		max. Earth dist.	14691 Feb 10 03:18	7°♊42'18 1.34543 AU	
	14690 Mar 19 21:16	0°♊		evening rise	14691 Feb 14 09:11	16°♊02'53	
evening max el	14690 Apr 07 21:32	24°♊05'59 25°50'05		desc. node	14691 Feb 16 19:39	20°♊37'41	
	14690 Apr 15 13:33	0°♊			14691 Feb 22 01:50	0°♊	
retrograde	14690 Apr 20 10:50	1°♊19'10			14691 Mar 14 09:07	0°♊	
	14690 Apr 24 21:25	30°♊		evening max el	14691 Mar 21 11:26	7°♊50'37 26°48'52	
asc. node	14690 Apr 26 04:27	29°♊05'32		retrograde	14691 Apr 03 17:01	15°♊16'46	
evening set	14690 Apr 26 12:16	28°♊49'36		evening set	14691 Apr 10 04:07	12°♊44'43	
min. Earth dist.	14690 Apr 30 17:39	24°♊17'02 0.67498 AU		asc. node	14691 Apr 13 01:51	9°♊59'26	
inferior conj	14690 May 02 06:53	22°♊19'18 1°46'51		min. Earth dist.	14691 Apr 14 04:02	8°♊46'22 0.66116 AU	
minimum elong	14690 May 02 04:47	22°♊25'57 1°45'27		inferior conj	14691 Apr 16 05:49	6°♊20'30 0°58'27	
morning rise	14690 May 07 21:55	16°♊30'41		minimum elong	14691 Apr 16 04:23	6°♊24'44 0°57'24	
direct	14690 May 11 06:29	15°♊26'16		morning rise	14691 Apr 22 05:54	0°♊43'36	
morning max el	14690 May 17 23:42	19°♊03'30 18°50'09			14691 Apr 24 08:12	30°♊	
	14690 May 26 15:35	0°♊		direct	14691 Apr 25 04:22	29°♊56'06	

	14691 Apr 26 00:40	0°♄		morning rise	14692 Apr 05 08:15	14°♄43'41	
morning max el	14691 May 01 13:10	3°♄16'39	18°11'51	direct	14692 Apr 07 21:49	14°♄10'03	
desc. node	14691 May 15 21:45	23°♄28'46		morning max el	14692 Apr 14 06:14	17°♄26'06	17°50'41
	14691 May 19 23:25	0°♄			14692 Apr 23 11:58	0°♄	
morning set	14691 May 20 19:13	1°♄19'27		morning set	14692 May 01 08:44	13°♄02'08	
				desc. node	14692 May 01 18:29	13°♄43'02	
superior conj	14691 Jun 05 00:18	25°♄26'48	-2°00'44		14692 May 11 14:41	0°♄	
minimum elong	14691 Jun 04 16:36	24°♄56'37	2°01'15				
max. Earth dist.	14691 Jun 06 19:32	28°♄15'43	1.45891 AU	superior conj	14692 May 14 20:07	5°♄12'28	-1°31'11
	14691 Jun 07 22:16	0°♄		minimum elong	14692 May 14 11:36	4°♄38'18	1°31'08
evening rise	14691 Jun 21 02:11	20°♄27'47		max. Earth dist.	14692 May 19 15:43	12°♄51'52	1.45305 AU
	14691 Jun 27 05:55	0°♄		evening rise	14692 May 30 15:10	29°♄53'46	
greatest brilliancy	14691 Jul 02 10:20	7°♄55'41	-0.7m		14692 May 30 16:48	0°♄	
asc. node	14691 Jul 10 00:15	18°♄46'40		greatest brilliancy	14692 Jun 14 12:13	22°♄10'50	-0.6m
evening max el	14691 Jul 14 14:06	24°♄07'58	19°08'46		14692 Jun 20 02:21	0°♄	
retrograde	14691 Jul 21 11:33	27°♄56'34		asc. node	14692 Jun 25 21:09	7°♄03'29	
evening set	14691 Jul 25 00:03	26°♄44'41		evening max el	14692 Jun 26 18:34	7°♄58'49	20°03'44
inferior conj	14691 Jul 30 10:54	20°♄56'29	2°55'32	retrograde	14692 Jul 04 10:18	12°♄19'56	
minimum elong	14691 Jul 30 12:28	20°♄51'25	2°54'34	evening set	14692 Jul 08 08:44	10°♄50'43	
min. Earth dist.	14691 Jul 31 23:14	18°♄59'16	0.66853 AU	inferior conj	14692 Jul 13 15:39	4°♄49'40	3°08'35
morning rise	14691 Aug 05 00:14	14°♄31'08		minimum elong	14692 Jul 13 16:15	4°♄47'36	3°07'39
direct	14691 Aug 11 02:47	11°♄53'44		min. Earth dist.	14692 Jul 14 13:50	3°♄34'24	0.68058 AU
desc. node	14691 Aug 11 20:16	11°♄55'45			14692 Jul 17 10:10	30°♄	
morning max el	14691 Aug 23 18:14	19°♄26'04	26°00'31	morning rise	14692 Jul 18 23:26	28°♄26'11	
	14691 Sep 01 18:24	0°♄		direct	14692 Jul 24 14:58	25°♄57'37	
	14691 Sep 21 15:58	0°♄		desc. node	14692 Jul 28 17:41	27°♄02'05	
morning set	14691 Sep 28 17:25	12°♄30'07			14692 Aug 02 02:19	0°♄	
max. Earth dist.	14691 Oct 02 11:00	19°♄32'21	1.35269 AU	morning max el	14692 Aug 05 04:59	2°♄53'52	24°37'26
asc. node	14691 Oct 06 02:04	26°♄39'53			14692 Aug 25 21:33	0°♄	
	14691 Oct 07 17:46	0°♄		morning set	14692 Sep 09 20:58	24°♄21'05	
					14692 Sep 13 01:11	0°♄	
superior conj	14691 Oct 08 02:07	0°♄42'23	0°18'29	max. Earth dist.	14692 Sep 13 10:56	0°♄44'10	1.37486 AU
minimum elong	14691 Oct 08 01:04	0°♄37'02	0°18'42				
evening rise	14691 Oct 15 18:28	16°♄37'14		superior conj	14692 Sep 20 10:31	13°♄51'30	-0°13'46
	14691 Oct 22 12:11	0°♄		minimum elong	14692 Sep 20 11:26	13°♄55'53	0°13'27
evening max el	14691 Nov 03 04:55	17°♄03'29	20°30'21	behind sun begin	14692 Sep 20 07:41	13°♄37'45	
desc. node	14691 Nov 07 16:35	20°♄37'46		behind sun end	14692 Sep 20 15:10	14°♄14'03	
retrograde	14691 Nov 14 06:35	22°♄33'54		asc. node	14692 Sep 21 22:40	16°♄47'55	
evening set	14691 Nov 16 13:18	22°♄20'58		evening rise	14692 Sep 28 21:54	0°♄42'11	
inferior conj	14691 Nov 25 10:53	18°♄26'10	-5°01'56		14692 Sep 28 13:28	0°♄	
minimum elong	14691 Nov 25 01:06	18°♄40'24	4°58'37	evening max el	14692 Oct 15 17:03	28°♄18'03	19°21'23
min. Earth dist.	14691 Nov 26 18:31	17°♄40'11	0.54655 AU		14692 Oct 17 14:06	0°♄	
morning rise	14691 Dec 03 12:37	14°♄27'31		desc. node	14692 Oct 24 13:56	3°♄00'53	
direct	14691 Dec 08 01:03	13°♄43'41		retrograde	14692 Oct 25 03:33	3°♄01'52	
morning max el	14691 Dec 21 10:09	20°♄15'55	23°38'29	evening set	14692 Oct 27 00:36	2°♄51'27	
	14691 Dec 29 14:10	0°♄			14692 Nov 02 14:53	30°♄	
asc. node	14692 Jan 02 02:26	5°♄21'20		inferior conj	14692 Nov 04 14:58	28°♄42'56	-3°26'09
morning set	14692 Jan 14 07:02	28°♄39'58		minimum elong	14692 Nov 04 06:25	28°♄56'56	3°22'18
	14692 Jan 14 21:58	0°♄		min. Earth dist.	14692 Nov 07 04:05	27°♄02'59	0.55696 AU
				morning rise	14692 Nov 12 09:59	24°♄14'08	
superior conj	14692 Jan 21 03:33	13°♄33'00	1°32'18	direct	14692 Nov 17 19:21	23°♄08'13	
minimum elong	14692 Jan 21 05:00	13°♄40'50	1°33'00		14692 Dec 01 14:29	0°♄	
max. Earth dist.	14692 Jan 23 23:15	19°♄36'03	1.32949 AU	morning max el	14692 Dec 01 19:45	0°♄12'28	25°25'15
evening rise	14692 Jan 28 20:35	29°♄40'56		asc. node	14692 Dec 18 23:34	23°♄54'45	
	14692 Jan 29 00:24	0°♄			14692 Dec 22 06:21	0°♄	
desc. node	14692 Feb 03 16:16	10°♄49'39		morning set	14692 Dec 28 18:42	13°♄20'29	
	14692 Feb 15 03:49	0°♄					
evening max el	14692 Mar 03 00:40	21°♄16'39	27°25'43	superior conj	14693 Jan 04 12:43	28°♄11'42	1°37'34
retrograde	14692 Mar 16 16:44	28°♄45'50		minimum elong	14693 Jan 04 13:06	28°♄13'53	1°38'31
evening set	14692 Mar 23 10:53	26°♄17'25			14693 Jan 05 08:19	0°♄	
min. Earth dist.	14692 Mar 27 06:43	22°♄50'35	0.64359 AU	max. Earth dist.	14693 Jan 06 02:04	1°♄37'41	1.31823 AU
inferior conj	14692 Mar 29 20:27	20°♄06'25	-0°02'16	evening rise	14693 Jan 11 17:12	13°♄40'44	
minimum elong	14692 Mar 29 20:31	20°♄06'13	0°02'28		14693 Jan 20 03:09	0°♄	
transit middle	14692 Mar 29 20:31	20°♄06'13	0°02'28	desc. node	14693 Jan 20 12:56	0°♄43'59	
transit begin	14692 Mar 29 17:28	20°♄14'24			14693 Feb 09 11:01	0°♄	
transit end	14692 Mar 29 23:35	19°♄58'04		evening max el	14693 Feb 13 11:12	4°♄10'51	27°33'53
asc. node	14692 Mar 29 23:17	19°♄58'51		retrograde	14693 Feb 27 09:01	11°♄36'05	

evening set	14693 Mar 06 05:56	9°Υ18'40		min. Earth dist.	14694 Feb 20 07:08	18°Χ57'13	0.60108 AU
min. Earth dist.	14693 Mar 10 00:02	6°Υ18'10	0.62312 AU	inferior conj	14694 Feb 23 11:51	16°Χ17'51	-2°38'42
inferior conj	14693 Mar 12 23:38	3°Υ28'29	-1°15'22	minimum elong	14694 Feb 23 17:42	16°Χ05'38	2°36'07
minimum elong	14693 Mar 13 02:13	3°Υ22'21	1°14'16	morning rise	14694 Mar 03 04:38	11°Χ31'31	
asc. node	14693 Mar 16 20:46	0°Υ06'50		asc. node	14694 Mar 03 18:13	11°Χ23'47	
	14693 Mar 17 00:35	30°ΚΧ		direct	14694 Mar 05 05:40	11°Χ15'10	
morning rise	14693 Mar 20 01:25	28°Χ22'39		morning max el	14694 Mar 12 14:34	14°Χ55'54	18°01'52
direct	14693 Mar 22 07:32	27°Χ59'30			14694 Mar 22 23:35	0°Υ	
	14693 Mar 27 10:10	0°Υ		morning set	14694 Mar 28 04:14	9°Υ27'21	
morning max el	14693 Mar 28 23:51	1°Υ22'25	17°47'01	desc. node	14694 Apr 05 11:41	24°Υ39'16	
morning set	14693 Apr 13 21:44	25°Υ50'37					
	14693 Apr 16 06:25	0°Ξ		superior conj	14694 Apr 07 07:05	27°Υ52'04	-0°14'35
desc. node	14693 Apr 18 15:06	4°Ξ07'49		minimum elong	14694 Apr 07 05:50	27°Υ46'35	0°14'45
				behind sun begin	14694 Apr 07 02:48	27°Υ33'11	
superior conj	14693 Apr 25 13:47	15°Ξ59'53	-0°53'17	behind sun end	14694 Apr 07 08:52	27°Υ59'57	
minimum elong	14693 Apr 25 08:41	15°Ξ38'29	0°53'11		14694 Apr 08 12:13	0°Ξ	
max. Earth dist.	14693 May 02 08:37	27°Ξ07'54	1.44036 AU	max. Earth dist.	14694 Apr 14 20:50	10°Ξ50'39	1.42228 AU
	14693 May 04 03:37	0°Π		evening rise	14694 Apr 20 07:33	19°Ξ43'05	
evening rise	14693 May 10 04:12	9°Π27'14			14694 Apr 26 21:38	0°Π	
	14693 May 23 21:09	0°Φ			14694 May 18 08:03	0°Φ	
evening max el	14693 Jun 09 17:01	21°Φ49'44	21°12'03	evening max el	14694 May 23 10:29	5°Φ41'13	22°29'41
asc. node	14693 Jun 12 18:08	24°Φ32'00		asc. node	14694 May 30 15:13	10°Φ56'52	
retrograde	14693 Jun 18 09:14	26°Φ52'15		retrograde	14694 Jun 02 06:36	11°Φ27'57	
evening set	14693 Jun 22 18:14	25°Φ06'07		evening set	14694 Jun 07 02:48	9°Φ26'12	
inferior conj	14693 Jun 27 23:56	18°Φ53'51	3°09'41	inferior conj	14694 Jun 12 09:40	3°Φ04'43	3°00'00
minimum elong	14693 Jun 27 23:33	18°Φ55'09	3°08'40	minimum elong	14694 Jun 12 08:25	3°Φ09'04	2°58'49
min. Earth dist.	14693 Jun 28 08:35	18°Φ23'42	0.68787 AU	min. Earth dist.	14694 Jun 12 05:18	3°Φ19'56	0.69036 AU
morning rise	14693 Jul 03 04:39	12°Φ35'08			14694 Jun 14 16:18	30°ΚΠ	
direct	14693 Jul 08 07:59	10°Φ21'09		morning rise	14694 Jun 17 13:54	26°Π52'45	
desc. node	14693 Jul 15 14:59	13°Φ41'59		direct	14694 Jun 22 04:45	24°Π57'08	
morning max el	14693 Jul 18 16:06	16°Φ29'51	23°08'03		14694 Jul 01 00:35	0°Φ	
	14693 Jul 29 19:34	0°Ω		morning max el	14694 Jul 01 06:04	0°Φ13'36	21°41'09
	14693 Aug 18 21:49	0°Π		desc. node	14694 Jul 02 12:11	1°Φ31'40	
morning set	14693 Aug 22 02:50	5°Π15'29			14694 Jul 23 13:16	0°Ω	
max. Earth dist.	14693 Aug 26 09:19	12°Π28'26	1.39863 AU	morning set	14694 Aug 02 08:08	15°Ω06'08	
				max. Earth dist.	14694 Aug 08 12:00	25°Ω04'00	1.42127 AU
superior conj	14693 Sep 03 04:14	26°Π19'55	-0°49'08		14694 Aug 11 11:05	0°Π	
minimum elong	14693 Sep 03 07:56	26°Π36'55	0°48'40				
	14693 Sep 05 03:45	0°Α		superior conj	14694 Aug 16 02:48	7°Π57'30	-1°24'26
asc. node	14693 Sep 08 19:15	6°Α53'06		minimum elong	14694 Aug 16 09:21	8°Π25'58	1°24'03
evening rise	14693 Sep 12 17:40	14°Α25'45		asc. node	14694 Aug 26 15:49	26°Π51'20	
	14693 Sep 21 04:55	0°Μ		evening rise	14694 Aug 27 01:58	27°Π37'45	
evening max el	14693 Sep 28 17:53	10°Μ21'16	18°34'34		14694 Aug 28 09:05	0°Α	
retrograde	14693 Oct 06 18:28	14°Μ24'36		evening max el	14694 Sep 12 03:17	23°Α03'58	18°08'42
evening set	14693 Oct 08 17:10	14°Μ11'04		retrograde	14694 Sep 19 04:00	26°Α39'24	
desc. node	14693 Oct 11 11:19	13°Μ09'38		evening set	14694 Sep 21 09:18	26°Α18'21	
inferior conj	14693 Oct 16 15:31	9°Μ42'52	-1°39'14	desc. node	14694 Sep 28 08:47	21°Α39'48	
minimum elong	14693 Oct 16 11:32	9°Μ50'28	1°37'04	inferior conj	14694 Sep 28 13:35	21°Α29'07	-0°03'46
min. Earth dist.	14693 Oct 19 19:57	7°Μ17'35	0.57456 AU	minimum elong	14694 Sep 28 13:28	21°Α29'23	0°03'27
morning rise	14693 Oct 24 02:27	4°Μ36'38		transit middle	14694 Sep 28 13:28	21°Α29'23	0°03'27
direct	14693 Oct 30 04:20	3°Μ04'02		transit begin	14694 Sep 28 10:10	21°Α36'44	
morning max el	14693 Nov 13 10:52	10°Μ33'43	26°51'58	transit end	14694 Sep 28 16:46	21°Α22'01	
	14693 Nov 28 09:49	0°Ξ		min. Earth dist.	14694 Oct 01 19:49	18°Α36'11	0.59643 AU
asc. node	14693 Dec 05 20:35	13°Ξ01'31		morning rise	14694 Oct 05 14:18	15°Α49'32	
morning set	14693 Dec 13 04:30	27°Ξ51'49		direct	14694 Oct 12 02:45	13°Α50'21	
	14693 Dec 14 04:17	0°Ξ		morning max el	14694 Oct 26 09:43	21°Α37'57	27°44'48
					14694 Nov 02 17:48	0°Μ	
superior conj	14693 Dec 19 23:58	12°Ξ53'18	1°36'48		14694 Nov 21 10:10	0°Ξ	
minimum elong	14693 Dec 19 23:18	12°Ξ49'35	1°37'48	asc. node	14694 Nov 22 17:29	2°Ξ31'59	
max. Earth dist.	14693 Dec 20 09:06	13°Ξ44'23	1.31207 AU	morning set	14694 Nov 27 10:32	12°Ξ08'17	
evening rise	14693 Dec 26 20:28	27°Ξ56'06		max. Earth dist.	14694 Dec 03 16:56	25°Ξ48'27	1.31126 AU
	14693 Dec 27 19:58	0°≈					
desc. node	14694 Jan 07 09:41	20°≈13'33		superior conj	14694 Dec 04 11:21	27°Ξ31'16	1°30'06
	14694 Jan 13 11:20	0°Χ		minimum elong	14694 Dec 04 09:47	27°Ξ22'30	1°31'00
evening max el	14694 Jan 26 16:42	16°Χ21'55	27°08'31		14694 Dec 05 13:57	0°Ξ	
retrograde	14694 Feb 09 16:46	23°Χ38'16		evening rise	14694 Dec 11 04:12	12°Ξ20'39	
evening set	14694 Feb 16 10:08	21°Χ39'57			14694 Dec 19 23:26	0°≈	

desc. node	14694 Dec 25 06:31	9°08'01			14695 Nov 27 01:57	0°3	
evening max el	14695 Jan 08 14:48	27°40'58	26°08'33	desc. node	14695 Dec 12 03:28	27°314'48	
	14695 Jan 11 06:26	0°			14695 Dec 14 02:48	0°	
retrograde	14695 Jan 22 13:45	4°45'27		evening max el	14695 Dec 21 04:36	8°09'50	24°40'02
evening set	14695 Jan 28 19:36	3°12'59		retrograde	14696 Jan 03 21:54	15°00'44	
min. Earth dist.	14695 Feb 02 04:06	0°35'46	0.57947 AU	evening set	14696 Jan 09 06:38	13°57'15	
	14695 Feb 03 00:22	30°		min. Earth dist.	14696 Jan 14 16:26	11°09'18	0.56100 AU
inferior conj	14695 Feb 05 05:25	28°23'48	-4°05'26	inferior conj	14696 Jan 17 02:02	9°38'56	-5°20'07
minimum elong	14695 Feb 05 14:06	28°08'07	4°02'04	minimum elong	14696 Jan 17 10:15	9°26'00	5°17'39
morning rise	14695 Feb 13 11:37	23°58'49		morning rise	14696 Jan 25 15:59	5°35'02	
direct	14695 Feb 15 11:54	23°45'33		direct	14696 Jan 27 23:02	5°20'43	
asc. node	14695 Feb 18 15:38	24°19'57		asc. node	14696 Feb 05 13:02	8°57'51	
morning max el	14695 Feb 23 22:26	27°54'29	18°37'02	morning max el	14696 Feb 06 19:20	10°06'45	19°34'28
	14695 Feb 25 20:51	0°			14696 Feb 19 23:26	0°	
morning set	14695 Mar 11 23:00	23°36'26		morning set	14696 Feb 24 01:59	8°05'49	
	14695 Mar 15 06:16	0°					
superior conj	14695 Mar 20 20:45	10°39'20	0°20'15	superior conj	14696 Mar 03 02:18	24°09'06	0°49'03
minimum elong	14695 Mar 20 22:07	10°45'39	0°19'56	minimum elong	14696 Mar 03 04:49	24°21'24	0°48'51
desc. node	14695 Mar 23 08:13	15°13'23			14696 Mar 06 02:51	0°	
max. Earth dist.	14695 Mar 28 05:04	23°53'53	1.40065 AU	desc. node	14696 Mar 09 04:43	5°46'28	
	14695 Mar 31 18:41	0°		max. Earth dist.	14696 Mar 09 11:34	6°17'57	1.37786 AU
evening rise	14695 Apr 01 07:38	0°54'19		evening rise	14696 Mar 13 04:21	12°57'39	
	14695 Apr 20 06:08	0°			14696 Mar 23 09:51	0°	
evening max el	14695 May 06 01:04	19°34'50	23°51'00	evening max el	14696 Apr 14 07:19	0°	
retrograde	14695 May 17 01:01	26°02'06			14696 Apr 17 14:36	3°28'44	25°09'16
asc. node	14695 May 17 12:21	26°01'07		retrograde	14696 Apr 29 15:26	10°28'06	
evening set	14695 May 22 08:52	23°46'47		asc. node	14696 May 03 09:36	9°28'25	
min. Earth dist.	14695 May 27 01:48	18°17'28	0.68805 AU	evening set	14696 May 05 10:49	8°02'21	
inferior conj	14695 May 27 18:59	17°18'52	2°39'58	min. Earth dist.	14696 May 09 19:57	3°09'37	0.68106 AU
minimum elong	14695 May 27 17:05	17°25'19	2°38'37	inferior conj	14696 May 11 01:54	1°31'42	2°09'26
morning rise	14695 Jun 02 01:19	11°15'05		minimum elong	14696 May 10 23:45	1°38'47	2°08'00
direct	14695 Jun 06 03:54	9°39'37			14696 May 12 06:18	30°	
morning max el	14695 Jun 14 02:00	14°08'23	20°23'38	morning rise	14696 May 16 13:01	25°37'21	
desc. node	14695 Jun 19 09:18	20°12'57		direct	14696 May 20 03:57	24°22'01	
	14695 Jun 26 13:54	0°		morning max el	14696 May 27 05:25	28°14'02	19°19'48
morning set	14695 Jul 12 16:48	24°05'07			14696 May 28 21:52	0°	
	14695 Jul 16 12:09	0°		desc. node	14696 Jun 05 06:19	9°31'35	
max. Earth dist.	14695 Jul 21 21:51	8°33'10	1.44008 AU	greatest brilliancy	14696 Jun 08 22:20	14°51'18	-0.7m
					14696 Jun 18 22:28	0°	
superior conj	14695 Jul 28 02:31	18°36'56	-1°54'23	morning set	14696 Jun 20 20:03	2°54'59	
minimum elong	14695 Jul 28 09:53	19°07'22	1°54'32	max. Earth dist.	14696 Jul 03 13:44	22°41'56	1.45304 AU
	14695 Aug 03 21:20	0°					
evening rise	14695 Aug 09 18:04	10°06'52		superior conj	14696 Jul 07 03:13	28°19'23	-2°11'53
asc. node	14695 Aug 13 12:24	16°38'48		minimum elong	14696 Jul 07 06:35	28°32'45	2°12'45
	14695 Aug 21 16:39	0°			14696 Jul 08 04:32	0°	
evening max el	14695 Aug 26 17:06	6°16'17	18°02'19	evening rise	14696 Jul 21 12:46	21°39'57	
retrograde	14695 Sep 02 04:47	9°38'07			14696 Jul 26 13:54	0°	
evening set	14695 Sep 04 18:12	9°05'57		asc. node	14696 Jul 30 09:03	6°10'01	
inferior conj	14695 Sep 11 06:23	3°57'16	1°11'21	evening max el	14696 Aug 09 07:37	19°47'49	18°14'21
minimum elong	14695 Sep 11 08:17	3°52'25	1°10'39	retrograde	14696 Aug 15 16:16	23°09'59	
min. Earth dist.	14695 Sep 14 05:08	0°58'00	0.61939 AU	evening set	14696 Aug 18 14:13	22°23'54	
desc. node	14695 Sep 15 06:17	29°58'34		inferior conj	14696 Aug 24 13:45	16°58'16	2°05'43
	14695 Sep 15 05:39	30°		minimum elong	14696 Aug 24 16:09	16°51'22	2°04'43
morning rise	14695 Sep 17 19:51	27°53'22		min. Earth dist.	14696 Aug 27 00:18	14°11'56	0.64099 AU
direct	14695 Sep 24 12:07	25°32'43		morning rise	14696 Aug 30 16:28	10°39'45	
	14695 Oct 04 17:35	0°		desc. node	14696 Sep 01 03:48	9°37'54	
morning max el	14695 Oct 08 15:24	3°30'37	27°58'31	direct	14696 Sep 06 06:40	8°05'26	
	14695 Oct 28 08:08	0°		morning max el	14696 Sep 20 01:20	16°04'31	27°35'15
asc. node	14695 Nov 09 14:18	22°19'47			14696 Oct 01 13:13	0°	
morning set	14695 Nov 11 10:50	26°05'46			14696 Oct 20 02:18	0°	
	14695 Nov 13 07:50	0°		morning set	14696 Oct 25 02:58	9°38'25	
max. Earth dist.	14695 Nov 16 21:53	7°42'00	1.31595 AU	asc. node	14696 Oct 26 11:02	12°18'53	
				max. Earth dist.	14696 Oct 29 20:13	19°17'00	1.32607 AU
superior conj	14695 Nov 18 21:03	12°01'03	1°17'32				
minimum elong	14695 Nov 18 18:53	11°49'05	1°18'12	superior conj	14696 Nov 02 03:04	26°16'57	0°59'05
evening rise	14695 Nov 25 14:31	26°50'12		minimum elong	14696 Nov 02 00:46	26°04'36	0°59'30
					14696 Nov 03 20:14	0°	

evening rise	14696 Nov 09 01:32	11° ♄ 19'48		evening rise	14697 Oct 24 11:20	25° ♄ 44'17	
	14696 Nov 18 11:14	0° ♄			14697 Oct 26 12:23	0° ♄	
desc. node	14696 Nov 28 00:34	14° ♄ 16'38		evening max el	14697 Nov 13 05:04	28° ♄ 16'48	21°19'34
evening max el	14696 Dec 01 14:11	18° ♄ 09'19	22°57'43	desc. node	14697 Nov 14 21:46	29° ♄ 50'20	
retrograde	14696 Dec 14 17:29	24° ♄ 40'25			14697 Nov 15 02:21	0° ♄	
evening set	14696 Dec 18 19:35	24° ♄ 04'04		retrograde	14697 Nov 25 04:39	4° ♄ 13'16	
min. Earth dist.	14696 Dec 25 23:27	20° ♄ 45'53	0.54850 AU	evening set	14697 Nov 27 23:30	3° ♄ 55'19	
inferior conj	14696 Dec 27 03:36	20° ♄ 05'42	-5°58'40	inferior conj	14697 Dec 06 19:04	0° ♄ 03'11	-5°39'40
minimum elong	14696 Dec 27 05:17	20° ♄ 03'17	5°57'37	minimum elong	14697 Dec 06 11:54	0° ♄ 13'16	5°37'36
morning rise	14697 Jan 04 16:26	16° ♄ 16'38			14697 Dec 06 21:19	30° ♄	
direct	14697 Jan 07 15:48	15° ♄ 56'02		min. Earth dist.	14697 Dec 07 05:13	29° ♄ 48'52	0.54448 AU
morning max el	14697 Jan 19 02:05	21° ♄ 25'01	20°55'06	morning rise	14697 Dec 15 00:50	26° ♄ 13'23	
asc. node	14697 Jan 22 10:24	25° ♄ 04'07		direct	14697 Dec 18 23:19	25° ♄ 39'53	
	14697 Jan 26 01:28	0° ♄			14697 Dec 29 16:00	0° ♄	
morning set	14697 Feb 07 10:13	22° ♄ 46'50		morning max el	14697 Dec 31 19:02	1° ♄ 51'36	22°35'40
	14697 Feb 10 21:12	0° ♄		asc. node	14698 Jan 09 07:41	12° ♄ 20'09	
					14698 Jan 19 06:11	0° ♄	
superior conj	14697 Feb 14 19:37	8° ♄ 10'11	1°11'05	morning set	14698 Jan 22 21:16	7° ♄ 31'42	
minimum elong	14697 Feb 14 22:12	8° ♄ 23'25	1°11'13				
max. Earth dist.	14697 Feb 19 20:24	18° ♄ 15'26	1.35633 AU	superior conj	14698 Jan 29 21:09	22° ♄ 31'47	1°26'24
evening rise	14697 Feb 23 18:53	25° ♄ 45'21		minimum elong	14698 Jan 29 23:08	22° ♄ 42'16	1°26'56
desc. node	14697 Feb 24 01:16	26° ♄ 15'02			14698 Feb 02 10:34	0° ♄	
	14697 Feb 26 02:31	0° ♄		max. Earth dist.	14698 Feb 02 11:31	0° ♄ 04'53	1.33801 AU
	14697 Mar 16 21:19	0° ♄		evening rise	14698 Feb 06 23:36	9° ♄ 07'26	
evening max el	14697 Mar 31 04:11	17° ♄ 18'38	26°17'15	desc. node	14698 Feb 10 21:51	16° ♄ 34'17	
retrograde	14697 Apr 13 01:00	24° ♄ 38'59			14698 Feb 18 14:49	0° ♄	
evening set	14697 Apr 19 06:56	22° ♄ 07'19			14698 Mar 12 19:05	0° ♄	
asc. node	14697 Apr 20 06:57	21° ♄ 14'16		evening max el	14698 Mar 13 17:46	0° ♄ 55'58	27°07'40
min. Earth dist.	14697 Apr 23 09:42	17° ♄ 49'54	0.66961 AU	retrograde	14698 Mar 27 04:46	8° ♄ 25'30	
inferior conj	14697 Apr 25 04:25	15° ♄ 38'52	1°27'49	evening set	14698 Apr 02 19:12	5° ♄ 53'57	
minimum elong	14697 Apr 25 02:31	15° ♄ 44'44	1°26'31	min. Earth dist.	14698 Apr 06 17:04	2° ♄ 09'29	0.65406 AU
morning rise	14697 Apr 30 23:00	9° ♄ 55'17		asc. node	14698 Apr 07 04:22	1° ♄ 38'09	
direct	14697 May 04 03:07	8° ♄ 58'29			14698 Apr 08 15:02	30° ♄	
morning max el	14697 May 10 15:49	12° ♄ 26'58	18°31'52	inferior conj	14698 Apr 09 00:09	29° ♄ 34'09	0°34'16
desc. node	14697 May 23 03:13	29° ♄ 17'39		minimum elong	14698 Apr 08 23:14	29° ♄ 36'44	0°33'30
	14697 May 23 14:12	0° ♄		morning rise	14698 Apr 15 04:54	24° ♄ 03'05	
morning set	14697 May 31 14:38	12° ♄ 32'45		direct	14698 Apr 17 23:19	23° ♄ 22'02	
	14697 Jun 11 17:59	0° ♄		morning max el	14698 Apr 24 07:09	26° ♄ 39'34	18°00'44
					14698 Apr 27 06:31	0° ♄	
superior conj	14697 Jun 16 13:13	7° ♄ 29'30	-2°10'36	desc. node	14698 May 09 24:00	19° ♄ 23'06	
minimum elong	14697 Jun 16 08:52	7° ♄ 12'33	2°11'30	morning set	14698 May 12 12:13	23° ♄ 29'09	
max. Earth dist.	14697 Jun 16 08:58	7° ♄ 12'54	1.45892 AU		14698 May 16 12:10	0° ♄	
	14697 Jun 30 21:38	0° ♄					
evening rise	14697 Jul 02 06:45	2° ♄ 10'53		superior conj	14698 May 27 00:42	16° ♄ 50'05	-1°49'48
greatest brilliancy	14697 Jul 10 13:50	15° ♄ 15'55	-0.8m	minimum elong	14698 May 26 15:52	16° ♄ 15'17	1°50'02
asc. node	14697 Jul 17 05:46	25° ♄ 19'04		max. Earth dist.	14698 May 30 04:52	21° ♄ 49'15	1.45727 AU
	14697 Jul 20 17:08	0° ♄			14698 Jun 04 10:53	0° ♄	
evening max el	14697 Jul 23 19:52	3° ♄ 31'22	18°44'00	evening rise	14698 Jun 12 02:55	11° ♄ 50'33	
retrograde	14697 Jul 30 10:24	7° ♄ 06'56			14698 Jun 24 01:12	0° ♄	
evening set	14697 Aug 02 17:21	6° ♄ 04'58		greatest brilliancy	14698 Jun 25 09:47	2° ♄ 00'47	-0.7m
inferior conj	14697 Aug 08 07:52	0° ♄ 24'34	2°41'50	asc. node	14698 Jul 04 02:35	13° ♄ 58'05	
minimum elong	14697 Aug 08 09:53	0° ♄ 18'17	2°40'50	evening max el	14698 Jul 07 03:36	17° ♄ 21'08	19°30'20
	14697 Aug 08 15:44	30° ♄		retrograde	14698 Jul 14 08:08	21° ♄ 22'29	
min. Earth dist.	14697 Aug 10 04:28	28° ♄ 06'08	0.65961 AU	evening set	14698 Jul 18 00:40	20° ♄ 03'28	
morning rise	14697 Aug 14 01:27	23° ♄ 59'39		inferior conj	14698 Jul 23 09:31	14° ♄ 09'46	3°02'37
desc. node	14697 Aug 19 01:19	21° ♄ 27'18		minimum elong	14698 Jul 23 10:41	14° ♄ 05'53	3°01'40
direct	14697 Aug 20 09:09	21° ♄ 20'43		min. Earth dist.	14698 Jul 24 15:51	12° ♄ 29'26	0.67422 AU
morning max el	14697 Sep 02 12:46	29° ♄ 07'59	26°41'33	morning rise	14698 Jul 28 20:10	7° ♄ 44'35	
	14697 Sep 03 09:00	0° ♄		direct	14698 Aug 03 18:18	5° ♄ 09'47	
	14697 Sep 25 09:33	0° ♄		desc. node	14698 Aug 05 22:46	5° ♄ 28'02	
morning set	14697 Oct 08 07:57	22° ♄ 39'04		morning max el	14698 Aug 15 23:44	12° ♄ 29'10	25°26'28
	14697 Oct 12 02:46	0° ♄			14698 Aug 30 02:34	0° ♄	
max. Earth dist.	14697 Oct 12 08:56	0° ♄ 30'40	1.34155 AU		14698 Sep 18 02:42	0° ♄	
asc. node	14697 Oct 13 07:42	2° ♄ 24'41		morning set	14698 Sep 20 22:04	4° ♄ 59'12	
				max. Earth dist.	14698 Sep 24 12:04	11° ♄ 34'56	1.36174 AU
superior conj	14697 Oct 17 03:02	10° ♄ 12'57	0°34'53	asc. node	14698 Sep 30 04:19	22° ♄ 33'26	
minimum elong	14697 Oct 17 01:17	10° ♄ 03'51	0°35'07				

superior conj	14698 Sep 30 18:10	23° Ω 42'23	0°05'20	superior conj	14699 Sep 13 20:51	6° Ω 36'00	-0°28'31
minimum elong	14698 Sep 30 17:49	23° Ω 40'41	0°05'35	minimum elong	14699 Sep 13 22:52	6° Ω 45'31	0°28'08
behind sun begin	14698 Sep 30 11:52	23° Ω 10'57		asc. node	14699 Sep 17 00:52	12° Ω 40'58	
behind sun end	14698 Sep 30 23:47	24° Ω 10'28		evening rise	14699 Sep 22 18:22	23° Ω 55'47	
	14698 Oct 03 20:57	0° \mathbb{M}			14699 Sep 25 21:04	0° \mathbb{M}	
evening rise	14698 Oct 08 17:49	9° \mathbb{M} 58'43		evening max el	14699 Oct 09 03:04	20° \mathbb{M} 40'45	18°58'45
	14698 Oct 19 10:14	0° \mathbb{J}		retrograde	14699 Oct 17 21:44	25° \mathbb{M} 05'36	
evening max el	14698 Oct 26 09:02	9° \mathbb{J} 04'17	19°58'20	evening set	14699 Oct 19 18:46	24° \mathbb{M} 54'18	
desc. node	14698 Nov 01 19:03	13° \mathbb{J} 30'07		desc. node	14699 Oct 19 16:25	24° \mathbb{M} 55'26	
retrograde	14698 Nov 05 17:56	14° \mathbb{J} 14'19		inferior conj	14699 Oct 28 02:58	20° \mathbb{M} 37'48	-2°40'24
evening set	14698 Nov 07 18:39	14° \mathbb{J} 03'22		minimum elong	14699 Oct 27 20:15	20° \mathbb{M} 49'30	2°37'07
inferior conj	14698 Nov 16 14:46	10° \mathbb{J} 04'22	-4°24'39	min. Earth dist.	14699 Oct 31 00:27	18° \mathbb{M} 37'04	0.56384 AU
minimum elong	14698 Nov 16 04:45	10° \mathbb{J} 19'35	4°20'45	morning rise	14699 Nov 04 18:53	15° \mathbb{M} 53'36	
min. Earth dist.	14698 Nov 18 12:45	8° \mathbb{J} 54'37	0.54995 AU	direct	14699 Nov 10 12:12	14° \mathbb{M} 36'36	
morning rise	14698 Nov 24 13:37	5° \mathbb{J} 54'25		morning max el	14699 Nov 24 15:34	21° \mathbb{M} 51'40	26°05'30
direct	14698 Nov 29 11:35	5° \mathbb{J} 01'34			14699 Dec 01 19:21	0° \mathbb{J}	
morning max el	14698 Dec 13 04:29	11° \mathbb{J} 48'53	24°25'04	asc. node	14699 Dec 14 01:57	19° \mathbb{J} 18'33	
	14698 Dec 26 21:52	0° \mathbb{Z}			14699 Dec 19 13:54	0° \mathbb{Z}	
asc. node	14698 Dec 27 04:53	0° \mathbb{Z} 29'37		morning set	14699 Dec 22 20:18	6° \mathbb{Z} 52'09	
morning set	14699 Jan 07 09:13	22° \mathbb{Z} 15'10					
	14699 Jan 10 22:37	0° \approx		superior conj	14699 Dec 29 14:28	21° \mathbb{Z} 46'35	1°37'58
				minimum elong	14699 Dec 29 14:24	21° \mathbb{Z} 46'13	1°38'57
superior conj	14699 Jan 14 04:12	7° \approx 06'12	1°35'16	max. Earth dist.	14699 Dec 30 15:32	24° \mathbb{Z} 05'56	1.31503 AU
minimum elong	14699 Jan 14 05:13	7° \approx 11'44	1°36'06		14700 Jan 02 07:54	0° \approx	
max. Earth dist.	14699 Jan 16 10:25	12° \approx 00'54	1.32409 AU	evening rise	14700 Jan 05 15:01	7° \approx 03'06	
evening rise	14699 Jan 21 15:16	22° \approx 55'51		desc. node	14700 Jan 15 15:10	26° \approx 24'25	
	14699 Jan 25 05:02	0° \mathbb{H}			14700 Jan 17 17:01	0° \mathbb{H}	
desc. node	14699 Jan 28 18:28	6° \mathbb{H} 39'29		evening max el	14700 Feb 06 15:09	26° \mathbb{H} 48'15	27°27'28
	14699 Feb 12 08:05	0° \mathbb{Y}			14700 Feb 10 08:46	0° \mathbb{Y}	
evening max el	14699 Feb 24 06:12	14° \mathbb{Y} 10'11	27°33'08	retrograde	14700 Feb 20 14:09	4° \mathbb{Y} 09'13	
retrograde	14699 Mar 10 01:33	21° \mathbb{Y} 38'34		evening set	14700 Feb 27 10:24	1° \mathbb{Y} 59'20	
evening set	14699 Mar 16 21:17	19° \mathbb{Y} 14'11			14700 Mar 02 04:10	30° \mathbb{R} \mathbb{H}	
min. Earth dist.	14699 Mar 20 16:06	15° \mathbb{Y} 59'01	0.63512 AU	min. Earth dist.	14700 Mar 03 05:10	29° \mathbb{H} 07'30	0.61382 AU
inferior conj	14699 Mar 23 10:18	13° \mathbb{Y} 10'49	-0°31'49	inferior conj	14700 Mar 06 07:35	26° \mathbb{H} 20'32	-1°49'44
minimum elong	14699 Mar 23 11:18	13° \mathbb{Y} 08'13	0°31'32	minimum elong	14700 Mar 06 11:29	26° \mathbb{H} 11'42	1°47'59
asc. node	14699 Mar 25 01:50	11° \mathbb{Y} 32'24		asc. node	14700 Mar 11 23:18	22° \mathbb{H} 03'54	
morning rise	14699 Mar 30 03:47	7° \mathbb{Y} 54'40		morning rise	14700 Mar 13 15:40	21° \mathbb{H} 22'22	
direct	14699 Apr 01 13:54	7° \mathbb{Y} 25'58		direct	14700 Mar 15 19:22	21° \mathbb{H} 02'27	
morning max el	14699 Apr 08 00:45	10° \mathbb{Y} 43'55	17°46'52	morning max el	14700 Mar 22 17:30	24° \mathbb{H} 31'35	17°51'00
	14699 Apr 21 04:25	0° \mathbb{B}			14700 Mar 27 05:03	0° \mathbb{Y}	
morning set	14699 Apr 24 12:24	5° \mathbb{B} 41'43		morning set	14700 Apr 07 09:36	18° \mathbb{Y} 53'28	
desc. node	14699 Apr 26 20:40	9° \mathbb{B} 42'13		desc. node	14700 Apr 13 17:16	0° \mathbb{B} 10'40	
					14700 Apr 13 14:51	0° \mathbb{B}	
superior conj	14699 May 07 04:55	26° \mathbb{B} 59'30	-1°15'37				
minimum elong	14699 May 06 21:34	26° \mathbb{B} 29'33	1°15'28	superior conj	14700 Apr 18 08:48	8° \mathbb{B} 15'11	-0°36'37
	14699 May 09 01:22	0° \mathbb{I}		minimum elong	14700 Apr 18 05:26	8° \mathbb{B} 00'45	0°36'37
max. Earth dist.	14699 May 12 23:35	6° \mathbb{I} 17'23	1.44841 AU	max. Earth dist.	14700 Apr 25 15:12	20° \mathbb{B} 23'13	1.43323 AU
evening rise	14699 May 22 13:43	21° \mathbb{I} 14'03			14700 May 01 15:27	0° \mathbb{I}	
	14699 May 28 08:17	0° \mathbb{E}		evening rise	14700 May 02 07:35	1° \mathbb{I} 03'16	
	14699 Jun 19 01:38	0° \mathbb{Q}			14700 May 21 21:05	0° \mathbb{E}	
evening max el	14699 Jun 20 05:33	1° \mathbb{Q} 12'36	20°31'29	evening max el	14700 Jun 03 01:47	15° \mathbb{E} 04'23	21°44'17
asc. node	14699 Jun 20 23:29	1° \mathbb{Q} 56'09		asc. node	14700 Jun 07 20:30	19° \mathbb{E} 00'14	
retrograde	14699 Jun 28 07:02	5° \mathbb{Q} 50'11		retrograde	14700 Jun 12 05:24	20° \mathbb{E} 25'11	
evening set	14699 Jul 02 09:53	4° \mathbb{Q} 13'47		evening set	14700 Jun 16 19:12	18° \mathbb{E} 32'02	
	14699 Jul 06 06:58	30° \mathbb{R} \mathbb{E}		inferior conj	14700 Jun 22 01:07	12° \mathbb{E} 15'42	3°06'50
inferior conj	14699 Jul 07 16:00	28° \mathbb{E} 08'03	3°10'25	minimum elong	14700 Jun 22 00:22	12° \mathbb{E} 18'22	3°05'46
minimum elong	14699 Jul 07 16:11	28° \mathbb{E} 07'25	3°09'27	min. Earth dist.	14700 Jun 22 04:09	12° \mathbb{E} 05'08	0.68954 AU
min. Earth dist.	14699 Jul 08 08:25	27° \mathbb{E} 11'35	0.68428 AU	morning rise	14700 Jun 27 05:20	5° \mathbb{E} 59'57	
morning rise	14699 Jul 12 22:10	21° \mathbb{E} 46'25		direct	14700 Jul 02 03:26	3° \mathbb{E} 53'29	
direct	14699 Jul 18 08:44	19° \mathbb{E} 23'13		desc. node	14700 Jul 10 17:23	8° \mathbb{E} 29'46	
desc. node	14699 Jul 23 20:08	21° \mathbb{E} 17'16		morning max el	14700 Jul 11 22:06	9° \mathbb{E} 39'21	22°30'26
morning max el	14699 Jul 29 10:08	25° \mathbb{E} 59'57	23°59'37		14700 Jul 27 21:58	0° \mathbb{Q}	
	14699 Aug 02 02:11	0° \mathbb{Q}		morning set	14700 Aug 14 12:22	26° \mathbb{Q} 54'57	
	14699 Aug 23 15:11	0° \mathbb{P}			14700 Aug 16 09:35	0° \mathbb{P}	
morning set	14699 Sep 02 16:51	16° \mathbb{P} 27'22		max. Earth dist.	14700 Aug 19 10:43	5° \mathbb{P} 05'01	1.40863 AU
max. Earth dist.	14699 Sep 06 10:27	22° \mathbb{P} 57'24	1.38498 AU				
	14699 Sep 10 08:05	0° \mathbb{U}		superior conj	14700 Aug 27 06:58	18° \mathbb{P} 44'23	-1°04'21

































































































































minimum elong	14700 Aug 27 11:58	19° \mathbb{M} 06'46	1°03'53	max. Earth dist.	14701 Aug 01 16:27	18° Ω 04'34	1.42983 AU
	14700 Sep 02 10:23	0° $\underline{\mathbf{A}}$					
asc. node	14700 Sep 03 21:25	2° $\underline{\mathbf{A}}$ 44'00		superior conj	14701 Aug 08 20:06	29° Ω 57'28	-1°38'11
evening rise	14700 Sep 06 09:47	7° $\underline{\mathbf{A}}$ 27'47		minimum elong	14701 Aug 09 03:25	0° \mathbb{M} 28'36	1°37'58
	14700 Sep 19 16:34	0° \mathbb{M}			14701 Aug 08 20:42	0° \mathbb{M}	
evening max el	14700 Sep 22 08:01	3° \mathbb{M} 02'00	18°20'59	evening rise	14701 Aug 20 11:50	20° \mathbb{M} 23'28	
retrograde	14700 Sep 29 21:06	6° \mathbb{M} 51'57		asc. node	14701 Aug 21 18:00	22° \mathbb{M} 38'29	
evening set	14700 Oct 01 22:18	6° \mathbb{M} 35'40			14701 Aug 25 21:40	0° $\underline{\mathbf{A}}$	
desc. node	14700 Oct 06 13:50	4° \mathbb{M} 15'13		evening max el	14701 Sep 05 19:43	15° $\underline{\mathbf{A}}$ 58'31	18°03'39
inferior conj	14700 Oct 09 12:51	1° \mathbb{M} 57'59	-0°56'32	retrograde	14701 Sep 12 13:50	19° $\underline{\mathbf{A}}$ 26'52	
minimum elong	14700 Oct 09 10:43	2° \mathbb{M} 02'21	0°55'13	evening set	14701 Sep 14 22:21	19° $\underline{\mathbf{A}}$ 01'37	
	14700 Oct 11 22:27	30° \mathbb{R} $\underline{\mathbf{A}}$		inferior conj	14701 Sep 21 19:25	14° $\underline{\mathbf{A}}$ 03'49	0°30'39
min. Earth dist.	14700 Oct 12 19:16	29° $\underline{\mathbf{A}}$ 18'46	0.58360 AU	minimum elong	14701 Sep 21 20:23	14° $\underline{\mathbf{A}}$ 01'33	0°30'27
morning rise	14700 Oct 16 19:41	26° $\underline{\mathbf{A}}$ 36'39		desc. node	14701 Sep 23 11:17	12° $\underline{\mathbf{A}}$ 28'56	
direct	14700 Oct 23 02:43	24° $\underline{\mathbf{A}}$ 52'49		min. Earth dist.	14701 Sep 24 23:17	11° $\underline{\mathbf{A}}$ 05'27	0.60616 AU
	14700 Nov 03 15:16	0° \mathbb{M}		morning rise	14701 Sep 28 15:20	8° $\underline{\mathbf{A}}$ 12'18	
morning max el	14700 Nov 06 10:03	2° \mathbb{M} 30'17	27°19'06	direct	14701 Oct 05 05:59	6° $\underline{\mathbf{A}}$ 03'12	
	14700 Nov 26 06:41	0° \mathbb{A}		morning max el	14701 Oct 19 12:21	13° $\underline{\mathbf{A}}$ 56'57	27°55'28
asc. node	14700 Nov 30 22:55	8° \mathbb{A} 36'39			14701 Nov 01 10:20	0° \mathbb{M}	
morning set	14700 Dec 07 04:44	21° \mathbb{A} 18'02		asc. node	14701 Nov 17 19:48	28° \mathbb{M} 15'57	
	14700 Dec 11 04:33	0° \mathbb{Z}			14701 Nov 18 16:38	0° \mathbb{A}	
				morning set	14701 Nov 21 08:40	5° \mathbb{A} 28'14	
superior conj	14700 Dec 14 01:59	6° \mathbb{Z} 27'16	1°34'41	max. Earth dist.	14701 Nov 27 06:44	18° \mathbb{A} 15'31	1.31257 AU
minimum elong	14700 Dec 14 00:54	6° \mathbb{Z} 21'15	1°35'39				
max. Earth dist.	14700 Dec 13 23:33	6° \mathbb{Z} 13'41	1.31113 AU	superior conj	14701 Nov 28 12:56	21° \mathbb{A} 03'17	1°25'31
evening rise	14700 Dec 20 20:27	21° \mathbb{Z} 23'07		minimum elong	14701 Nov 28 11:04	20° \mathbb{A} 52'53	1°26'18
	14700 Dec 25 00:03	0° \approx			14701 Dec 02 13:24	0° \mathbb{Z}	
desc. node	14701 Jan 02 11:57	15° \approx 40'38		evening rise	14701 Dec 05 05:33	5° \mathbb{Z} 51'04	
	14701 Jan 12 02:24	0° \mathbb{H}			14701 Dec 17 16:55	0° \approx	
evening max el	14701 Jan 19 17:42	8° \mathbb{H} 37'32	26°46'59	desc. node	14701 Dec 20 08:50	4° \approx 17'28	
retrograde	14701 Feb 02 17:14	15° \mathbb{H} 48'46		evening max el	14702 Jan 01 11:58	19° \approx 34'07	25°33'36
evening set	14701 Feb 09 07:06	14° \mathbb{H} 00'33		retrograde	14702 Jan 15 09:24	26° \approx 34'04	
min. Earth dist.	14701 Feb 13 07:34	11° \mathbb{H} 22'15	0.59169 AU	evening set	14702 Jan 21 07:31	25° \approx 13'33	
inferior conj	14701 Feb 16 12:14	8° \mathbb{H} 52'32	-3°15'49	min. Earth dist.	14702 Jan 26 00:32	22° \approx 34'02	0.57105 AU
minimum elong	14701 Feb 16 19:29	8° \mathbb{H} 38'21	3°12'44	inferior conj	14702 Jan 28 21:03	20° \approx 37'56	-4°39'51
morning rise	14701 Feb 24 11:09	4° \mathbb{H} 15'22		minimum elong	14702 Jan 29 06:09	20° \approx 22'28	4°36'39
direct	14701 Feb 26 11:20	4° \mathbb{H} 00'43		morning rise	14702 Feb 06 07:35	16° \approx 22'38	
asc. node	14701 Feb 26 20:45	4° \mathbb{H} 01'18		direct	14702 Feb 08 09:30	16° \approx 09'34	
morning max el	14701 Mar 06 05:49	7° \mathbb{H} 51'46	18°14'20	asc. node	14702 Feb 13 18:10	17° \approx 42'23	
	14701 Mar 20 10:38	0° \mathbb{Y}		morning max el	14702 Feb 17 09:41	20° \approx 33'14	18°58'40
morning set	14701 Mar 21 21:53	2° \mathbb{Y} 45'46			14702 Feb 24 13:56	0° \mathbb{H}	
				morning set	14702 Mar 05 20:35	17° \mathbb{H} 05'01	
superior conj	14701 Mar 31 11:20	20° \mathbb{Y} 32'40	0°00'51		14702 Mar 12 10:31	0° \mathbb{Y}	
minimum elong	14701 Mar 31 11:23	20° \mathbb{Y} 32'54	0°00'35				
behind sun begin	14701 Mar 31 03:55	19° \mathbb{Y} 59'08		superior conj	14702 Mar 14 08:23	3° \mathbb{Y} 40'16	0°33'15
behind sun end	14701 Mar 31 18:51	21° \mathbb{Y} 06'34		minimum elong	14702 Mar 14 10:24	3° \mathbb{Y} 49'48	0°32'57
desc. node	14701 Mar 31 13:50	20° \mathbb{Y} 43'57		desc. node	14702 Mar 18 10:23	11° \mathbb{Y} 18'28	
	14701 Apr 05 19:49	0° \mathbb{B}		max. Earth dist.	14702 Mar 21 08:31	16° \mathbb{Y} 35'13	1.39092 AU
max. Earth dist.	14701 Apr 08 01:52	3° \mathbb{B} 50'59	1.41332 AU	evening rise	14702 Mar 25 04:32	23° \mathbb{Y} 16'27	
evening rise	14701 Apr 12 19:24	11° \mathbb{B} 41'57			14702 Mar 29 04:53	0° \mathbb{B}	
	14701 Apr 24 13:58	0° \mathbb{I}			14702 Apr 18 09:58	0° \mathbb{I}	
evening max el	14701 May 16 17:37	28° \mathbb{I} 56'08	23°04'09	evening max el	14702 Apr 29 07:23	12° \mathbb{I} 49'31	24°25'02
	14701 May 17 20:00	0° \mathbb{E}		retrograde	14702 May 10 18:42	19° \mathbb{I} 32'30	
asc. node	14701 May 25 17:36	4° \mathbb{E} 53'12		asc. node	14702 May 12 14:48	19° \mathbb{I} 17'49	
retrograde	14701 May 27 01:41	5° \mathbb{E} 01'09		evening set	14702 May 16 07:25	17° \mathbb{I} 12'13	
evening set	14701 Jun 01 02:54	2° \mathbb{E} 53'01		min. Earth dist.	14702 May 20 20:48	11° \mathbb{I} 58'25	0.68560 AU
	14701 Jun 03 19:44	30° \mathbb{R} \mathbb{I}		inferior conj	14702 May 21 19:26	10° \mathbb{I} 42'19	2°28'19
inferior conj	14701 Jun 06 10:54	26° \mathbb{I} 28'17	2°52'45	minimum elong	14702 May 21 17:23	10° \mathbb{I} 49'14	2°26'55
minimum elong	14701 Jun 06 09:21	26° \mathbb{I} 33'39	2°51'30	morning rise	14702 May 27 03:28	4° \mathbb{I} 42'17	
min. Earth dist.	14701 Jun 06 00:59	27° \mathbb{I} 02'39	0.68994 AU	direct	14702 May 31 00:54	3° \mathbb{I} 15'38	
morning rise	14701 Jun 11 15:43	20° \mathbb{I} 19'47		morning max el	14702 Jun 07 13:31	7° \mathbb{I} 27'43	19°54'35
direct	14701 Jun 16 01:12	18° \mathbb{I} 32'54		desc. node	14702 Jun 14 11:39	15° \mathbb{I} 41'56	
morning max el	14701 Jun 24 14:27	23° \mathbb{I} 28'06	21°06'48		14702 Jun 24 11:40	0° \mathbb{E}	
desc. node	14701 Jun 27 14:33	26° \mathbb{I} 43'21		morning set	14702 Jul 04 11:36	15° \mathbb{E} 08'29	
	14701 Jun 30 07:21	0° \mathbb{E}			14702 Jul 14 00:40	0° Ω	
	14701 Jul 21 05:27	0° Ω		max. Earth dist.	14702 Jul 15 04:28	1° Ω 50'00	1.44633 AU
morning set	14701 Jul 25 07:52	6° Ω 20'56					

































































































































superior conj	14702 Jul 20 09:34	10°♎10'58	-2°03'48	morning set	14703 Jun 13 19:05	24°♊12'28	
minimum elong	14702 Jul 20 15:56	10°♎36'44	2°04'16		14703 Jun 17 12:46	0°♊	
	14702 Aug 01 08:09	0°♎		max. Earth dist.	14703 Jun 27 21:51	16°♊09'34	1.45643 AU
evening rise	14702 Aug 02 19:24	2°♎29'42					
asc. node	14702 Aug 08 14:37	12°♎19'38		superior conj	14703 Jun 30 02:31	19°♊35'58	-2°13'52
evening max el	14702 Aug 20 10:15	29°♎20'01	18°05'20	minimum elong	14703 Jun 30 02:43	19°♊36'46	2°14'51
	14702 Aug 21 03:12	0°♎			14703 Jul 06 16:28	0°♎	
retrograde	14702 Aug 26 19:36	2°♎40'24		evening rise	14703 Jul 15 03:42	13°♎36'16	
evening set	14702 Aug 29 12:31	2°♎02'43			14703 Jul 25 08:42	0°♎	
	14702 Sep 01 13:09	30°♎		asc. node	14703 Jul 26 11:17	1°♎42'29	
inferior conj	14702 Sep 04 18:54	26°♎46'54	1°36'48	evening max el	14703 Aug 04 00:13	12°♎58'11	18°24'58
minimum elong	14702 Sep 04 21:10	26°♎40'49	1°35'55	retrograde	14703 Aug 10 10:12	16°♎24'08	
min. Earth dist.	14702 Sep 07 12:59	23°♎50'38	0.62879 AU	evening set	14703 Aug 13 12:00	15°♎31'25	
desc. node	14702 Sep 10 08:49	21°♎12'14		inferior conj	14703 Aug 19 07:16	9°♎59'31	2°23'04
morning rise	14702 Sep 11 03:38	20°♎35'35		minimum elong	14703 Aug 19 09:36	9°♎52'36	2°22'03
direct	14702 Sep 17 19:45	18°♎07'39		min. Earth dist.	14703 Aug 21 12:03	7°♎23'30	0.64936 AU
morning max el	14702 Oct 01 20:07	26°♎08'16	27°52'50	morning rise	14703 Aug 25 05:53	3°♎37'41	
	14702 Oct 05 10:25	0°♎		desc. node	14703 Aug 28 06:20	1°♎44'17	
	14702 Oct 26 00:21	0°♎		direct	14703 Aug 31 17:58	1°♎00'08	
asc. node	14702 Nov 04 16:34	18°♎09'21		morning max el	14703 Sep 14 06:44	8°♎55'31	27°15'39
morning set	14702 Nov 05 05:50	19°♎16'17			14703 Sep 30 18:09	0°♎	
	14702 Nov 10 08:52	0°♎			14703 Oct 18 09:16	0°♎	
max. Earth dist.	14702 Nov 10 09:05	0°♎01'11	1.31953 AU	morning set	14703 Oct 19 17:36	2°♎36'10	
				asc. node	14703 Oct 22 13:17	8°♎11'59	
superior conj	14702 Nov 12 21:21	5°♎28'18	1°10'27	max. Earth dist.	14703 Oct 24 03:23	11°♎26'01	1.33203 AU
minimum elong	14702 Nov 12 19:04	5°♎15'47	1°10'59				
evening rise	14702 Nov 19 16:22	20°♎21'20		superior conj	14703 Oct 28 01:06	19°♎36'50	0°49'32
	14702 Nov 24 07:04	0°♎		minimum elong	14703 Oct 27 22:57	19°♎25'23	0°49'52
desc. node	14702 Dec 07 05:51	21°♎59'28			14703 Nov 01 21:05	0°♎	
evening max el	14702 Dec 13 23:10	29°♎47'23	23°57'11	evening rise	14703 Nov 04 03:06	4°♎49'32	
	14702 Dec 14 04:28	0°♎			14703 Nov 17 14:00	0°♎	
retrograde	14702 Dec 27 12:23	6°♎31'18		desc. node	14703 Nov 24 02:58	8°♎27'01	
evening set	14703 Jan 01 08:37	5°♎40'16		evening max el	14703 Nov 25 09:56	9°♎46'11	22°14'34
min. Earth dist.	14703 Jan 07 10:33	2°♎41'33	0.55479 AU	retrograde	14703 Dec 08 02:51	16°♎03'38	
inferior conj	14703 Jan 09 09:01	1°♎31'55	-5°42'24	evening set	14703 Dec 11 15:02	15°♎36'31	
minimum elong	14703 Jan 09 15:13	1°♎22'37	5°40'41	min. Earth dist.	14703 Dec 19 16:35	12°♎00'01	0.54574 AU
	14703 Jan 12 00:07	30°♎		inferior conj	14703 Dec 20 04:46	11°♎42'57	-5°58'14
morning rise	14703 Jan 17 23:34	27°♎35'13		minimum elong	14703 Dec 20 02:26	11°♎46'13	5°57'06
direct	14703 Jan 20 12:10	27°♎19'02		morning rise	14703 Dec 28 14:52	7°♎55'44	
	14703 Jan 28 04:12	0°♎		direct	14703 Dec 31 23:55	7°♎30'15	
morning max el	14703 Jan 31 00:53	2°♎23'34	20°05'53	morning max el	14704 Jan 13 01:12	13°♎17'50	21°35'45
asc. node	14703 Jan 31 15:34	3°♎00'01		asc. node	14704 Jan 18 12:54	19°♎38'02	
	14703 Feb 17 06:25	0°♎			14704 Jan 25 03:24	0°♎	
morning set	14703 Feb 18 02:08	1°♎40'13		morning set	14704 Feb 02 11:49	16°♎23'38	
					14704 Feb 08 22:21	0°♎	
superior conj	14703 Feb 25 19:25	17°♎24'38	0°59'12				
minimum elong	14703 Feb 25 22:03	17°♎37'52	0°59'08	superior conj	14704 Feb 09 16:33	1°♎35'12	1°18'23
max. Earth dist.	14703 Mar 03 15:08	28°♎44'29	1.36845 AU	minimum elong	14704 Feb 09 18:56	1°♎47'38	1°18'41
	14703 Mar 04 07:13	0°♎		max. Earth dist.	14704 Feb 14 02:31	10°♎37'24	1.34815 AU
desc. node	14703 Mar 05 06:56	1°♎50'16		evening rise	14704 Feb 18 06:18	18°♎43'45	
evening rise	14703 Mar 07 09:18	5°♎40'16		desc. node	14704 Feb 20 03:28	22°♎15'24	
	14703 Mar 22 02:34	0°♎			14704 Feb 24 10:53	0°♎	
evening max el	14703 Apr 11 20:59	26°♎43'01	25°39'57		14704 Mar 15 05:55	0°♎	
	14703 Apr 15 13:24	0°♎		evening max el	14704 Mar 24 10:53	10°♎29'36	26°41'21
retrograde	14703 Apr 24 07:15	3°♎52'54		retrograde	14704 Apr 06 14:17	17°♎54'22	
asc. node	14703 Apr 29 12:05	2°♎01'42		evening set	14704 Apr 13 00:09	15°♎22'14	
evening set	14703 Apr 30 07:08	1°♎24'18		asc. node	14704 Apr 15 09:29	13°♎08'21	
	14703 May 01 19:00	30°♎		min. Earth dist.	14704 Apr 17 00:46	11°♎19'06	0.66348 AU
min. Earth dist.	14703 May 04 13:29	26°♎46'29	0.67669 AU	inferior conj	14704 Apr 19 00:44	8°♎56'50	1°06'38
inferior conj	14703 May 06 00:47	24°♎53'48	1°53'13	minimum elong	14704 Apr 18 23:09	9°♎01'34	1°05'30
minimum elong	14703 May 05 22:39	25°♎00'36	1°51'47	morning rise	14704 Apr 24 23:18	3°♎18'11	
morning rise	14703 May 11 14:43	19°♎03'32		direct	14704 Apr 27 23:15	2°♎28'17	
direct	14703 May 15 00:55	17°♎56'18		morning max el	14704 May 04 08:43	5°♎50'23	18°16'31
morning max el	14703 May 21 19:59	21°♎36'56	18°57'19	desc. node	14704 May 18 05:30	25°♎08'51	
	14703 May 28 17:15	0°♎			14704 May 21 06:46	0°♎	
desc. node	14703 Jun 01 08:39	5°♎13'37		morning set	14704 May 24 00:37	4°♎22'40	
greatest brilliancy	14703 Jun 04 03:58	9°♎25'02	-0.7m				

superior conj	14704 Jun 08 10:53	28° Π 44'29	-2°03'55	morning max el	14705 Apr 18 01:26	20° Υ 01'12	17°52'43
minimum elong	14704 Jun 08 03:53	28° Π 17'05	2°04'33		14705 Apr 25 16:28	0° \mathcal{B}	
	14704 Jun 09 06:14	0° \mathcal{B}		morning set	14705 May 05 10:03	15° \mathcal{B} 53'35	
max. Earth dist.	14704 Jun 09 18:12	0° \mathcal{B} 46'44	1.45918 AU	desc. node	14705 May 05 02:15	15° \mathcal{B} 21'04	
evening rise	14704 Jun 24 11:30	23° \mathcal{B} 42'46			14705 May 13 23:17	0° Π	
	14704 Jun 28 12:21	0° Ω					
greatest brilliancy	14704 Jul 05 01:36	10° Ω 06'48	-0.8m	superior conj	14705 May 19 04:04	8° Π 22'33	-1°36'25
asc. node	14704 Jul 12 08:02	20° Ω 39'45		minimum elong	14705 May 18 19:18	7° Π 47'34	1°36'25
evening max el	14704 Jul 17 10:47	26° Ω 45'02	19°01'45	max. Earth dist.	14705 May 23 14:20	15° Π 23'18	1.45439 AU
	14704 Jul 21 21:57	0° \mathcal{M}			14705 Jun 02 00:03	0° \mathcal{B}	
retrograde	14704 Jul 24 06:09	0° \mathcal{M} 29'50		evening rise	14705 Jun 04 01:48	3° \mathcal{B} 10'49	
	14704 Jul 26 12:39	30° $\mathcal{R}\Omega$		greatest brilliancy	14705 Jun 18 19:04	25° \mathcal{B} 16'51	-0.6m
evening set	14704 Jul 27 17:13	29° Ω 20'29			14705 Jun 22 02:38	0° Ω	
inferior conj	14704 Aug 02 04:55	23° Ω 34'09	2°52'22	asc. node	14705 Jun 29 04:52	9° Ω 02'42	
minimum elong	14704 Aug 02 06:36	23° Ω 28'43	2°51'23	evening max el	14705 Jun 30 16:04	10° Ω 35'27	19°54'34
min. Earth dist.	14704 Aug 03 19:20	21° Ω 31'17	0.66639 AU	retrograde	14705 Jul 08 04:44	14° Ω 51'17	
morning rise	14704 Aug 07 19:17	17° Ω 08'45		evening set	14705 Jul 12 01:36	13° Ω 24'44	
direct	14704 Aug 13 23:13	14° Ω 30'50		inferior conj	14705 Jul 17 08:55	7° Ω 25'27	3°07'23
desc. node	14704 Aug 14 03:50	14° Ω 30'58		minimum elong	14705 Jul 17 09:40	7° Ω 22'53	3°06'27
morning max el	14704 Aug 26 18:02	22° Ω 07'19	26°11'42	min. Earth dist.	14705 Jul 18 09:10	6° Ω 03'35	0.67910 AU
	14704 Sep 02 15:49	0° \mathcal{M}		morning rise	14705 Jul 22 17:21	1° Ω 01'20	
	14704 Sep 23 00:14	0° \mathcal{L}			14705 Jul 24 00:22	30° $\mathcal{R}\mathcal{B}$	
morning set	14704 Oct 01 16:41	15° \mathcal{L} 20'00		direct	14705 Jul 28 10:35	28° \mathcal{B} 31'00	
max. Earth dist.	14704 Oct 05 11:59	22° \mathcal{L} 33'57	1.34968 AU	desc. node	14705 Aug 01 01:16	29° \mathcal{B} 20'46	
asc. node	14704 Oct 08 09:56	28° \mathcal{L} 19'13			14705 Aug 02 08:35	0° Ω	
	14704 Oct 09 05:58	0° \mathcal{M}		morning max el	14705 Aug 09 04:53	5° Ω 33'53	24°50'21
					14705 Aug 28 02:34	0° \mathcal{M}	
superior conj	14704 Oct 10 21:39	3° \mathcal{M} 22'00	0°22'57	morning set	14705 Sep 13 23:05	27° \mathcal{M} 18'59	
minimum elong	14704 Oct 10 20:23	3° \mathcal{M} 15'32	0°23'11		14705 Sep 15 11:19	0° \mathcal{L}	
evening rise	14704 Oct 18 11:44	19° \mathcal{M} 10'16		max. Earth dist.	14705 Sep 17 12:32	3° \mathcal{L} 42'52	1.37140 AU
	14704 Oct 23 20:32	0° \mathcal{J}					
evening max el	14704 Nov 06 05:41	20° \mathcal{J} 07'20	20°42'28	superior conj	14705 Sep 24 07:54	16° \mathcal{L} 36'36	-0°08'39
desc. node	14704 Nov 10 00:10	23° \mathcal{J} 15'19		minimum elong	14705 Sep 24 08:27	16° \mathcal{L} 39'17	0°08'21
retrograde	14704 Nov 17 13:16	25° \mathcal{J} 44'57		behind sun begin	14705 Sep 24 02:45	16° \mathcal{L} 11'28	
evening set	14704 Nov 19 22:39	25° \mathcal{J} 31'01		behind sun end	14705 Sep 24 14:08	17° \mathcal{L} 07'09	
inferior conj	14704 Nov 28 20:07	21° \mathcal{J} 37'14	-5°13'30	asc. node	14705 Sep 25 06:30	18° \mathcal{L} 27'31	
minimum elong	14704 Nov 28 10:45	21° \mathcal{J} 50'42	5°10'28		14705 Oct 01 00:48	0° \mathcal{M}	
min. Earth dist.	14704 Nov 29 22:19	20° \mathcal{J} 59'33	0.54566 AU	evening rise	14705 Oct 02 16:02	3° \mathcal{M} 17'55	
morning rise	14704 Dec 06 22:51	17° \mathcal{J} 41'40			14705 Oct 18 11:32	0° \mathcal{J}	
direct	14704 Dec 11 07:43	17° \mathcal{J} 00'46		evening max el	14705 Oct 19 15:41	1° \mathcal{J} 14'33	19°30'13
morning max el	14704 Dec 24 13:47	23° \mathcal{J} 27'51	23°22'10	desc. node	14705 Oct 27 21:29	5° \mathcal{J} 58'56	
	14704 Dec 30 08:59	0° \mathcal{B}		retrograde	14705 Oct 29 07:58	6° \mathcal{J} 05'08	
asc. node	14705 Jan 04 10:09	7° \mathcal{B} 18'46		evening set	14705 Oct 31 05:27	5° \mathcal{J} 54'48	
	14705 Jan 16 10:29	0° \approx		inferior conj	14705 Nov 08 21:39	1° \mathcal{J} 49'02	-3°42'02
morning set	14705 Jan 16 23:30	1° \approx 09'18		minimum elong	14705 Nov 08 12:34	2° \mathcal{J} 03'36	3°38'05
				min. Earth dist.	14705 Nov 11 07:20	0° \mathcal{J} 16'36	0.55485 AU
superior conj	14705 Jan 23 20:45	16° \approx 03'36	1°30'56		14705 Nov 11 18:00	30° $\mathcal{R}\mathcal{M}$	
minimum elong	14705 Jan 23 22:20	16° \approx 12'11	1°31'36	morning rise	14705 Nov 16 17:39	27° \mathcal{M} 25'22	
max. Earth dist.	14705 Jan 26 21:19	22° \approx 30'42	1.33153 AU	direct	14705 Nov 22 00:08	26° \mathcal{M} 22'58	
	14705 Jan 30 12:25	0° \mathcal{H}			14705 Dec 01 21:16	0° \mathcal{J}	
evening rise	14705 Jan 31 16:04	2° \mathcal{H} 18'20		morning max el	14705 Dec 05 23:05	3° \mathcal{J} 23'22	25°10'16
desc. node	14705 Feb 06 00:01	12° \mathcal{H} 29'42		asc. node	14705 Dec 22 07:18	25° \mathcal{J} 46'12	
	14705 Feb 16 08:13	0° Υ			14705 Dec 24 15:15	0° \mathcal{B}	
evening max el	14705 Mar 07 00:11	23° Υ 59'03	27°21'51	morning set	14706 Jan 01 11:17	15° \mathcal{B} 50'37	
	14705 Mar 15 00:23	0° \mathcal{B}			14706 Jan 07 21:55	0° \approx	
retrograde	14705 Mar 20 15:00	1° \mathcal{B} 28'38					
	14705 Mar 25 19:35	30° $\mathcal{R}\Upsilon$		superior conj	14706 Jan 08 05:24	0° \approx 41'22	1°37'09
evening set	14705 Mar 27 08:23	28° Υ 59'04		minimum elong	14706 Jan 08 05:58	0° \approx 44'27	1°38'05
min. Earth dist.	14705 Mar 31 04:39	25° Υ 27'55	0.64644 AU	max. Earth dist.	14706 Jan 09 23:03	4° \approx 30'13	1.31952 AU
asc. node	14705 Apr 02 06:55	23° Υ 12'20		evening rise	14706 Jan 15 11:25	16° \approx 15'13	
inferior conj	14705 Apr 02 16:45	22° Υ 45'32	0°07'49		14706 Jan 22 12:21	0° \mathcal{H}	
minimum elong	14705 Apr 02 16:32	22° Υ 46'08	0°07'25	desc. node	14706 Jan 23 20:38	2° \mathcal{H} 26'57	
transit middle	14705 Apr 02 16:32	22° Υ 46'08	0°07'25		14706 Feb 11 01:42	0° Υ	
transit begin	14705 Apr 02 13:49	22° Υ 53'31		evening max el	14706 Feb 17 11:09	6° Υ 58'35	27°34'45
transit end	14705 Apr 02 19:15	22° Υ 38'46		retrograde	14706 Mar 03 08:36	14° Υ 25'11	
morning rise	14705 Apr 09 02:39	17° Υ 20'41		evening set	14706 Mar 10 05:20	12° Υ 05'39	
direct	14705 Apr 11 17:27	16° Υ 45'15		min. Earth dist.	14706 Mar 13 23:27	9° Υ 01'36	0.62629 AU

inferior conj	14706 Mar 16 21:50	6°♿11'40	-1°03'32	asc. node	14707 Mar 07 01:51	14°♿17'33	
minimum elong	14706 Mar 16 23:58	6°♿06'29	1°02'39	direct	14707 Mar 09 04:35	13°♿59'37	
asc. node	14706 Mar 20 04:23	3°♿14'25		morning max el	14707 Mar 16 10:28	17°♿37'10	17°58'26
morning rise	14706 Mar 23 21:25	1°♿03'09			14707 Mar 25 06:34	0°♿	
direct	14706 Mar 26 04:28	0°♿38'43		morning set	14707 Apr 01 00:10	12°♿03'58	
morning max el	14706 Apr 01 19:08	4°♿00'04	17°46'23	desc. node	14707 Apr 08 19:26	26°♿15'08	
morning set	14706 Apr 17 19:54	28°♿33'17			14707 Apr 10 22:16	0°♿	
	14706 Apr 18 15:44	0°♿					
desc. node	14706 Apr 21 22:52	5°♿44'31		superior conj	14707 Apr 11 08:01	0°♿42'44	-0°20'16
				minimum elong	14707 Apr 11 06:15	0°♿35'00	0°20'24
superior conj	14706 Apr 29 18:08	18°♿59'58	-0°59'14	max. Earth dist.	14707 Apr 18 20:34	13°♿30'57	1.42523 AU
minimum elong	14706 Apr 29 12:24	18°♿36'10	0°59'06	evening rise	14707 Apr 24 14:17	22°♿48'38	
	14706 May 06 11:59	0°♿			14707 Apr 29 04:38	0°♿	
max. Earth dist.	14706 May 06 07:29	29°♿41'56	1.44264 AU		14707 May 20 04:52	0°♿	
evening rise	14706 May 14 13:39	12°♿40'13		evening max el	14707 May 27 09:32	8°♿18'20	22°17'49
	14706 May 26 01:59	0°♿		asc. node	14707 Jun 02 22:51	13°♿15'23	
evening max el	14706 Jun 13 15:22	24°♿26'35	21°01'14	retrograde	14707 Jun 06 01:20	13°♿58'16	
asc. node	14706 Jun 16 01:49	26°♿39'33		evening set	14707 Jun 10 19:52	11°♿58'45	
retrograde	14706 Jun 22 03:43	29°♿22'38		inferior conj	14707 Jun 16 02:26	5°♿38'37	3°02'07
evening set	14706 Jun 26 11:04	27°♿39'05		minimum elong	14707 Jun 16 01:19	5°♿42'33	3°00'59
inferior conj	14706 Jul 01 16:48	21°♿28'28	3°10'13	min. Earth dist.	14707 Jun 16 00:00	5°♿47'07	0.69030 AU
minimum elong	14706 Jul 01 16:34	21°♿29'16	3°09'13		14707 Jun 20 15:25	30°♿♿	
min. Earth dist.	14706 Jul 02 03:29	20°♿51'21	0.68708 AU	morning rise	14707 Jun 21 06:35	29°♿25'37	
morning rise	14706 Jul 06 21:48	15°♿08'51		direct	14707 Jun 25 23:20	27°♿27'02	
direct	14706 Jul 12 03:01	12°♿52'17			14707 Jul 02 00:16	0°♿	
desc. node	14706 Jul 18 22:36	15°♿48'17		morning max el	14707 Jul 05 05:00	2°♿50'57	21°53'38
morning max el	14706 Jul 22 15:43	19°♿08'40	23°21'22	desc. node	14707 Jul 05 19:51	3°♿28'48	
	14706 Jul 31 19:48	0°♿			14707 Jul 25 18:52	0°♿	
	14706 Aug 21 05:35	0°♿		morning set	14707 Aug 06 17:22	18°♿22'51	
morning set	14706 Aug 26 08:26	8°♿22'56		max. Earth dist.	14707 Aug 12 12:34	27°♿49'01	1.41811 AU
max. Earth dist.	14706 Aug 30 10:36	15°♿20'44	1.39510 AU		14707 Aug 13 20:01	0°♿	
superior conj	14706 Sep 07 04:06	29°♿12'20	-0°43'40	superior conj	14707 Aug 20 05:47	10°♿58'17	-1°19'16
minimum elong	14706 Sep 07 07:20	29°♿27'22	0°43'14	minimum elong	14707 Aug 20 11:58	11°♿25'23	1°18'52
	14706 Sep 07 14:22	0°♿		asc. node	14707 Aug 29 23:35	28°♿33'14	
asc. node	14706 Sep 12 03:03	8°♿33'39		evening rise	14707 Aug 30 23:26	0°♿23'09	
evening rise	14706 Sep 16 13:10	17°♿05'37			14707 Aug 30 18:25	0°♿	
	14706 Sep 23 10:18	0°♿		evening max el	14707 Sep 15 23:22	25°♿49'28	18°11'16
evening max el	14706 Oct 02 14:56	13°♿11'40	18°40'09	retrograde	14707 Sep 23 02:52	29°♿28'05	
retrograde	14706 Oct 10 19:52	17°♿20'03		evening set	14707 Sep 25 07:06	29°♿08'21	
evening set	14706 Oct 12 17:57	17°♿07'14		desc. node	14707 Oct 01 16:22	25°♿08'39	
desc. node	14706 Oct 14 18:53	16°♿27'34		inferior conj	14707 Oct 02 14:00	24°♿22'01	-0°17'03
inferior conj	14706 Oct 20 18:58	12°♿42'14	-1°55'01	minimum elong	14707 Oct 02 13:24	24°♿23'18	0°16'29
minimum elong	14706 Oct 20 14:17	12°♿50'59	1°52'32	min. Earth dist.	14707 Oct 05 20:34	21°♿32'05	0.59309 AU
min. Earth dist.	14706 Oct 23 22:08	10°♿22'44	0.57166 AU	morning rise	14707 Oct 09 16:21	18°♿47'01	
morning rise	14706 Oct 28 07:15	7°♿41'39		direct	14707 Oct 16 03:41	16°♿51'43	
direct	14706 Nov 03 07:11	6°♿13'00		morning max el	14707 Oct 30 10:43	24°♿36'33	27°39'19
morning max el	14706 Nov 17 13:01	13°♿39'10	26°40'54		14707 Nov 04 09:21	0°♿	
	14706 Nov 30 12:06	0°♿			14707 Nov 23 19:48	0°♿	
asc. node	14706 Dec 09 04:20	14°♿48'33		asc. node	14707 Nov 26 01:16	4°♿16'08	
morning set	14706 Dec 16 21:26	0°♿23'15		morning set	14707 Dec 01 04:10	14°♿42'20	
	14706 Dec 16 17:06	0°♿		max. Earth dist.	14707 Dec 07 13:39	28°♿41'37	1.31110 AU
superior conj	14706 Dec 23 16:27	15°♿22'37	1°37'18	superior conj	14707 Dec 08 03:57	0°♿01'33	1°31'31
minimum elong	14706 Dec 23 15:56	15°♿19'46	1°38'18	minimum elong	14707 Dec 08 02:30	29°♿53'27	1°32'25
max. Earth dist.	14706 Dec 24 05:36	16°♿36'02	1.31267 AU		14707 Dec 08 03:40	0°♿	
	14706 Dec 30 08:29	0°♿		evening rise	14707 Dec 14 21:06	14°♿52'14	
evening rise	14706 Dec 30 13:51	0°♿28'28			14707 Dec 22 08:06	0°♿	
desc. node	14707 Jan 10 17:21	22°♿00'27		desc. node	14707 Dec 28 14:12	11°♿01'03	
	14707 Jan 15 13:46	0°♿			14708 Jan 11 22:52	0°♿	
evening max el	14707 Jan 30 17:40	19°♿16'45	27°14'35	evening max el	14708 Jan 12 17:05	0°♿44'04	26°19'31
retrograde	14707 Feb 13 17:40	26°♿34'24		retrograde	14708 Jan 26 16:12	7°♿50'02	
evening set	14707 Feb 20 11:55	24°♿33'00		evening set	14708 Feb 02 00:26	6°♿13'27	
min. Earth dist.	14707 Feb 24 08:10	21°♿48'10	0.60434 AU	min. Earth dist.	14708 Feb 06 06:33	3°♿36'25	0.58254 AU
inferior conj	14707 Feb 27 12:28	19°♿06'19	-2°25'43	inferior conj	14708 Feb 09 09:02	1°♿19'31	-3°52'39
minimum elong	14707 Feb 27 17:49	18°♿54'56	2°23'19	minimum elong	14708 Feb 09 17:25	1°♿04'03	3°49'19
morning rise	14707 Mar 07 03:01	14°♿16'45			14708 Feb 11 05:05	30°♿♿	

morning rise	14708 Feb 17 13:29	26° \approx 51'16		inferior conj	14709 Jan 20 08:48	12° \approx 42'27	-5°10'31
direct	14708 Feb 19 13:36	26° \approx 37'44		minimum elong	14709 Jan 20 17:27	12° \approx 28'36	5°07'50
asc. node	14708 Feb 21 23:18	26° \approx 58'10		morning rise	14709 Jan 28 22:11	8° \approx 35'52	
	14708 Feb 27 01:49	0° \mathbb{X}		direct	14709 Jan 31 03:38	8° \approx 22'01	
morning max el	14708 Feb 27 19:37	0° \mathbb{X} 41'44	18°30'30	asc. node	14709 Feb 07 20:45	11° \approx 21'35	
morning set	14708 Mar 14 17:26	26° \mathbb{X} 09'32		morning max el	14709 Feb 09 18:28	13° \approx 01'53	19°24'31
	14708 Mar 16 17:22	0° \mathbb{Y}			14709 Feb 21 08:23	0° \mathbb{X}	
				morning set	14709 Feb 26 19:26	10° \mathbb{X} 36'35	
superior conj	14708 Mar 23 19:00	13° \mathbb{Y} 23'01	0°15'20				
minimum elong	14708 Mar 23 20:04	13° \mathbb{Y} 27'55	0°15'01	superior conj	14709 Mar 06 22:30	26° \mathbb{X} 47'27	0°45'05
behind sun begin	14708 Mar 23 17:40	13° \mathbb{Y} 16'49		minimum elong	14709 Mar 07 00:55	26° \mathbb{X} 59'12	0°44'52
behind sun end	14708 Mar 23 22:27	13° \mathbb{Y} 38'59			14709 Mar 08 14:21	0° \mathbb{Y}	
desc. node	14708 Mar 25 16:00	16° \mathbb{Y} 49'19		desc. node	14709 Mar 12 12:31	7° \mathbb{Y} 22'46	
max. Earth dist.	14708 Mar 31 05:37	26° \mathbb{Y} 41'38	1.40397 AU	max. Earth dist.	14709 Mar 13 12:06	9° \mathbb{Y} 10'48	1.38119 AU
	14708 Apr 02 03:58	0° \mathbb{Z}		evening rise	14709 Mar 17 05:02	15° \mathbb{Y} 47'54	
evening rise	14708 Apr 04 11:15	3° \mathbb{Z} 51'58			14709 Mar 25 17:06	0° \mathbb{Z}	
	14708 Apr 21 09:45	0° \mathbb{I}			14709 Apr 16 00:22	0° \mathbb{I}	
evening max el	14708 May 09 00:27	22° \mathbb{I} 11'59	23°38'53	evening max el	14709 Apr 21 13:58	6° \mathbb{I} 05'38	24°58'02
retrograde	14708 May 19 20:15	28° \mathbb{I} 33'30		retrograde	14709 May 03 11:25	13° \mathbb{I} 01'11	
asc. node	14708 May 19 20:01	28° \mathbb{I} 33'30		asc. node	14709 May 06 17:17	12° \mathbb{I} 16'17	
evening set	14708 May 25 02:26	26° \mathbb{I} 19'53		evening set	14709 May 09 05:07	10° \mathbb{I} 36'36	
inferior conj	14708 May 30 11:56	19° \mathbb{I} 52'48	2°43'41	min. Earth dist.	14709 May 13 15:15	5° \mathbb{I} 38'33	0.68239 AU
minimum elong	14708 May 30 10:08	19° \mathbb{I} 59'00	2°42'21	inferior conj	14709 May 14 19:22	4° \mathbb{I} 05'57	2°14'48
min. Earth dist.	14708 May 29 20:39	20° \mathbb{I} 45'13	0.68872 AU	minimum elong	14709 May 14 17:12	4° \mathbb{I} 13'03	2°13'21
morning rise	14708 Jun 04 17:49	13° \mathbb{I} 47'49			14709 May 18 03:58	30° \mathbb{R} \mathbb{Z}	
direct	14708 Jun 08 22:13	12° \mathbb{I} 09'21		morning rise	14709 May 20 05:35	28° \mathbb{Z} 10'12	
morning max el	14708 Jun 16 23:58	16° \mathbb{I} 44'26	20°34'25	direct	14709 May 23 22:11	26° \mathbb{Z} 52'02	
desc. node	14708 Jun 21 17:00	22° \mathbb{I} 03'29			14709 May 30 05:33	0° \mathbb{I}	
	14708 Jun 27 16:31	0° \mathbb{S}		morning max el	14709 May 31 02:19	0° \mathbb{I} 48'49	19°28'21
morning set	14708 Jul 16 04:28	27° \mathbb{S} 27'52		desc. node	14709 Jun 08 14:02	11° \mathbb{I} 17'11	
	14708 Jul 17 19:41	0° \mathbb{Q}		greatest brilliancy	14709 Jun 12 17:28	17° \mathbb{I} 14'50	-0.7m
max. Earth dist.	14708 Jul 24 21:35	11° \mathbb{Q} 11'37	1.43765 AU		14709 Jun 21 05:05	0° \mathbb{S}	
				morning set	14709 Jun 25 07:12	6° \mathbb{S} 15'27	
superior conj	14708 Jul 31 09:02	21° \mathbb{Q} 46'27	-1°50'29	max. Earth dist.	14709 Jul 07 12:34	25° \mathbb{S} 14'59	1.45153 AU
minimum elong	14708 Jul 31 16:32	22° \mathbb{Q} 17'39	1°50'31		14709 Jul 10 12:39	0° \mathbb{Q}	
	14708 Aug 05 06:19	0° \mathbb{P}					
evening rise	14708 Aug 12 18:18	12° \mathbb{P} 59'32		superior conj	14709 Jul 11 12:53	1° \mathbb{Q} 36'23	-2°10'21
asc. node	14708 Aug 15 20:10	18° \mathbb{P} 22'37		minimum elong	14709 Jul 11 17:13	1° \mathbb{Q} 53'40	2°11'07
	14708 Aug 22 18:05	0° \mathbb{U}		evening rise	14709 Jul 25 16:31	24° \mathbb{Q} 41'43	
evening max el	14708 Aug 29 12:45	8° \mathbb{U} 57'40	18°02'03		14709 Jul 28 20:59	0° \mathbb{P}	
retrograde	14708 Sep 05 01:47	12° \mathbb{U} 20'49		asc. node	14709 Aug 02 16:49	7° \mathbb{P} 56'45	
evening set	14708 Sep 07 13:54	11° \mathbb{U} 50'31		evening max el	14709 Aug 13 03:20	22° \mathbb{P} 26'47	18°11'26
inferior conj	14708 Sep 14 04:16	6° \mathbb{U} 44'26	1°01'19	retrograde	14709 Aug 19 11:56	25° \mathbb{P} 48'11	
minimum elong	14708 Sep 14 05:58	6° \mathbb{U} 40'09	1°00'43	evening set	14709 Aug 22 08:31	25° \mathbb{P} 04'24	
min. Earth dist.	14708 Sep 17 04:27	3° \mathbb{U} 44'52	0.61601 AU	inferior conj	14709 Aug 28 09:43	19° \mathbb{P} 41'14	1°58'42
desc. node	14708 Sep 17 13:52	3° \mathbb{U} 22'36		minimum elong	14709 Aug 28 12:08	19° \mathbb{P} 34'27	1°57'43
morning rise	14708 Sep 20 19:24	0° \mathbb{U} 43'25		min. Earth dist.	14709 Aug 30 22:18	16° \mathbb{P} 51'44	0.63789 AU
	14708 Sep 21 22:57	30° \mathbb{R} \mathbb{P}		morning rise	14709 Sep 03 13:56	13° \mathbb{P} 24'10	
direct	14708 Sep 27 11:23	28° \mathbb{P} 25'38		desc. node	14709 Sep 04 11:24	12° \mathbb{P} 45'18	
	14708 Oct 03 08:43	0° \mathbb{U}		direct	14709 Sep 10 04:44	10° \mathbb{P} 51'15	
morning max el	14708 Oct 11 15:38	6° \mathbb{U} 22'31	27°58'56	morning max el	14709 Sep 24 01:13	18° \mathbb{P} 51'25	27°40'53
	14708 Oct 29 13:13	0° \mathbb{M}			14709 Oct 03 11:58	0° \mathbb{U}	
asc. node	14708 Nov 11 22:06	24° \mathbb{M} 01'48			14709 Oct 22 11:53	0° \mathbb{M}	
morning set	14708 Nov 14 05:30	28° \mathbb{M} 43'17		morning set	14709 Oct 28 23:05	12° \mathbb{M} 20'35	
	14708 Nov 14 20:17	0° \mathbb{X}		asc. node	14709 Oct 29 18:51	13° \mathbb{M} 59'46	
max. Earth dist.	14708 Nov 19 19:24	10° \mathbb{X} 38'01	1.31492 AU	max. Earth dist.	14709 Nov 02 18:57	22° \mathbb{M} 16'25	1.32417 AU
superior conj	14708 Nov 21 14:03	14° \mathbb{X} 33'01	1°19'50	superior conj	14709 Nov 05 20:47	28° \mathbb{M} 51'46	1°02'16
minimum elong	14708 Nov 21 11:57	14° \mathbb{X} 21'22	1°20'31	minimum elong	14709 Nov 05 18:28	28° \mathbb{M} 39'15	1°02'44
evening rise	14708 Nov 28 07:10	29° \mathbb{X} 21'33			14709 Nov 06 09:22	0° \mathbb{X}	
	14708 Nov 28 14:18	0° \mathbb{Z}		evening rise	14709 Nov 12 18:12	13° \mathbb{X} 51'40	
desc. node	14708 Dec 14 11:09	29° \mathbb{Z} 16'18			14709 Nov 20 17:58	0° \mathbb{Z}	
	14708 Dec 14 23:05	0° \approx		desc. node	14709 Dec 01 08:13	16° \mathbb{Z} 29'41	
evening max el	14708 Dec 24 07:57	11° \approx 19'29	24°54'27	evening max el	14709 Dec 05 17:39	21° \mathbb{Z} 21'36	23°13'08
retrograde	14709 Jan 07 02:25	18° \approx 12'53		retrograde	14709 Dec 19 00:03	27° \mathbb{Z} 56'42	
evening set	14709 Jan 12 15:02	17° \approx 04'55		evening set	14709 Dec 23 06:57	27° \mathbb{Z} 16'45	
min. Earth dist.	14709 Jan 17 19:52	14° \approx 19'50	0.56342 AU	min. Earth dist.	14709 Dec 30 03:36	24° \mathbb{Z} 04'11	0.54987 AU

inferior conj	14709 Dec 31 12:54	23°  16'07	-5°56'13	inferior conj	14710 Dec 11 05:03	3°  16'09	-5°46'32
minimum elong	14709 Dec 31 15:56	23°  11'45	5°55'03	minimum elong	14710 Dec 10 22:59	3°  24'39	5°44'46
morning rise	14710 Jan 09 02:27	19°  25'31		min. Earth dist.	14710 Dec 11 09:28	3°  09'56	0.54450 AU
direct	14710 Jan 11 22:38	19°  06'20			14710 Dec 17 19:17	30°  R ²	
morning max el	14710 Jan 23 03:32	24°  28'59	20°41'38	morning rise	14710 Dec 19 11:56	29°  27'32	
asc. node	14710 Jan 25 18:07	27°  15'53		direct	14710 Dec 23 06:52	28°  27'56'18	
	14710 Jan 27 22:18	0°  ≈			14710 Dec 28 12:58	0°  Z	
morning set	14710 Feb 11 03:01	25°  ≈16'09		morning max el	14711 Jan 04 22:13	5°  Z02'09	22°19'38
	14710 Feb 13 09:42	0°  X		asc. node	14711 Jan 12 15:25	14°  Z22'25	
					14711 Jan 21 16:30	0°  ≈	
superior conj	14710 Feb 18 14:17	10°  X44'29	1°08'09	morning set	14711 Jan 26 13:46	10°  ≈00'39	
minimum elong	14710 Feb 18 16:55	10°  X57'51	1°08'14				
max. Earth dist.	14710 Feb 23 20:03	21°  X10'00	1.35938 AU	superior conj	14711 Feb 02 14:46	25°  ≈03'20	1°24'29
desc. node	14710 Feb 27 09:03	27°  X52'10		minimum elong	14711 Feb 02 16:51	25°  ≈14'25	1°24'57
evening rise	14710 Feb 27 17:08	28°  X29'32			14711 Feb 04 23:16	0°  X	
	14710 Feb 28 12:52	0°  Y		max. Earth dist.	14711 Feb 06 10:02	2°  X59'18	1.34053 AU
	14710 Mar 19 00:01	0°  8		evening rise	14711 Feb 10 19:58	11°  X47'05	
evening max el	14710 Apr 04 03:27	19°  856'04	26°08'05	desc. node	14711 Feb 14 05:35	18°  X13'00	
retrograde	14710 Apr 16 21:49	27°  814'24			14711 Feb 20 22:20	0°  Y	
evening set	14710 Apr 23 02:13	24°  843'18			14711 Mar 14 05:56	0°  8	
asc. node	14710 Apr 23 14:37	24°  816'36		evening max el	14711 Mar 17 17:11	3°  836'15	27°01'37
min. Earth dist.	14710 Apr 27 05:51	20°  820'38	0.67156 AU	retrograde	14711 Mar 31 02:31	11°  804'56	
inferior conj	14710 Apr 28 22:40	18°  814'01	1°34'55	evening set	14711 Apr 06 15:47	8°  833'09	
minimum elong	14710 Apr 28 20:41	18°  820'12	1°33'34	min. Earth dist.	14711 Apr 10 14:21	4°  843'49	0.65659 AU
morning rise	14710 May 04 15:57	12°  828'39		asc. node	14711 Apr 10 12:02	4°  850'16	
direct	14710 May 07 21:34	11°  829'17		inferior conj	14711 Apr 12 19:34	2°  811'33	0°43'14
morning max el	14710 May 14 11:44	15°  800'38	18°37'55	minimum elong	14711 Apr 12 18:27	2°  814'47	0°42'20
	14710 May 25 19:18	0°  II			14711 Apr 14 18:59	30°  R ¹ Y	
desc. node	14710 May 26 10:57	0°  II59'25		morning rise	14711 Apr 18 22:38	26°  Y38'22	
morning set	14710 Jun 04 22:21	15°  II42'37		direct	14711 Apr 21 18:26	25°  Y55'08	
	14710 Jun 14 01:47	0°  E		morning max el	14711 Apr 28 02:27	29°  Y13'33	18°04'15
max. Earth dist.	14710 Jun 20 07:09	9°  E42'26	1.45848 AU		14711 Apr 28 20:47	0°  8	
				desc. node	14711 May 13 07:44	21°  802'22	
superior conj	14710 Jun 21 00:11	10°  E48'54	-2°12'07	morning set	14711 May 16 15:45	26°  827'02	
minimum elong	14710 Jun 20 20:58	10°  E36'22	2°13'05		14711 May 18 20:16	0°  II	
	14710 Jul 03 05:11	0°  Q					
evening rise	14710 Jul 06 14:09	5°  Q21'29		superior conj	14711 May 31 10:18	20°  II05'02	-1°54'01
greatest brilliancy	14710 Jul 13 23:02	17°  Q03'49	-0.9m	minimum elong	14711 May 31 01:44	19°  II31'22	1°54'20
asc. node	14710 Jul 20 13:30	27°  Q09'41		max. Earth dist.	14711 Jun 03 03:11	24°  II19'18	1.45798 AU
	14710 Jul 22 13:37	0°  np			14711 Jun 06 18:36	0°  E	
evening max el	14710 Jul 27 16:05	6°  np09'04	18°38'33	evening rise	14711 Jun 16 13:00	15°  E07'09	
retrograde	14710 Aug 03 05:14	9°  np41'47			14711 Jun 26 06:00	0°  Q	
evening set	14710 Aug 06 10:47	8°  np42'20		greatest brilliancy	14711 Jun 29 04:34	4°  Q24'45	-0.7m
inferior conj	14710 Aug 12 02:26	3°  np04'10	2°37'23	asc. node	14711 Jul 07 10:18	15°  Q53'55	
minimum elong	14710 Aug 12 04:33	2°  np57'39	2°36'23	evening max el	14711 Jul 11 00:39	19°  Q58'31	19°22'26
min. Earth dist.	14710 Aug 14 01:13	0°  np40'41	0.65705 AU	retrograde	14711 Jul 18 02:31	23°  Q55'02	
	14710 Aug 14 14:56	30°  R ¹ Q		evening set	14711 Jul 21 17:38	22°  Q38'33	
morning rise	14710 Aug 17 21:15	26°  Q39'48		inferior conj	14711 Jul 27 03:08	16°  Q46'50	3°00'17
desc. node	14710 Aug 22 08:55	24°  Q14'05		minimum elong	14711 Jul 27 04:27	16°  Q42'30	2°59'21
direct	14710 Aug 24 06:14	24°  Q00'48		min. Earth dist.	14711 Jul 28 11:35	15°  Q00'23	0.67234 AU
	14710 Sep 04 14:32	0°  np		morning rise	14711 Aug 01 14:41	10°  Q21'30	
morning max el	14710 Sep 06 12:27	1°  np50'56	26°51'09	direct	14711 Aug 07 14:26	7°  Q45'35	
	14710 Sep 27 15:40	0°  E		desc. node	14711 Aug 09 06:21	7°  Q56'08	
morning set	14710 Oct 12 05:54	25°  E26'24		morning max el	14711 Aug 19 23:25	15°  Q09'41	25°38'37
	14710 Oct 14 14:20	0°  ML			14711 Sep 01 04:06	0°  np	
max. Earth dist.	14710 Oct 16 08:59	3°  ML31'59	1.33889 AU		14711 Sep 20 11:50	0°  E	
asc. node	14710 Oct 16 15:29	4°  ML04'43		morning set	14711 Sep 24 22:26	7°  E52'41	
				max. Earth dist.	14711 Sep 28 13:22	14°  E36'05	1.35853 AU
superior conj	14710 Oct 20 21:47	12°  ML51'06	0°38'55	asc. node	14711 Oct 03 12:05	24°  E13'03	
minimum elong	14710 Oct 20 19:55	12°  ML41'15	0°39'11				
evening rise	14710 Oct 28 04:16	28°  ML17'03		superior conj	14711 Oct 04 14:24	26°  E24'45	0°10'08
	14710 Oct 28 23:50	0°  X		minimum elong	14711 Oct 04 13:47	26°  E21'39	0°10'22
	14710 Nov 15 22:05	0°  Z		behind sun begin	14711 Oct 04 08:59	25°  E57'31	
evening max el	14710 Nov 17 07:10	1°  Z25'43	21°33'24	behind sun end	14711 Oct 04 18:36	26°  E45'49	
desc. node	14710 Nov 18 05:23	2°  Z18'22			14711 Oct 06 08:57	0°  ML	
retrograde	14710 Nov 29 11:45	7°  Z28'01		evening rise	14711 Oct 12 11:22	12°  ML33'01	
evening set	14710 Dec 02 10:41	7°  Z08'07			14711 Oct 21 13:16	0°  X	

evening max el	14711 Oct 30 08:54	12°  05'32	20°09'03	retrograde	14712 Oct 21 00:56	28°  05'43	
desc. node	14711 Nov 05 02:37	16°  16'35		desc. node	14712 Oct 21 23:58	28°  02'48	
retrograde	14711 Nov 09 23:37	17°  22'32		evening set	14712 Oct 22 21:49	27°  54'48	
evening set	14711 Nov 12 02:09	17°  11'02		inferior conj	14712 Oct 31 08:18	23°  41'05	-2°56'46
inferior conj	14711 Nov 20 23:04	13°  13'48	-4°38'36	minimum elong	14712 Oct 31 00:54	23°  53'43	2°53'13
minimum elong	14711 Nov 20 12:58	13°  28'52	4°34'51	min. Earth dist.	14712 Nov 03 03:08	21°  47'28	0.56130 AU
min. Earth dist.	14711 Nov 22 16:19	12°  12'16	0.54859 AU	morning rise	14712 Nov 08 01:20	19°  02'27	
morning rise	14711 Nov 28 22:54	9°  08'12		direct	14712 Nov 13 16:00	17°  49'26	
direct	14711 Dec 03 17:43	8°  18'33		morning max el	14712 Nov 27 18:28	25°  00'41	25°52'01
morning max el	14711 Dec 17 08:02	15°  00'43	24°08'54		14712 Dec 02 09:43	0°  17	
	14711 Dec 29 01:14	0°  30		asc. node	14712 Dec 16 09:41	21°  08'07	
asc. node	14711 Dec 30 12:36	2°  24'23			14712 Dec 21 00:55	0°  30	
morning set	14712 Jan 11 01:41	24°  44'29		morning set	14712 Dec 25 13:02	9°  23'06	
	14712 Jan 13 11:56	0°  30					
				superior conj	14713 Jan 01 07:03	24°  16'07	1°37'57
superior conj	14712 Jan 17 21:07	9°  36'00	1°34'20	minimum elong	14713 Jan 01 07:09	24°  16'40	1°38'55
minimum elong	14712 Jan 17 22:17	9°  42'23	1°35'07	max. Earth dist.	14713 Jan 02 12:26	26°  35'00	1.31602 AU
max. Earth dist.	14712 Jan 20 07:58	14°  54'34	1.32588 AU		14713 Jan 03 21:18	0°  30	
evening rise	14712 Jan 25 10:11	25°  31'52		evening rise	14713 Jan 08 08:54	9°  36'53	
	14712 Jan 27 16:09	0°  30		desc. node	14713 Jan 17 22:50	28°  08'59	
desc. node	14712 Feb 01 02:10	8°  20'31			14713 Jan 19 00:06	0°  30	
	14712 Feb 14 08:58	0°  30		evening max el	14713 Feb 09 15:34	29°  39'09	27°30'26
evening max el	14712 Feb 28 06:00	16°  54'59	27°31'13		14713 Feb 10 00:24	0°  30	
retrograde	14712 Mar 13 00:16	24°  52'37		retrograde	14713 Feb 23 14:07	7°  01'35	
evening set	14712 Mar 19 19:32	21°  57'44		evening set	14713 Mar 02 10:48	4°  48'54	
min. Earth dist.	14712 Mar 23 14:41	18°  53'34	0.63814 AU	min. Earth dist.	14713 Mar 06 05:13	1°  54'18	0.61712 AU
inferior conj	14712 Mar 26 07:21	15°  51'34	-0°20'59		14713 Mar 08 07:27	30°  00'00	
minimum elong	14712 Mar 26 08:00	15°  49'52	0°20'53	inferior conj	14713 Mar 09 06:47	29°  06'01	-1°37'15
asc. node	14712 Mar 27 09:29	14°  44'39		minimum elong	14713 Mar 09 10:13	28°  08'09	1°35'43
morning rise	14712 Apr 01 22:47	10°  32'58		asc. node	14713 Mar 14 06:58	25°  06'46	
direct	14712 Apr 04 10:05	10°  02'35		morning rise	14713 Mar 16 12:39	24°  05'08	
morning max el	14712 Apr 10 19:53	13°  51'38	17°47'49	direct	14713 Mar 18 17:12	23°  04'07	
	14712 Apr 22 11:54	0°  30		morning max el	14713 Mar 25 13:02	27°  10'43	17°49'13
morning set	14712 Apr 27 12:17	8°  29'17			14713 Mar 28 01:24	0°  30	
desc. node	14712 Apr 29 04:25	11°  19'40		morning set	14713 Apr 10 06:47	21°  33'25	
					14713 Apr 15 00:44	0°  30	
superior conj	14712 May 10 11:22	0°  05'19	-1°21'18	desc. node	14713 Apr 16 01:02	1°  08'54	
minimum elong	14712 May 10 03:32	29°  33'36	1°21'10				
	14712 May 10 10:03	0°  30		superior conj	14713 Apr 21 11:43	11°  11'14	-0°42'32
max. Earth dist.	14712 May 15 22:32	8°  50'40	1.45018 AU	minimum elong	14713 Apr 21 07:44	10°  08'19	0°42'31
evening rise	14712 May 26 00:09	24°  30'17		max. Earth dist.	14713 Apr 28 14:43	23°  00'33	1.43587 AU
	14712 May 29 14:46	0°  30			14713 May 02 23:31	0°  30	
	14712 Jun 19 16:47	0°  30		evening rise	14713 May 05 16:05	4°  13'17	
evening max el	14712 Jun 23 03:30	3°  49'39	20°21'30		14713 May 22 23:55	0°  30	
asc. node	14712 Jun 23 07:12	3°  58'50		evening max el	14713 Jun 06 00:27	17°  40'43	21°32'48
retrograde	14712 Jul 01 01:23	8°  21'11		asc. node	14713 Jun 10 04:11	21°  11'42	
evening set	14712 Jul 05 02:43	6°  47'14		retrograde	14713 Jun 14 23:59	22°  55'05	
inferior conj	14712 Jul 10 09:02	0°  43'08	3°09'56	evening set	14713 Jun 19 12:07	21°  04'18	
minimum elong	14712 Jul 10 09:23	0°  41'59	3°09'00	inferior conj	14713 Jun 24 17:55	14°  49'17	3°08'03
	14712 Jul 10 21:38	30°  00'00		minimum elong	14713 Jun 24 17:18	14°  51'29	3°07'01
min. Earth dist.	14712 Jul 11 03:27	29°  40'05	0.68310 AU	min. Earth dist.	14713 Jun 24 22:54	14°  31'56	0.68907 AU
morning rise	14712 Jul 15 15:44	24°  20'53		morning rise	14713 Jun 29 22:16	8°  32'29	
direct	14712 Jul 21 04:04	21°  55'43		direct	14713 Jul 04 22:10	6°  23'25	
desc. node	14712 Jul 26 03:45	23°  30'25		desc. node	14713 Jul 13 01:04	10°  31'29	
morning max el	14712 Aug 01 09:55	28°  39'19	24°12'56	morning max el	14713 Jul 14 21:33	12°  17'17	22°43'29
	14712 Aug 02 16:55	0°  30			14713 Jul 29 01:26	0°  30	
	14712 Aug 24 21:37	0°  30		morning set	14713 Aug 17 19:33	0°  30	
morning set	14712 Sep 05 20:22	19°  28'59			14713 Aug 17 18:08	0°  30	
max. Earth dist.	14712 Sep 09 12:14	25°  54'33	1.38145 AU	max. Earth dist.	14713 Aug 22 11:48	7°  53'47	1.40517 AU
	14712 Sep 11 18:35	0°  30					
				superior conj	14713 Aug 30 08:03	21°  39'19	-0°58'56
superior conj	14712 Sep 16 19:12	9°  24'03	-0°23'10	minimum elong	14713 Aug 30 12:35	21°  59'50	0°58'28
minimum elong	14712 Sep 16 20:48	9°  31'41	0°22'49		14713 Sep 03 20:54	0°  30	
asc. node	14712 Sep 19 08:39	14°  20'48		asc. node	14713 Sep 06 05:12	4°  24'24	
evening rise	14712 Sep 25 13:00	26°  23'07		evening rise	14713 Sep 09 06:02	10°  20'15	
	14712 Sep 27 06:58	0°  30			14713 Sep 20 12:37	0°  30	
evening max el	14712 Oct 12 00:56	23°  34'25	19°06'11	evening max el	14713 Sep 25 04:32	5°  49'22	18°25'19

retrograde	14713 Oct 02 21:29	9° \mathbb{M} 43'53		asc. node	14714 Aug 24 01:46	24° \mathbb{M} 20'14	
evening set	14713 Oct 04 21:41	9° \mathbb{M} 28'40			14714 Aug 27 05:27	0° \mathbb{L}	
desc. node	14713 Oct 08 21:25	7° \mathbb{M} 39'13		evening max el	14714 Sep 08 15:34	18° \mathbb{L} 41'26	18°05'04
inferior conj	14713 Oct 12 14:59	4° \mathbb{M} 54'14	-1°11'28	retrograde	14714 Sep 15 11:49	22° \mathbb{L} 12'01	
minimum elong	14713 Oct 12 12:13	4° \mathbb{M} 59'46	1°09'51	evening set	14714 Sep 17 19:09	21° \mathbb{L} 48'20	
min. Earth dist.	14713 Oct 15 20:56	2° \mathbb{M} 19'30	0.58035 AU	inferior conj	14714 Sep 24 18:43	16° \mathbb{L} 53'35	0°18'46
	14713 Oct 19 07:15	30° \mathbb{R} \mathbb{L}		minimum elong	14714 Sep 24 19:20	16° \mathbb{L} 52'10	0°18'43
morning rise	14713 Oct 19 23:15	29° \mathbb{L} 38'01		desc. node	14714 Sep 25 18:56	15° \mathbb{L} 57'07	
direct	14713 Oct 26 04:34	27° \mathbb{L} 58'06		min. Earth dist.	14714 Sep 27 23:35	13° \mathbb{L} 56'38	0.60273 AU
	14713 Nov 02 06:56	0° \mathbb{M}		morning rise	14714 Oct 01 16:18	11° \mathbb{L} 06'00	
morning max el	14713 Nov 09 11:50	5° \mathbb{M} 33'03	27°10'25	direct	14714 Oct 08 06:19	9° \mathbb{L} 00'11	
	14713 Nov 27 13:04	0° \mathbb{X}		morning max el	14714 Oct 22 13:01	16° \mathbb{L} 52'08	27°52'31
asc. node	14713 Dec 03 06:40	10° \mathbb{X} 22'12			14714 Nov 02 10:04	0° \mathbb{M}	
morning set	14713 Dec 09 21:59	23° \mathbb{X} 50'48		asc. node	14714 Nov 20 03:33	29° \mathbb{M} 58'24	
	14713 Dec 12 18:01	0° \mathbb{Z}			14714 Nov 20 03:53	0° \mathbb{X}	
				morning set	14714 Nov 24 02:43	8° \mathbb{X} 03'18	
superior conj	14713 Dec 16 18:31	8° \mathbb{Z} 57'00	1°35'34	max. Earth dist.	14714 Nov 30 03:38	21° \mathbb{X} 08'50	1.31200 AU
minimum elong	14713 Dec 16 17:36	8° \mathbb{Z} 51'47	1°36'33				
max. Earth dist.	14713 Dec 16 20:11	9° \mathbb{Z} 06'18	1.31132 AU	superior conj	14714 Dec 01 05:41	23° \mathbb{X} 33'49	1°27'17
evening rise	14713 Dec 23 13:38	23° \mathbb{Z} 55'02		minimum elong	14714 Dec 01 03:55	23° \mathbb{X} 23'58	1°28'07
	14713 Dec 26 11:26	0° \approx			14714 Dec 04 02:57	0° \mathbb{Z}	
desc. node	14714 Jan 04 19:36	17° \approx 29'55		evening rise	14714 Dec 07 22:18	8° \mathbb{Z} 21'49	
	14714 Jan 12 22:18	0° \mathbb{H}			14714 Dec 18 22:27	0° \approx	
evening max el	14714 Jan 22 19:09	11° \mathbb{H} 35'43	26°55'13	desc. node	14714 Dec 22 16:30	6° \approx 13'10	
retrograde	14714 Feb 05 18:57	18° \mathbb{H} 48'58		evening max el	14715 Jan 04 14:45	22° \approx 39'46	25°46'21
evening set	14714 Feb 12 10:12	16° \mathbb{H} 57'01		retrograde	14715 Jan 18 12:53	29° \approx 41'27	
min. Earth dist.	14714 Feb 16 09:13	14° \mathbb{H} 17'30	0.59494 AU	evening set	14715 Jan 24 13:52	28° \approx 16'43	
inferior conj	14714 Feb 19 14:09	11° \mathbb{H} 43'58	-3°02'33	min. Earth dist.	14715 Jan 29 03:38	25° \approx 38'16	0.57391 AU
minimum elong	14714 Feb 19 20:55	11° \mathbb{H} 30'26	2°59'38	inferior conj	14715 Feb 01 02:03	23° \approx 36'21	-4°27'58
morning rise	14714 Feb 27 11:00	7° \mathbb{H} 03'39		minimum elong	14715 Feb 01 11:06	23° \approx 20'39	4°24'41
direct	14714 Mar 01 11:21	6° \mathbb{H} 48'30		morning rise	14715 Feb 09 11:13	19° \approx 17'40	
asc. node	14714 Mar 01 04:26	6° \mathbb{H} 48'49		direct	14715 Feb 11 12:20	19° \approx 04'39	
morning max el	14714 Mar 09 02:19	10° \mathbb{H} 35'42	18°09'34	asc. node	14715 Feb 16 01:53	20° \approx 13'32	
	14714 Mar 21 20:18	0° \mathbb{Y}		morning max el	14715 Feb 20 07:39	23° \approx 23'05	18°50'38
morning set	14714 Mar 24 17:09	5° \mathbb{Y} 20'23			14715 Feb 25 15:38	0° \mathbb{H}	
desc. node	14714 Apr 02 21:36	22° \mathbb{Y} 19'21		morning set	14715 Mar 08 14:32	19° \mathbb{H} 35'56	
					14715 Mar 13 22:14	0° \mathbb{Y}	
superior conj	14714 Apr 03 11:08	23° \mathbb{Y} 20'08	-0°04'36				
minimum elong	14714 Apr 03 10:45	23° \mathbb{Y} 18'25	0°04'51	superior conj	14715 Mar 17 05:41	6° \mathbb{Y} 20'33	0°28'43
behind sun begin	14714 Apr 03 03:27	22° \mathbb{Y} 45'39		minimum elong	14715 Mar 17 07:29	6° \mathbb{Y} 29'03	0°28'25
behind sun end	14714 Apr 03 18:03	23° \mathbb{Y} 51'07		desc. node	14715 Mar 20 18:07	12° \mathbb{Y} 53'30	
	14714 Apr 07 05:48	0° \mathbb{B}		max. Earth dist.	14715 Mar 24 08:54	19° \mathbb{Y} 23'32	1.39432 AU
max. Earth dist.	14714 Apr 11 01:54	6° \mathbb{B} 33'30	1.41652 AU	evening rise	14715 Mar 28 06:52	26° \mathbb{Y} 10'01	
evening rise	14714 Apr 16 00:52	14° \mathbb{B} 43'43			14715 Mar 30 13:42	0° \mathbb{B}	
	14714 Apr 25 20:06	0° \mathbb{I}			14715 Apr 19 11:06	0° \mathbb{I}	
	14714 May 18 05:10	0° \mathbb{G}		evening max el	14715 May 02 06:49	15° \mathbb{I} 25'42	24°13'15
evening max el	14714 May 19 16:48	1° \mathbb{G} 32'15	22°52'02	retrograde	14715 May 13 14:18	22° \mathbb{I} 03'29	
asc. node	14714 May 28 01:18	7° \mathbb{G} 16'31		asc. node	14715 May 14 22:31	21° \mathbb{I} 55'37	
retrograde	14714 May 29 20:45	7° \mathbb{G} 31'07		evening set	14715 May 19 01:18	19° \mathbb{I} 44'55	
evening set	14714 Jun 03 20:12	5° \mathbb{G} 25'09		min. Earth dist.	14715 May 23 15:54	14° \mathbb{I} 25'38	0.68656 AU
	14714 Jun 08 10:52	30° \mathbb{R} \mathbb{I}		inferior conj	14715 May 24 12:36	13° \mathbb{I} 15'37	2°32'46
inferior conj	14714 Jun 09 03:45	29° \mathbb{I} 01'25	2°55'35	minimum elong	14715 May 24 10:36	13° \mathbb{I} 22'24	2°31'21
minimum elong	14714 Jun 09 02:18	29° \mathbb{I} 06'27	2°54'21	morning rise	14715 May 29 19:59	7° \mathbb{I} 14'09	
min. Earth dist.	14714 Jun 08 19:46	29° \mathbb{I} 29'10	0.69018 AU	direct	14715 Jun 02 19:13	5° \mathbb{I} 44'25	
morning rise	14714 Jun 14 08:19	22° \mathbb{I} 51'38		morning max el	14715 Jun 10 11:00	10° \mathbb{I} 02'09	20°04'24
direct	14714 Jun 18 19:39	21° \mathbb{I} 01'43		desc. node	14715 Jun 16 19:23	17° \mathbb{I} 29'31	
morning max el	14714 Jun 27 13:05	26° \mathbb{I} 04'23	21°18'34		14715 Jun 25 16:47	0° \mathbb{G}	
desc. node	14714 Jun 29 22:17	28° \mathbb{I} 36'56		morning set	14715 Jul 07 23:27	18° \mathbb{G} 30'25	
	14714 Jul 01 03:01	0° \mathbb{G}			14715 Jul 15 08:47	0° \mathbb{Q}	
	14714 Jul 22 12:19	0° \mathbb{Q}		max. Earth dist.	14715 Jul 18 03:34	4° \mathbb{Q} 24'12	1.44429 AU
morning set	14714 Jul 28 18:24	9° \mathbb{Q} 40'10					
max. Earth dist.	14714 Aug 04 16:25	20° \mathbb{Q} 44'51	1.42690 AU	superior conj	14715 Jul 23 17:36	13° \mathbb{Q} 23'23	-2°00'45
	14714 Aug 10 06:00	0° \mathbb{M}		minimum elong	14715 Jul 24 00:27	13° \mathbb{Q} 51'17	2°01'06
					14715 Aug 02 16:55	0° \mathbb{M}	
superior conj	14714 Aug 12 00:34	3° \mathbb{M} 01'06	-1°33'26	evening rise	14715 Aug 05 21:03	5° \mathbb{M} 25'07	
minimum elong	14714 Aug 12 07:40	3° \mathbb{M} 31'32	1°33'08	asc. node	14715 Aug 10 22:22	14° \mathbb{M} 03'32	
evening rise	14714 Aug 23 10:24	23° \mathbb{M} 10'57			14715 Aug 21 10:07	0° \mathbb{L}	

evening max el	14715 Aug 23 05:54	1°♎59'35	18°03'55		14716 Jul 25 13:52	0°♎	
retrograde	14715 Aug 29 15:51	5°♎20'06		asc. node	14716 Jul 27 19:03	3°♎29'35	
evening set	14715 Sep 01 07:33	4°♎44'24		evening max el	14716 Aug 05 20:07	15°♎35'29	18°20'49
	14715 Sep 07 04:52	30°♎		retrograde	14716 Aug 12 05:23	18°♎59'43	
inferior conj	14715 Sep 07 15:53	29°♎31'05	1°28'07	evening set	14716 Aug 15 05:51	18°♎09'19	
minimum elong	14715 Sep 07 18:03	29°♎25'22	1°27'16	inferior conj	14716 Aug 21 02:33	12°♎39'31	2°17'12
min. Earth dist.	14715 Sep 10 11:42	26°♎33'22	0.62556 AU	minimum elong	14716 Aug 21 04:55	12°♎32'34	2°16'10
desc. node	14715 Sep 12 16:28	24°♎29'18		min. Earth dist.	14716 Aug 23 09:22	9°♎59'40	0.64655 AU
morning rise	14715 Sep 14 02:16	23°♎22'14		morning rise	14716 Aug 27 02:34	6°♎18'44	
direct	14715 Sep 20 18:37	20°♎56'37		desc. node	14716 Aug 29 13:59	4°♎41'37	
morning max el	14715 Oct 04 20:01	28°♎56'24	27°55'32	direct	14716 Sep 02 15:29	3°♎42'11	
	14715 Oct 05 20:57	0°♎		morning max el	14716 Sep 16 06:23	11°♎38'53	27°23'03
	14715 Oct 27 08:02	0°♎			14716 Sep 30 21:16	0°♎	
asc. node	14715 Nov 07 00:20	19°♎49'34			14716 Oct 18 20:13	0°♎	
morning set	14715 Nov 08 01:01	21°♎54'27		morning set	14716 Oct 21 14:21	5°♎18'29	
	14715 Nov 11 22:00	0°♎		asc. node	14716 Oct 23 21:02	9°♎50'42	
max. Earth dist.	14715 Nov 13 06:55	2°♎56'52	1.31815 AU	max. Earth dist.	14716 Oct 26 02:40	14°♎24'57	1.32983 AU
superior conj	14715 Nov 15 14:36	8°♎00'26	1°13'07	superior conj	14716 Oct 29 19:09	22°♎11'17	0°53'04
minimum elong	14715 Nov 15 12:20	7°♎48'03	1°13'42	minimum elong	14716 Oct 29 16:56	21°♎59'25	0°53'26
evening rise	14715 Nov 22 08:58	22°♎51'44			14716 Nov 02 10:05	0°♎	
	14715 Nov 25 18:03	0°♎		evening rise	14716 Nov 05 19:48	7°♎20'11	
desc. node	14715 Dec 09 13:30	24°♎04'20			14716 Nov 17 15:09	0°♎	
	14715 Dec 14 06:27	0°♎		desc. node	14716 Nov 25 10:36	10°♎44'22	
evening max el	14715 Dec 17 02:48	2°♎58'09	24°12'25	evening max el	14716 Nov 27 12:54	12°♎56'01	22°29'30
retrograde	14715 Dec 30 17:39	9°♎44'31		retrograde	14716 Dec 10 09:41	19°♎18'31	
evening set	14716 Jan 04 18:26	8°♎49'17		evening set	14716 Dec 14 02:44	18°♎48'22	
min. Earth dist.	14716 Jan 10 14:25	5°♎54'43	0.55680 AU	min. Earth dist.	14716 Dec 21 20:35	15°♎18'43	0.54649 AU
inferior conj	14716 Jan 12 17:01	4°♎37'45	-5°35'25	inferior conj	14716 Dec 22 14:31	14°♎53'29	-5°59'43
minimum elong	14716 Jan 13 00:04	4°♎27'00	5°33'25	minimum elong	14716 Dec 22 13:37	14°♎54'46	5°58'41
morning rise	14716 Jan 21 07:32	0°♎38'38		morning rise	14716 Dec 31 01:41	11°♎06'05	
direct	14716 Jan 23 18:01	0°♎23'12		direct	14717 Jan 03 07:15	10°♎42'27	
asc. node	14716 Feb 02 23:16	5°♎17'20		morning max el	14717 Jan 15 03:24	16°♎23'31	21°21'11
morning max el	14716 Feb 03 00:54	5°♎21'17	19°54'24	asc. node	14717 Jan 19 20:36	21°♎44'14	
	14716 Feb 18 17:41	0°♎			14717 Jan 25 08:56	0°♎	
morning set	14716 Feb 20 19:15	4°♎09'25		morning set	14717 Feb 04 04:27	18°♎52'06	
					14717 Feb 09 11:20	0°♎	
superior conj	14716 Feb 28 14:52	20°♎00'03	0°55'41	superior conj	14717 Feb 11 10:41	4°♎07'20	1°15'54
minimum elong	14716 Feb 28 17:29	20°♎13'03	0°55'34	minimum elong	14717 Feb 11 13:09	4°♎20'07	1°16'08
	14716 Mar 04 18:34	0°♎		max. Earth dist.	14717 Feb 16 01:57	13°♎32'33	1.35093 AU
max. Earth dist.	14716 Mar 05 15:25	1°♎37'56	1.37171 AU	evening rise	14717 Feb 20 03:39	21°♎25'00	
desc. node	14716 Mar 06 14:38	3°♎25'49		desc. node	14717 Feb 21 11:08	23°♎52'03	
evening rise	14716 Mar 09 08:53	8°♎27'04			14717 Feb 24 20:25	0°♎	
	14716 Mar 22 08:33	0°♎		evening max el	14717 Mar 16 04:57	0°♎	
evening max el	14716 Apr 13 20:27	29°♎19'51	25°29'28		14717 Mar 27 10:12	13°♎07'34	26°33'19
	14716 Apr 14 13:04	0°♎		retrograde	14717 Apr 09 11:21	20°♎30'52	
retrograde	14716 Apr 26 03:29	6°♎26'07		evening set	14717 Apr 15 19:55	17°♎58'44	
asc. node	14716 Apr 30 19:48	4°♎55'11		asc. node	14717 Apr 17 17:11	16°♎14'53	
evening set	14716 May 02 01:49	3°♎58'29		min. Earth dist.	14717 Apr 19 21:15	13°♎50'43	0.66573 AU
	14716 May 05 18:59	30°♎		inferior conj	14717 Apr 21 19:25	11°♎32'11	1°14'29
min. Earth dist.	14716 May 06 09:08	29°♎15'28	0.67832 AU	minimum elong	14717 Apr 21 17:42	11°♎37'22	1°13'17
inferior conj	14716 May 07 18:33	27°♎27'52	1°59'18	morning rise	14717 Apr 27 16:31	5°♎51'49	
minimum elong	14716 May 07 16:24	27°♎34'49	1°57'52	direct	14717 Apr 30 17:56	4°♎59'32	
morning rise	14716 May 13 07:25	21°♎36'06		morning max el	14717 May 07 04:20	8°♎23'30	18°21'32
direct	14716 May 16 19:18	20°♎26'01		desc. node	14717 May 20 13:10	26°♎48'30	
morning max el	14716 May 23 16:24	24°♎10'17	19°04'51		14717 May 22 13:49	0°♎	
	14716 May 28 16:39	0°♎		morning set	14717 May 27 06:34	7°♎26'51	
desc. node	14716 Jun 02 16:21	6°♎56'44			14717 Jun 10 14:20	0°♎	
greatest brilliancy	14716 Jun 05 17:28	11°♎27'07	-0.7m	superior conj	14717 Jun 11 21:36	2°♎02'00	-2°06'42
morning set	14716 Jun 16 05:05	27°♎28'38		minimum elong	14717 Jun 11 15:25	1°♎37'54	2°07'25
	14716 Jun 17 20:16	0°♎		max. Earth dist.	14717 Jun 12 16:43	3°♎16'36	1.45926 AU
max. Earth dist.	14716 Jun 29 20:38	18°♎41'00	1.45545 AU	evening rise	14717 Jun 27 20:18	26°♎55'55	
superior conj	14716 Jul 02 13:06	22°♎54'10	-2°13'34		14717 Jun 29 19:19	0°♎	
minimum elong	14716 Jul 02 14:29	22°♎59'39	2°14'33	greatest brilliancy	14717 Jul 07 15:52	12°♎13'37	-0.8m
	14716 Jul 07 00:41	0°♎		asc. node	14717 Jul 14 15:47	22°♎31'24	
evening rise	14716 Jul 17 09:05	16°♎41'14					

evening max el	14717 Jul 20 07:18	29°Ω21'22	18°55'10	greatest brilliancy	14718 Jun 21 19:55	28°Ω00'58	-0.6m
	14717 Jul 20 23:26	0°ྐ			14718 Jun 23 04:50	0°Ω	
retrograde	14717 Jul 27 00:48	3°ྐ02'43		asc. node	14718 Jul 01 12:37	11°Ω00'15	
evening set	14717 Jul 30 10:24	1°ྐ55'58		evening max el	14718 Jul 03 13:25	13°Ω11'24	19°45'50
	14717 Aug 01 17:21	30°κΩ		retrograde	14718 Jul 10 23:09	17°Ω22'06	
inferior conj	14717 Aug 04 23:01	26°Ω11'35	2°48'49	evening set	14718 Jul 14 18:28	15°Ω58'13	
minimum elong	14717 Aug 05 00:50	26°Ω05'49	2°47'52	inferior conj	14718 Jul 20 02:15	10°Ω00'51	3°05'52
min. Earth dist.	14717 Aug 06 15:35	24°Ω03'09	0.66411 AU	minimum elong	14718 Jul 20 03:10	9°Ω57'47	3°04'58
morning rise	14717 Aug 10 14:29	19°Ω46'13		min. Earth dist.	14718 Jul 21 04:38	8°Ω32'22	0.67745 AU
desc. node	14717 Aug 16 11:27	17°Ω08'19		morning rise	14718 Jul 25 11:25	3°Ω36'11	
direct	14717 Aug 16 19:45	17°Ω07'52		direct	14718 Jul 31 06:21	1°Ω04'10	
morning max el	14717 Aug 29 17:50	24°Ω48'28	26°22'33	desc. node	14718 Aug 03 08:52	1°Ω41'00	
	14717 Sep 03 10:49	0°ྐ		morning max el	14718 Aug 12 04:43	8°Ω13'19	25°03'10
	14717 Sep 24 08:06	0°Ω			14718 Aug 29 07:00	0°ྐ	
morning set	14717 Oct 04 15:34	18°Ω08'41			14718 Sep 16 21:18	0°Ω	
max. Earth dist.	14717 Oct 08 12:46	25°Ω35'12	1.34675 AU	morning set	14718 Sep 17 00:45	0°Ω15'20	
asc. node	14717 Oct 10 17:41	29°Ω57'42		max. Earth dist.	14718 Sep 20 14:06	6°Ω41'53	1.36797 AU
	14717 Oct 10 18:08	0°ྐ					
superior conj	14717 Oct 13 16:58	6°ྐ00'35	0°27'20	superior conj	14718 Sep 27 04:59	19°Ω20'32	-0°03'34
minimum elong	14717 Oct 13 15:31	5°ྐ53'05	0°27'34	minimum elong	14718 Sep 27 05:11	19°Ω21'34	0°03'18
evening rise	14717 Oct 21 04:54	21°ྐ42'39		behind sun begin	14718 Sep 26 22:49	18°Ω50'09	
	14717 Oct 25 06:09	0°✎		behind sun end	14718 Sep 27 11:34	19°Ω53'02	
evening max el	14717 Nov 09 06:47	23°✎11'47	20°55'02	asc. node	14718 Sep 27 14:15	20°Ω06'16	
desc. node	14717 Nov 12 07:48	25°✎49'32			14718 Oct 02 12:31	0°ྐ	
retrograde	14717 Nov 20 20:11	28°✎56'21		evening rise	14718 Oct 05 10:01	5°ྐ52'47	
evening set	14717 Nov 23 08:33	28°✎41'13			14718 Oct 19 00:33	0°✎	
inferior conj	14717 Dec 02 05:35	24°✎48'13	-5°23'52	evening max el	14718 Oct 22 14:40	4°✎11'59	19°39'35
minimum elong	14717 Dec 01 20:50	25°✎00'41	5°21'11	desc. node	14718 Oct 30 05:08	8°✎53'32	
min. Earth dist.	14717 Dec 03 02:15	24°✎18'45	0.54503 AU	retrograde	14718 Nov 01 12:45	9°✎09'18	
morning rise	14717 Dec 10 09:21	20°✎55'07		evening set	14718 Nov 03 11:03	8°✎58'54	
direct	14717 Dec 14 14:32	20°✎17'00		inferior conj	14718 Nov 12 04:51	4°✎55'44	-3°57'37
morning max el	14717 Dec 27 17:22	26°✎38'51	23°05'49	minimum elong	14718 Nov 11 19:20	5°✎10'42	3°53'37
	14717 Dec 30 22:01	0°Ω		min. Earth dist.	14718 Nov 14 10:47	3°✎31'01	0.55298 AU
asc. node	14718 Jan 06 17:50	9°Ω16'21		morning rise	14718 Nov 20 01:49	0°✎37'01	
	14718 Jan 17 22:42	0°≈			14718 Nov 22 02:38	30°κྐ	
morning set	14718 Jan 19 15:57	3°≈37'35		direct	14718 Nov 25 05:26	29°ྐ38'01	
					14718 Nov 28 07:49	0°✎	
superior conj	14718 Jan 26 14:01	18°≈33'33	1°29'27	morning max el	14718 Dec 09 02:32	6°✎34'11	24°54'45
minimum elong	14718 Jan 26 15:45	18°≈42'51	1°30'03	asc. node	14718 Dec 24 14:59	27°✎37'22	
max. Earth dist.	14718 Jan 29 19:24	25°≈24'02	1.33369 AU		14718 Dec 25 23:12	0°Ω	
	14718 Feb 01 00:50	0°✎		morning set	14719 Jan 04 03:50	18°Ω19'35	
evening rise	14718 Feb 03 11:43	4°✎55'17			14719 Jan 09 11:41	0°≈	
desc. node	14718 Feb 08 07:43	14°✎08'13		superior conj	14719 Jan 10 22:10	3°≈10'11	1°36'37
	14718 Feb 17 13:53	0°ྐ		minimum elong	14719 Jan 10 22:53	3°≈14'10	1°37'30
evening max el	14718 Mar 09 23:33	26°ྐ39'39	27°17'25	max. Earth dist.	14719 Jan 12 20:06	7°≈21'45	1.32100 AU
	14718 Mar 13 19:21	0°Ω		evening rise	14719 Jan 18 05:51	18°≈49'15	
retrograde	14718 Mar 23 13:09	4°Ω09'34			14719 Jan 23 22:25	0°✎	
evening set	14718 Mar 30 05:37	1°Ω39'03		desc. node	14719 Jan 26 04:22	4°✎08'22	
	14718 Apr 01 04:10	30°κྐ			14719 Feb 11 20:36	0°ྐ	
min. Earth dist.	14718 Apr 03 02:21	28°ྐ03'25	0.64919 AU	evening max el	14719 Feb 20 11:06	9°ྐ44'35	27°34'53
asc. node	14718 Apr 04 14:35	26°ྐ24'31		retrograde	14719 Mar 06 08:01	17°ྐ12'09	
inferior conj	14718 Apr 05 12:47	25°ྐ23'08	0°17'32	evening set	14719 Mar 13 04:26	14°ྐ50'47	
minimum elong	14718 Apr 05 12:17	25°ྐ24'29	0°17'00	min. Earth dist.	14719 Mar 16 22:43	11°ྐ42'58	0.62939 AU
morning rise	14718 Apr 11 20:50	19°ྐ56'08		inferior conj	14719 Mar 19 19:43	8°ྐ53'16	-0°51'56
direct	14718 Apr 14 12:51	19°ྐ18'50		minimum elong	14719 Mar 19 21:26	8°ྐ49'01	0°51'17
morning max el	14718 Apr 20 20:37	22°ྐ35'03	17°55'08	asc. node	14719 Mar 22 12:02	6°ྐ22'31	
	14718 Apr 26 19:11	0°Ω		morning rise	14719 Mar 26 17:07	3°ྐ42'02	
desc. node	14718 May 07 09:54	16°Ω58'08		direct	14719 Mar 29 01:11	3°ྐ16'13	
morning set	14718 May 08 11:51	18°Ω45'28		morning max el	14719 Apr 04 14:23	6°ྐ36'16	17°46'11
	14718 May 15 08:01	0°ྐ			14719 Apr 20 00:53	0°Ω	
superior conj	14718 May 22 12:25	11°ྐ32'54	-1°41'25	morning set	14719 Apr 20 18:31	1°Ω16'31	
minimum elong	14718 May 22 03:31	10°ྐ57'32	1°41'28	desc. node	14719 Apr 24 06:35	7°Ω20'23	
max. Earth dist.	14718 May 26 12:39	17°ྐ52'41	1.45553 AU	superior conj	14719 May 02 23:04	22°Ω00'55	-1°05'07
	14718 Jun 03 07:41	0°Ω		minimum elong	14719 May 02 16:44	21°Ω34'47	1°05'00
evening rise	14718 Jun 07 12:15	6°Ω26'43			14719 May 07 20:40	0°ྐ	

max. Earth dist.	14719 May 09 06:23	2° Π 15'09	1.44477 AU	evening rise	14720 Apr 26 21:36	25° \mathcal{B} 55'14	
evening rise	14719 May 17 23:29	15° Π 53'42			14720 Apr 29 12:08	0° Π	
	14719 May 27 07:35	0° \mathcal{B}			14720 May 20 04:08	0° \mathcal{B}	
evening max el	14719 Jun 16 13:41	27° \mathcal{B} 03'04	20°50'37	evening max el	14720 May 29 08:35	10° \mathcal{B} 55'04	22°05'57
asc. node	14719 Jun 18 09:33	28° \mathcal{B} 45'18		asc. node	14720 Jun 04 06:36	15° \mathcal{B} 31'47	
	14719 Jun 19 23:44	0° Ω		retrograde	14720 Jun 07 20:02	16° \mathcal{B} 28'10	
retrograde	14719 Jun 24 22:10	1° Ω 52'30		evening set	14720 Jun 12 12:56	14° \mathcal{B} 30'49	
evening set	14719 Jun 29 03:55	0° Ω 11'30		inferior conj	14720 Jun 17 19:15	8° \mathcal{B} 12'05	3°04'03
	14719 Jun 29 09:30	30° \mathcal{R} \mathcal{B}		minimum elong	14720 Jun 17 18:15	8° \mathcal{B} 15'34	3°02'55
inferior conj	14719 Jul 04 09:43	24° \mathcal{B} 02'36	3°10'29	min. Earth dist.	14720 Jun 17 18:44	8° \mathcal{B} 13'52	0.69016 AU
minimum elong	14719 Jul 04 09:38	24° \mathcal{B} 02'53	3°09'31	morning rise	14720 Jun 22 23:22	1° \mathcal{B} 58'06	
min. Earth dist.	14719 Jul 04 22:26	23° \mathcal{B} 18'36	0.68620 AU		14720 Jun 26 22:26	30° \mathcal{R} Π	
morning rise	14719 Jul 09 15:05	17° \mathcal{B} 42'11		direct	14720 Jun 27 18:01	29° Π 56'40	
direct	14719 Jul 14 22:13	15° \mathcal{B} 23'08			14720 Jun 28 13:59	0° \mathcal{B}	
desc. node	14719 Jul 21 06:14	17° \mathcal{B} 55'32		morning max el	14720 Jul 07 04:07	5° \mathcal{B} 28'04	22°06'20
morning max el	14719 Jul 25 15:22	21° \mathcal{B} 46'53	23°34'44	desc. node	14720 Jul 07 03:31	5° \mathcal{B} 26'32	
	14719 Aug 01 18:33	0° Ω			14720 Jul 26 00:09	0° Ω	
	14719 Aug 22 13:15	0° \mathcal{M}		morning set	14720 Aug 09 02:07	21° Ω 37'33	
morning set	14719 Aug 29 13:30	11° \mathcal{M} 28'04			14720 Aug 14 05:04	0° \mathcal{M}	
max. Earth dist.	14719 Sep 02 12:03	18° \mathcal{M} 13'37	1.39158 AU	max. Earth dist.	14720 Aug 14 13:22	0° \mathcal{M} 34'34	1.41489 AU
	14719 Sep 09 01:08	0° \mathcal{L}					
				superior conj	14720 Aug 22 08:18	13° \mathcal{M} 56'56	-1°14'02
superior conj	14719 Sep 10 03:34	2° \mathcal{L} 02'53	-0°38'14	minimum elong	14720 Aug 22 14:04	14° \mathcal{M} 22'28	1°13'34
minimum elong	14719 Sep 10 06:21	2° \mathcal{L} 15'55	0°37'48	asc. node	14720 Aug 31 07:23	0° \mathcal{L} 14'09	
asc. node	14719 Sep 14 10:50	10° \mathcal{L} 13'09			14720 Aug 31 04:20	0° \mathcal{L}	
evening rise	14719 Sep 19 08:26	19° \mathcal{L} 44'01		evening rise	14720 Sep 01 20:36	3° \mathcal{L} 06'47	
	14719 Sep 24 17:39	0° \mathcal{M}		evening max el	14720 Sep 17 19:33	28° \mathcal{L} 34'35	18°14'16
evening max el	14719 Oct 05 12:14	16° \mathcal{M} 02'18	18°46'13		14720 Sep 19 09:39	0° \mathcal{M}	
retrograde	14719 Oct 13 21:43	20° \mathcal{M} 16'04		retrograde	14720 Sep 25 02:08	2° \mathcal{M} 16'52	
evening set	14719 Oct 15 19:20	20° \mathcal{M} 03'51		evening set	14720 Sep 27 05:18	1° \mathcal{M} 58'23	
desc. node	14719 Oct 17 02:31	19° \mathcal{M} 42'13			14720 Oct 01 03:17	30° \mathcal{R} \mathcal{L}	
inferior conj	14719 Oct 23 22:56	15° \mathcal{M} 41'54	-2°11'04	desc. node	14720 Oct 02 24:00	28° \mathcal{L} 35'51	
minimum elong	14719 Oct 23 17:32	15° \mathcal{M} 51'45	2°08'16	inferior conj	14720 Oct 04 14:50	27° \mathcal{L} 14'59	-0°30'44
min. Earth dist.	14719 Oct 27 00:27	13° \mathcal{M} 28'39	0.56886 AU	minimum elong	14720 Oct 04 13:44	27° \mathcal{L} 17'20	0°29'55
morning rise	14719 Oct 31 12:32	10° \mathcal{M} 47'05		min. Earth dist.	14720 Oct 07 21:32	24° \mathcal{L} 28'28	0.58973 AU
direct	14719 Nov 06 10:23	9° \mathcal{M} 22'25		morning rise	14720 Oct 11 18:47	21° \mathcal{L} 44'41	
morning max el	14719 Nov 20 15:21	16° \mathcal{M} 44'47	26°29'08	direct	14720 Oct 18 04:46	19° \mathcal{L} 53'22	
	14719 Dec 01 12:21	0° \mathcal{X}		morning max el	14720 Nov 01 11:56	27° \mathcal{L} 35'32	27°33'06
asc. node	14719 Dec 11 12:03	16° \mathcal{X} 35'09			14720 Nov 03 19:57	0° \mathcal{M}	
	14719 Dec 18 05:43	0° \mathcal{Z}		asc. node	14720 Nov 24 04:49	0° \mathcal{X}	
morning set	14719 Dec 19 14:21	2° \mathcal{Z} 53'45		morning set	14720 Nov 27 09:00	5° \mathcal{X} 59'52	
					14720 Dec 02 21:45	17° \mathcal{X} 15'44	
superior conj	14719 Dec 26 09:00	17° \mathcal{Z} 51'14	1°37'39		14720 Dec 08 17:30	0° \mathcal{Z}	
minimum elong	14719 Dec 26 08:39	17° \mathcal{Z} 49'17	1°38'40	superior conj	14720 Dec 09 20:34	2° \mathcal{Z} 31'18	1°32'46
max. Earth dist.	14719 Dec 27 02:14	19° \mathcal{Z} 27'20	1.31339 AU	minimum elong	14720 Dec 09 19:15	2° \mathcal{Z} 23'55	1°33'42
	14719 Dec 31 21:30	0° \approx		max. Earth dist.	14720 Dec 09 10:26	1° \mathcal{Z} 34'39	1.31099 AU
evening rise	14720 Jan 02 07:25	3° \approx 00'34		evening rise	14720 Dec 16 14:06	17° \mathcal{Z} 23'36	
desc. node	14720 Jan 13 01:06	23° \approx 46'04			14720 Dec 22 17:45	0° \approx	
	14720 Jan 16 18:03	0° \mathcal{H}		desc. node	14720 Dec 29 21:55	12° \approx 52'50	
evening max el	14720 Feb 02 18:35	22° \mathcal{H} 10'03	27°19'51		14721 Jan 11 04:19	0° \mathcal{H}	
retrograde	14720 Feb 16 18:19	29° \mathcal{H} 28'53		evening max el	14721 Jan 14 19:13	3° \mathcal{H} 45'44	26°29'48
evening set	14720 Feb 23 13:22	27° \mathcal{H} 24'29		retrograde	14721 Jan 28 18:28	10° \mathcal{H} 53'23	
min. Earth dist.	14720 Feb 27 09:02	24° \mathcal{H} 37'20	0.60762 AU	evening set	14721 Feb 04 04:53	9° \mathcal{H} 12'41	
inferior conj	14720 Mar 01 12:45	21° \mathcal{H} 53'26	-2°12'43	min. Earth dist.	14721 Feb 08 08:48	6° \mathcal{H} 35'33	0.58570 AU
minimum elong	14720 Mar 01 17:35	21° \mathcal{H} 42'56	2°10'34	inferior conj	14721 Feb 11 12:17	4° \mathcal{H} 13'52	-3°39'36
asc. node	14720 Mar 08 09:31	17° \mathcal{H} 13'18		minimum elong	14721 Feb 11 20:18	3° \mathcal{H} 58'45	3°36'21
morning rise	14720 Mar 09 01:02	17° \mathcal{H} 00'44			14721 Feb 18 14:00	30° \mathcal{R} \approx	
direct	14720 Mar 11 03:16	16° \mathcal{H} 42'43		morning rise	14721 Feb 19 14:52	29° \approx 42'28	
morning max el	14720 Mar 18 06:18	20° \mathcal{H} 17'11	17°55'28	direct	14721 Feb 21 14:56	29° \approx 28'35	
	14720 Mar 25 12:05	0° \mathcal{Y}		asc. node	14721 Feb 23 06:59	29° \approx 38'38	
morning set	14720 Apr 02 20:29	14° \mathcal{Y} 41'04			14721 Feb 24 13:26	0° \mathcal{H}	
desc. node	14720 Apr 10 03:11	27° \mathcal{Y} 50'19		morning max el	14721 Mar 01 16:40	3° \mathcal{H} 27'47	18°24'24
	14720 Apr 11 08:30	0° \mathcal{B}		morning set	14721 Mar 17 12:06	28° \mathcal{H} 42'32	
					14721 Mar 18 04:19	0° \mathcal{Y}	
superior conj	14720 Apr 13 09:32	3° \mathcal{B} 34'24	-0°26'03	superior conj	14721 Mar 26 17:39	16° \mathcal{Y} 07'10	0°10'15
minimum elong	14720 Apr 13 07:12	3° \mathcal{B} 24'20	0°26'09				
max. Earth dist.	14720 Apr 20 20:25	16° \mathcal{B} 10'25	1.42811 AU				

minimum elong	14721 Mar 26 18:23	16° Υ 10'30	0°09'57	superior conj	14722 Mar 09 18:57	29° Υ 25'51	0°40'58
behind sun begin	14721 Mar 26 12:41	15° Υ 44'20		minimum elong	14722 Mar 09 21:14	29° Υ 36'55	0°40'43
behind sun end	14721 Mar 27 00:05	16° Υ 36'37			14722 Mar 10 02:02	0° Υ	
desc. node	14721 Mar 27 23:44	18° Υ 24'20		desc. node	14722 Mar 14 20:15	8° Υ 58'10	
max. Earth dist.	14721 Apr 03 06:08	29° Υ 27'49	1.40730 AU	max. Earth dist.	14722 Mar 16 12:33	12° Υ 01'55	1.38458 AU
	14721 Apr 03 13:39	0° Υ		evening rise	14722 Mar 20 06:07	18° Υ 38'25	
evening rise	14721 Apr 07 15:22	6° Υ 50'04			14722 Mar 27 00:59	0° Υ	
	14721 Apr 22 14:23	0° Υ			14722 Apr 16 20:39	0° Υ	
evening max el	14721 May 11 23:48	24° Υ 48'08	23°26'41	evening max el	14722 Apr 24 13:18	8° Υ 41'31	24°46'38
	14721 May 18 15:50	0° Υ		retrograde	14722 May 06 07:18	15° Υ 33'04	
asc. node	14721 May 22 03:45	1° Υ 02'49		asc. node	14722 May 09 01:00	15° Υ 00'51	
retrograde	14721 May 22 15:28	1° Υ 03'53		evening set	14722 May 11 23:18	13° Υ 09'49	
	14721 May 26 06:51	30° Υ		min. Earth dist.	14722 May 16 10:30	8° Υ 06'20	0.68361 AU
evening set	14721 May 27 19:56	28° Υ 52'04		inferior conj	14722 May 17 12:42	6° Υ 39'19	2°19'54
min. Earth dist.	14721 Jun 01 15:27	23° Υ 11'58	0.68929 AU	minimum elong	14722 May 17 10:35	6° Υ 46'23	2°18'27
inferior conj	14721 Jun 02 04:53	22° Υ 25'43	2°47'11	morning rise	14722 May 22 22:07	0° Υ 42'04	
minimum elong	14721 Jun 02 03:09	22° Υ 31'40	2°45'51		14722 May 24 01:37	30° Υ	
morning rise	14721 Jun 07 10:20	16° Υ 19'35		direct	14722 May 26 16:21	29° Υ 21'01	
direct	14721 Jun 11 16:31	14° Υ 38'11			14722 May 29 10:08	0° Υ	
morning max el	14721 Jun 19 22:08	19° Υ 19'59	20°45'27	morning max el	14722 Jun 02 23:21	3° Υ 22'58	19°37'13
desc. node	14721 Jun 24 00:40	23° Υ 54'03		desc. node	14722 Jun 10 21:41	13° Υ 02'36	
	14721 Jun 28 18:06	0° Υ		greatest brilliancy	14722 Jun 15 15:44	19° Υ 49'03	-0.6m
	14721 Jul 19 03:12	0° Υ			14722 Jun 22 11:31	0° Υ	
morning set	14721 Jul 19 15:55	0° Υ 49'16		morning set	14722 Jun 28 18:37	9° Υ 36'07	
max. Earth dist.	14721 Jul 27 21:23	13° Υ 49'54	1.43506 AU	max. Earth dist.	14722 Jul 10 11:22	27° Υ 47'39	1.44984 AU
					14722 Jul 11 20:51	0° Υ	
superior conj	14721 Aug 03 15:01	24° Υ 53'44	-1°46'18				
minimum elong	14721 Aug 03 22:33	25° Υ 25'17	1°46'15	superior conj	14722 Jul 14 22:10	4° Υ 52'05	-2°08'22
	14721 Aug 06 15:35	0° Υ		minimum elong	14722 Jul 15 03:21	5° Υ 12'49	2°09'03
evening rise	14721 Aug 15 18:04	15° Υ 50'12		evening rise	14722 Jul 28 19:42	27° Υ 41'38	
asc. node	14721 Aug 18 03:58	20° Υ 05'27			14722 Jul 30 04:42	0° Υ	
	14721 Aug 23 22:14	0° Υ		asc. node	14722 Aug 05 00:36	9° Υ 42'40	
evening max el	14721 Sep 01 08:22	11° Υ 38'38	18°02'13	evening max el	14722 Aug 15 23:00	25° Υ 05'38	18°08'53
retrograde	14721 Sep 07 23:00	15° Υ 03'25		retrograde	14722 Aug 22 07:42	28° Υ 26'28	
evening set	14721 Sep 10 09:49	14° Υ 34'58		evening set	14722 Aug 25 02:58	27° Υ 44'55	
inferior conj	14721 Sep 17 02:28	9° Υ 31'39	0°50'49	inferior conj	14722 Aug 31 05:55	22° Υ 24'18	1°51'13
minimum elong	14721 Sep 17 03:56	9° Υ 28'02	0°50'20	minimum elong	14722 Aug 31 08:18	22° Υ 17'43	1°50'16
desc. node	14721 Sep 19 21:30	6° Υ 47'27		min. Earth dist.	14722 Sep 02 20:29	19° Υ 32'02	0.63476 AU
min. Earth dist.	14721 Sep 20 04:02	6° Υ 32'06	0.61256 AU	morning rise	14722 Sep 06 11:41	16° Υ 08'58	
morning rise	14721 Sep 23 19:15	3° Υ 33'42		desc. node	14722 Sep 06 19:01	15° Υ 55'17	
direct	14721 Sep 30 10:51	1° Υ 18'53		direct	14722 Sep 13 03:01	13° Υ 37'34	
morning max el	14721 Oct 14 16:01	9° Υ 14'53	27°58'35	morning max el	14722 Sep 27 01:04	21° Υ 38'22	27°45'44
	14721 Oct 30 17:17	0° Υ			14722 Oct 04 08:31	0° Υ	
asc. node	14721 Nov 14 05:50	25° Υ 43'22			14722 Oct 23 21:03	0° Υ	
	14721 Nov 16 08:32	0° Υ		morning set	14722 Oct 31 18:52	15° Υ 01'13	
morning set	14721 Nov 17 00:00	1° Υ 19'55		asc. node	14722 Nov 01 02:34	15° Υ 39'56	
max. Earth dist.	14721 Nov 22 16:47	13° Υ 33'15	1.31395 AU	max. Earth dist.	14722 Nov 05 17:18	25° Υ 14'02	1.32242 AU
					14722 Nov 07 22:34	0° Υ	
superior conj	14721 Nov 24 06:58	17° Υ 04'15	1°21'59				
minimum elong	14721 Nov 24 04:56	16° Υ 53'00	1°22'43	superior conj	14722 Nov 08 14:18	1° Υ 25'21	1°05'20
	14721 Nov 30 03:08	0° Υ		minimum elong	14722 Nov 08 11:59	1° Υ 12'46	1°05'49
evening rise	14721 Nov 30 23:49	1° Υ 52'21		evening rise	14722 Nov 15 10:47	16° Υ 22'32	
	14721 Dec 15 22:51	0° Υ			14722 Nov 22 02:16	0° Υ	
desc. node	14721 Dec 16 18:51	1° Υ 16'12		desc. node	14722 Dec 03 15:53	18° Υ 40'13	
evening max el	14721 Dec 27 11:10	14° Υ 28'04	25°08'36	evening max el	14722 Dec 08 21:07	24° Υ 33'04	23°28'35
retrograde	14722 Jan 10 06:47	21° Υ 23'56			14722 Dec 16 15:43	0° Υ	
evening set	14722 Jan 15 22:58	20° Υ 11'28		retrograde	14722 Dec 22 06:14	1° Υ 11'38	
min. Earth dist.	14722 Jan 20 23:14	17° Υ 28'47	0.56598 AU	evening set	14722 Dec 26 17:53	0° Υ 27'57	
inferior conj	14722 Jan 23 15:11	15° Υ 44'34	-5°00'13		14722 Dec 28 01:24	30° Υ	
minimum elong	14722 Jan 24 00:08	15° Υ 29'58	4°57'18	min. Earth dist.	14723 Jan 02 07:42	27° Υ 20'34	0.55142 AU
morning rise	14722 Feb 01 03:47	11° Υ 35'06		inferior conj	14723 Jan 03 21:50	26° Υ 24'51	-5°52'28
direct	14722 Feb 03 07:46	11° Υ 21'38		minimum elong	14723 Jan 04 02:06	26° Υ 18'37	5°51'08
asc. node	14722 Feb 10 04:25	13° Υ 47'04		morning rise	14723 Jan 12 11:55	22° Υ 32'19	
morning max el	14722 Feb 12 17:20	15° Υ 55'34	19°14'58	direct	14723 Jan 15 05:10	22° Υ 14'23	
	14722 Feb 22 16:08	0° Υ		morning max el	14723 Jan 26 04:33	27° Υ 30'46	20°28'40
morning set	14722 Mar 01 12:57	13° Υ 06'50		asc. node	14723 Jan 28 01:46	29° Υ 28'28	
					14723 Jan 28 12:50	0° Υ	

morning set	14723 Feb 13 19:50	27° \approx 44'49		morning set	14724 Jan 23 01:52	0° \approx	
	14723 Feb 14 22:03	0° H			14724 Jan 29 06:16	12° \approx 29'18	
superior conj	14723 Feb 21 09:06	13° H 18'29	1°05'05	superior conj	14724 Feb 05 08:29	27° \approx 34'53	1°22'26
minimum elong	14723 Feb 21 11:45	13° H 31'53	1°05'06	minimum elong	14724 Feb 05 10:41	27° \approx 46'30	1°22'50
max. Earth dist.	14723 Feb 26 19:45	24° H 03'23	1.36249 AU		14724 Feb 06 12:07	0° H	
desc. node	14723 Mar 01 16:45	29° H 28'25		max. Earth dist.	14724 Feb 09 08:48	5° H 54'02	1.34309 AU
	14723 Mar 01 23:35	0° Y		evening rise	14724 Feb 13 16:33	14° H 27'05	
evening rise	14723 Mar 02 15:40	1° Y 13'51		desc. node	14724 Feb 16 13:18	19° H 51'14	
	14723 Mar 20 03:54	0° B			14724 Feb 22 06:29	0° Y	
evening max el	14723 Apr 07 02:45	22° B 32'59	25°58'35		14724 Mar 13 21:36	0° B	
retrograde	14723 Apr 19 18:30	29° B 48'49		evening max el	14724 Mar 19 16:38	6° B 16'13	26°55'03
evening set	14723 Apr 25 21:19	27° B 18'30		retrograde	14724 Apr 02 00:02	13° B 43'40	
asc. node	14723 Apr 25 22:19	27° B 16'23		evening set	14724 Apr 08 12:08	11° B 11'43	
min. Earth dist.	14723 Apr 30 01:51	22° B 50'31	0.67341 AU	asc. node	14724 Apr 11 19:42	8° B 01'22	
inferior conj	14723 May 01 16:45	20° B 48'34	1°41'42	min. Earth dist.	14724 Apr 12 11:25	7° B 17'34	0.65907 AU
minimum elong	14723 May 01 14:42	20° B 55'01	1°40'20	inferior conj	14724 Apr 14 14:48	4° B 48'37	0°51'52
morning rise	14723 May 07 08:47	15° B 01'27		minimum elong	14724 Apr 14 13:29	4° B 52'26	0°50'54
direct	14723 May 10 15:58	13° B 59'24			14724 Apr 19 10:21	30° R Y	
morning max el	14723 May 17 07:43	17° B 33'51	18°44'21	morning rise	14724 Apr 20 16:12	29° Y 13'23	
	14723 May 26 23:24	0° II		direct	14724 Apr 23 13:27	28° Y 27'51	
desc. node	14723 May 28 18:36	2° II 41'06			14724 Apr 27 18:41	0° B	
morning set	14723 Jun 08 06:42	18° II 54'03		morning max el	14724 Apr 29 21:48	1° B 47'20	18°08'11
	14723 Jun 15 09:35	0° D		desc. node	14724 May 14 15:23	22° B 41'33	
max. Earth dist.	14723 Jun 23 05:23	12° D 11'58	1.45790 AU	morning set	14724 May 18 19:54	29° B 26'39	
					14724 May 19 04:10	0° II	
superior conj	14723 Jun 24 11:07	14° D 08'10	-2°13'11	superior conj	14724 Jun 02 20:16	23° II 20'48	-1°57'53
minimum elong	14723 Jun 24 09:07	14° D 00'18	2°14'10	minimum elong	14724 Jun 02 12:07	22° II 48'50	1°58'18
	14723 Jul 04 12:58	0° O		max. Earth dist.	14724 Jun 05 01:38	26° II 49'37	1.45857 AU
evening rise	14723 Jul 09 21:03	8° O 30'37			14724 Jun 07 02:27	0° D	
greatest brilliancy	14723 Jul 16 00:02	18° O 18'30	-0.9m	evening rise	14724 Jun 18 22:48	18° D 23'00	
asc. node	14723 Jul 22 21:18	28° O 59'29			14724 Jun 26 11:35	0° O	
	14723 Jul 23 13:46	0° np		greatest brilliancy	14724 Jun 30 21:45	6° O 42'47	-0.7m
evening max el	14723 Jul 30 12:13	8° np 46'43	18°33'25	asc. node	14724 Jul 08 18:05	17° O 48'44	
retrograde	14723 Aug 06 00:05	12° np 16'47		evening max el	14724 Jul 12 21:34	22° O 35'36	19°14'53
evening set	14723 Aug 09 04:18	11° np 19'45		retrograde	14724 Jul 19 20:57	26° O 27'38	
inferior conj	14723 Aug 14 21:10	5° np 43'48	2°32'32	evening set	14724 Jul 23 10:40	25° O 13'38	
minimum elong	14723 Aug 14 23:22	5° np 37'06	2°31'32	inferior conj	14724 Jul 28 20:52	19° O 23'49	2°57'40
min. Earth dist.	14723 Aug 16 22:05	3° np 15'38	0.65446 AU	minimum elong	14724 Jul 28 22:20	19° O 19'04	2°56'44
	14723 Aug 19 23:10	30° R O		min. Earth dist.	14724 Jul 30 07:24	17° O 31'31	0.67038 AU
morning rise	14723 Aug 20 17:17	29° O 20'13		morning rise	14724 Aug 03 09:23	12° O 58'25	
desc. node	14723 Aug 24 16:30	27° O 03'45		direct	14724 Aug 09 10:39	10° O 21'41	
direct	14723 Aug 27 03:27	26° O 41'27		desc. node	14724 Aug 10 13:57	10° O 26'36	
	14723 Sep 04 07:44	0° np		morning max el	14724 Aug 21 23:08	17° O 50'15	25°50'28
morning max el	14723 Sep 09 12:04	4° np 33'46	27°00'11		14724 Sep 01 04:22	0° np	
	14723 Sep 28 21:05	0° D			14724 Sep 20 20:41	0° D	
morning set	14723 Oct 15 03:29	28° D 12'09		morning set	14724 Sep 26 22:23	10° D 44'49	
	14723 Oct 16 01:46	0° ml		max. Earth dist.	14724 Sep 30 14:35	17° D 37'33	1.35538 AU
asc. node	14723 Oct 18 23:14	5° ml 44'14		asc. node	14724 Oct 04 19:52	25° D 52'27	
max. Earth dist.	14723 Oct 19 08:46	6° ml 32'22	1.33640 AU				
superior conj	14723 Oct 23 16:19	15° ml 28'06	0°42'51	superior conj	14724 Oct 06 10:24	29° D 06'10	0°14'50
minimum elong	14723 Oct 23 14:20	15° ml 17'35	0°43'07	minimum elong	14724 Oct 06 09:32	29° D 01'47	0°15'03
	14723 Oct 30 11:52	0° x		behind sun begin	14724 Oct 06 07:20	28° D 50'36	
evening rise	14723 Oct 30 21:07	0° x 48'59		behind sun end	14724 Oct 06 11:45	29° D 12'59	
	14723 Nov 16 08:20	0° Z			14724 Oct 06 21:01	0° ml	
evening max el	14723 Nov 20 09:28	4° Z 34'33	21°47'28	evening rise	14724 Oct 14 04:49	15° ml 06'58	
desc. node	14723 Nov 20 13:01	4° Z 43'13			14724 Oct 21 18:51	0° x	
retrograde	14723 Dec 02 18:39	10° Z 42'19		evening max el	14724 Nov 01 09:06	15° x 07'47	20°20'16
evening set	14723 Dec 05 22:00	10° Z 20'11		desc. node	14724 Nov 06 10:17	19° x 00'03	
inferior conj	14723 Dec 14 14:55	6° Z 28'04	-5°51'58	retrograde	14724 Nov 12 05:42	20° x 31'56	
minimum elong	14723 Dec 14 10:05	6° Z 34'49	5°50'30	evening set	14724 Nov 14 10:21	20° x 19'43	
min. Earth dist.	14723 Dec 14 13:35	6° Z 29'55	0.54472 AU	inferior conj	14724 Nov 23 07:44	16° x 23'56	-4°51'50
morning rise	14723 Dec 22 22:56	2° Z 40'18		minimum elong	14724 Nov 22 21:44	16° x 38'39	4°48'17
direct	14723 Dec 26 14:26	2° Z 11'09		min. Earth dist.	14724 Nov 24 19:56	15° x 30'43	0.54739 AU
morning max el	14724 Jan 08 01:05	8° Z 10'58	22°04'02	morning rise	14724 Dec 01 08:33	12° x 22'20	
asc. node	14724 Jan 14 23:02	16° Z 25'09		direct	14724 Dec 06 00:02	11° x 35'48	

morning max el	14724 Dec 19 11:38	18° ♊ 12'44	23°52'39	minimum elong	14725 Nov 03 06:11	26° ♍ 59'42	3°09'20
	14724 Dec 29 02:03	0° ♊		min. Earth dist.	14725 Nov 06 06:07	24° ♍ 59'56	0.55890 AU
asc. node	14724 Dec 31 20:15	4° ♊ 19'56		morning rise	14725 Nov 11 08:20	22° ♍ 13'01	
morning set	14725 Jan 12 18:10	27° ♊ 14'02		direct	14725 Nov 16 20:11	21° ♍ 03'51	
	14725 Jan 14 00:59	0° ♋		morning max el	14725 Nov 30 21:38	28° ♍ 11'17	25°37'49
					14725 Dec 02 17:00	0° ♋	
superior conj	14725 Jan 19 14:08	12° ♋ 06'14	1°33'14	asc. node	14725 Dec 18 17:22	22° ♊ 58'24	
minimum elong	14725 Jan 19 15:27	12° ♋ 13'26	1°33'59		14725 Dec 22 11:10	0° ♊	
max. Earth dist.	14725 Jan 22 05:45	17° ♋ 48'57	1.32774 AU	morning set	14725 Dec 28 05:45	11° ♊ 54'08	
evening rise	14725 Jan 27 05:17	28° ♋ 08'35					
	14725 Jan 28 03:37	0° ♋		superior conj	14726 Jan 03 23:43	26° ♊ 46'00	1°37'47
desc. node	14725 Feb 02 09:54	10° ♋ 01'27		minimum elong	14726 Jan 03 23:59	26° ♊ 47'28	1°38'45
	14725 Feb 14 11:21	0° ♌			14726 Jan 05 10:49	0° ♋	
evening max el	14725 Mar 02 05:41	19° ♌ 39'11	27°28'35	max. Earth dist.	14726 Jan 05 09:23	29° ♊ 52'11	1.31717 AU
retrograde	14725 Mar 15 22:48	27° ♌ 08'08		evening rise	14726 Jan 11 02:56	12° ♋ 11'09	
evening set	14725 Mar 22 17:31	24° ♌ 40'52		desc. node	14726 Jan 20 06:37	29° ♋ 53'29	
min. Earth dist.	14725 Mar 26 13:02	21° ♌ 17'38	0.64111 AU		14726 Jan 20 08:05	0° ♋	
inferior conj	14725 Mar 29 04:09	18° ♌ 32'01	-0°10'24		14726 Feb 10 04:49	0° ♌	
minimum elong	14725 Mar 29 04:28	18° ♌ 31'10	0°10'29	evening max el	14726 Feb 12 15:48	2° ♌ 28'53	27°32'35
transit middle	14725 Mar 29 04:28	18° ♌ 31'10	0°10'29	retrograde	14726 Feb 26 13:58	9° ♌ 52'51	
transit begin	14725 Mar 29 02:07	18° ♌ 37'23		evening set	14726 Mar 05 10:50	7° ♌ 37'33	
transit end	14725 Mar 29 06:49	18° ♌ 24'59		min. Earth dist.	14726 Mar 09 05:02	4° ♌ 39'54	0.62037 AU
asc. node	14725 Mar 29 17:09	17° ♌ 57'55		inferior conj	14726 Mar 12 05:37	1° ♌ 50'39	-1°24'57
morning rise	14725 Apr 04 17:35	13° ♌ 11'09		minimum elong	14726 Mar 12 08:34	1° ♌ 43'45	1°23'41
direct	14725 Apr 07 06:07	12° ♌ 39'02			14726 Mar 14 06:27	30° ♌	
morning max el	14725 Apr 13 15:04	15° ♌ 55'21	17°49'10	asc. node	14726 Mar 16 14:35	28° ♌ 11'31	
	14725 Apr 23 18:28	0° ♍		morning rise	14726 Mar 19 09:17	26° ♌ 47'07	
morning set	14725 Apr 30 12:41	11° ♍ 18'27		direct	14726 Mar 21 14:40	26° ♌ 24'58	
desc. node	14725 May 01 12:06	12° ♍ 57'12		morning max el	14726 Mar 28 08:30	29° ♌ 49'25	17°47'51
	14725 May 11 18:42	0° ♍			14726 Mar 28 12:47	0° ♌	
				morning set	14726 Apr 13 04:17	24° ♌ 14'21	
superior conj	14725 May 13 18:21	3° ♍ 12'48	-1°26'50		14726 Apr 16 10:26	0° ♍	
minimum elong	14725 May 13 10:07	2° ♍ 39'36	1°26'44	desc. node	14726 Apr 18 08:46	3° ♍ 23'17	
max. Earth dist.	14725 May 18 21:26	11° ♍ 23'36	1.45181 AU				
evening rise	14725 May 29 10:43	27° ♍ 47'01		superior conj	14726 Apr 24 15:08	14° ♍ 08'52	-0°48'30
	14725 May 30 21:32	0° ♎		minimum elong	14726 Apr 24 10:32	13° ♍ 49'28	0°48'26
	14725 Jun 20 12:41	0° ♎		max. Earth dist.	14726 May 01 14:01	25° ♍ 36'55	1.43836 AU
asc. node	14725 Jun 25 14:59	6° ♎ 00'25			14726 May 04 07:42	0° ♍	
evening max el	14725 Jun 26 01:17	6° ♎ 26'35	20°11'50	evening rise	14726 May 09 00:56	7° ♍ 24'31	
retrograde	14725 Jul 03 19:48	10° ♎ 52'26			14726 May 24 03:34	0° ♎	
evening set	14725 Jul 07 19:34	9° ♎ 20'58		evening max el	14726 Jun 08 23:01	20° ♎ 17'30	21°21'35
inferior conj	14725 Jul 13 02:11	3° ♎ 18'31	3°09'15	asc. node	14726 Jun 12 11:58	23° ♎ 22'07	
minimum elong	14725 Jul 13 02:41	3° ♎ 16'50	3°08'19	retrograde	14726 Jun 17 18:35	25° ♎ 25'28	
min. Earth dist.	14725 Jul 13 22:37	2° ♎ 08'52	0.68179 AU	evening set	14726 Jun 22 05:03	23° ♎ 37'09	
	14725 Jul 15 13:48	30° ♎		inferior conj	14726 Jun 27 10:46	17° ♎ 23'34	3°09'03
morning rise	14725 Jul 18 09:27	26° ♎ 55'35		minimum elong	14726 Jun 27 10:17	17° ♎ 25'16	3°08'01
direct	14725 Jul 23 23:30	24° ♎ 28'35		min. Earth dist.	14726 Jun 27 17:43	16° ♎ 59'21	0.68846 AU
desc. node	14725 Jul 28 11:21	25° ♎ 45'34		morning rise	14726 Jul 02 15:18	11° ♎ 05'42	
	14725 Aug 03 01:27	0° ♏		direct	14726 Jul 07 17:01	8° ♎ 54'01	
morning max el	14725 Aug 04 09:47	1° ♏ 19'04	24°26'10	desc. node	14726 Jul 15 08:41	12° ♎ 34'58	
	14725 Aug 26 03:31	0° ♏		morning max el	14726 Jul 17 21:07	14° ♎ 55'56	22°56'40
morning set	14725 Sep 08 23:26	22° ♏ 29'42			14726 Jul 30 03:48	0° ♏	
max. Earth dist.	14725 Sep 12 14:05	28° ♏ 53'04	1.37788 AU		14726 Aug 19 02:20	0° ♏	
	14725 Sep 13 04:54	0° ♐		morning set	14726 Aug 21 02:12	3° ♏ 15'52	
				max. Earth dist.	14726 Aug 25 13:00	10° ♏ 44'12	1.40164 AU
superior conj	14725 Sep 19 17:14	12° ♐ 11'29	-0°17'55				
minimum elong	14725 Sep 19 18:26	12° ♐ 17'17	0°17'34	superior conj	14726 Sep 02 08:43	24° ♏ 33'45	-0°53'30
asc. node	14725 Sep 21 16:28	16° ♐ 00'57		minimum elong	14726 Sep 02 12:48	24° ♏ 52'21	0°53'02
evening rise	14725 Sep 28 07:30	29° ♐ 10'29			14726 Sep 05 07:25	0° ♐	
	14725 Sep 28 17:27	0° ♑		asc. node	14726 Sep 08 13:02	6° ♐ 05'27	
evening max el	14725 Oct 14 23:08	26° ♑ 29'45	19°14'09	evening rise	14726 Sep 12 02:02	12° ♐ 50'36	
	14725 Oct 19 14:46	0° ♑			14726 Sep 21 13:27	0° ♑	
retrograde	14725 Oct 24 04:44	1° ♑ 07'47		evening max el	14726 Sep 28 01:16	8° ♑ 38'23	18°30'07
desc. node	14725 Oct 24 07:38	1° ♑ 07'44		retrograde	14726 Oct 05 22:16	12° ♑ 37'36	
evening set	14725 Oct 26 01:37	0° ♑ 57'11		evening set	14726 Oct 07 21:36	12° ♑ 23'20	
	14725 Oct 29 01:28	30° ♑		desc. node	14726 Oct 11 05:04	11° ♑ 01'51	
inferior conj	14725 Nov 03 14:14	26° ♑ 46'16	-3°13'04	inferior conj	14726 Oct 15 17:38	7° ♑ 52'16	-1°26'44

minimum elong	14726 Oct 15 14:12	7° \mathbb{M} 58'58	1°24'49	minimum elong	14727 Sep 27 18:33	19° $\underline{\mathbf{A}}$ 44'01	0°06'33
min. Earth dist.	14726 Oct 18 22:52	5° \mathbb{M} 22'27	0.57720 AU	transit middle	14727 Sep 27 18:33	19° $\underline{\mathbf{A}}$ 44'01	0°06'33
morning rise	14726 Oct 23 03:19	2° \mathbb{M} 41'22		transit begin	14727 Sep 27 15:29	19° $\underline{\mathbf{A}}$ 50'58	
direct	14726 Oct 29 06:51	1° \mathbb{M} 05'21		transit end	14727 Sep 27 21:37	19° $\underline{\mathbf{A}}$ 37'03	
morning max el	14726 Nov 12 13:48	8° \mathbb{M} 37'36	27°00'49	desc. node	14727 Sep 28 02:32	19° $\underline{\mathbf{A}}$ 25'52	
	14726 Nov 28 18:01	0° \mathbb{A}		min. Earth dist.	14727 Oct 01 00:00	16° $\underline{\mathbf{A}}$ 49'32	0.59934 AU
asc. node	14726 Dec 05 14:23	12° \mathbb{A} 08'29		morning rise	14727 Oct 04 17:35	14° $\underline{\mathbf{A}}$ 01'11	
morning set	14726 Dec 12 15:10	26° \mathbb{A} 23'44		direct	14727 Oct 11 06:52	11° $\underline{\mathbf{A}}$ 58'48	
	14726 Dec 14 07:12	0° \mathbb{B}		morning max el	14727 Oct 25 13:43	19° $\underline{\mathbf{A}}$ 48'31	27°48'44
					14727 Nov 03 07:12	0° \mathbb{M}	
superior conj	14726 Dec 19 11:05	11° \mathbb{B} 27'13	1°36'19		14727 Nov 21 14:30	0° \mathbb{A}	
minimum elong	14726 Dec 19 10:18	11° \mathbb{B} 22'50	1°37'18	asc. node	14727 Nov 22 11:19	1° \mathbb{A} 41'44	
max. Earth dist.	14726 Dec 19 16:47	11° \mathbb{B} 59'07	1.31169 AU	morning set	14727 Nov 26 20:37	10° \mathbb{A} 38'24	
evening rise	14726 Dec 26 06:55	26° \mathbb{B} 27'42		max. Earth dist.	14727 Dec 03 00:25	24° \mathbb{A} 02'20	1.31154 AU
	14726 Dec 27 23:16	0° \approx					
desc. node	14727 Jan 07 03:23	19° \approx 19'06		superior conj	14727 Dec 03 22:22	26° \mathbb{A} 04'44	1°28'55
	14727 Jan 13 21:06	0° \mathbb{H}		minimum elong	14727 Dec 03 20:43	25° \mathbb{A} 55'28	1°29'47
evening max el	14727 Jan 25 20:25	14° \mathbb{H} 33'00	27°02'39		14727 Dec 05 16:30	0° \mathbb{B}	
retrograde	14727 Feb 08 20:25	21° \mathbb{H} 48'01		evening rise	14727 Dec 10 15:05	10° \mathbb{B} 53'19	
evening set	14727 Feb 15 12:50	19° \mathbb{H} 52'36			14727 Dec 20 05:16	0° \approx	
min. Earth dist.	14727 Feb 19 10:42	17° \mathbb{H} 11'27	0.59821 AU	desc. node	14727 Dec 25 00:14	8° \approx 08'41	
inferior conj	14727 Feb 22 15:36	14° \mathbb{H} 34'37	-2°49'20	evening max el	14728 Jan 07 17:22	25° \approx 45'18	25°58'35
minimum elong	14727 Feb 22 21:52	14° \mathbb{H} 21'47	2°46'36		14728 Jan 13 01:44	0° \mathbb{H}	
morning rise	14727 Mar 02 10:17	9° \mathbb{H} 51'05		retrograde	14728 Jan 21 16:02	2° \mathbb{H} 48'32	
asc. node	14727 Mar 03 12:02	9° \mathbb{H} 38'53		evening set	14728 Jan 27 19:42	1° \mathbb{H} 19'41	
direct	14727 Mar 04 10:56	9° \mathbb{H} 35'21			14728 Jan 30 06:31	30° \mathbb{R} \approx	
morning max el	14727 Mar 11 22:35	13° \mathbb{H} 19'00	18°05'17	min. Earth dist.	14728 Feb 01 06:32	28° \approx 42'00	0.57685 AU
	14727 Mar 23 05:04	0° \mathbb{Y}		inferior conj	14728 Feb 04 06:36	26° \approx 34'34	-4°15'42
morning set	14727 Mar 27 12:38	7° \mathbb{Y} 56'00		minimum elong	14728 Feb 04 15:29	26° \approx 18'48	4°12'21
desc. node	14727 Apr 05 05:22	23° \mathbb{Y} 55'22		morning rise	14728 Feb 12 14:15	22° \approx 12'29	
				direct	14728 Feb 14 14:49	21° \approx 59'23	
superior conj	14727 Apr 06 11:19	26° \mathbb{Y} 09'08	-0°10'07	asc. node	14728 Feb 18 09:30	22° \approx 47'45	
minimum elong	14727 Apr 06 10:28	26° \mathbb{Y} 05'21	0°10'20	morning max el	14728 Feb 23 05:20	26° \approx 12'41	18°43'05
behind sun begin	14727 Apr 06 04:30	25° \mathbb{Y} 38'47			14728 Feb 26 12:31	0° \mathbb{H}	
behind sun end	14727 Apr 06 16:27	26° \mathbb{Y} 31'53		morning set	14728 Mar 10 08:37	22° \mathbb{H} 08'11	
	14727 Apr 08 15:44	0° \mathbb{B}			14728 Mar 14 09:38	0° \mathbb{Y}	
max. Earth dist.	14727 Apr 14 01:46	9° \mathbb{B} 15'27	1.41961 AU	superior conj	14728 Mar 19 03:15	9° \mathbb{Y} 02'30	0°24'03
evening rise	14727 Apr 19 06:47	17° \mathbb{B} 47'22		minimum elong	14728 Mar 19 04:49	9° \mathbb{Y} 09'49	0°23'44
	14727 Apr 27 02:30	0° \mathbb{II}		desc. node	14728 Mar 22 01:52	14° \mathbb{Y} 29'29	
	14727 May 18 20:16	0° \mathbb{E}		max. Earth dist.	14728 Mar 26 09:19	22° \mathbb{Y} 12'14	1.39772 AU
evening max el	14727 May 22 15:57	4° \mathbb{E} 09'22	22°39'59	evening rise	14728 Mar 30 09:36	29° \mathbb{Y} 05'36	
asc. node	14727 May 30 09:01	9° \mathbb{E} 38'41			14728 Mar 30 22:33	0° \mathbb{B}	
retrograde	14727 Jun 01 15:43	10° \mathbb{E} 01'49			14728 Apr 19 13:11	0° \mathbb{II}	
evening set	14727 Jun 06 13:24	7° \mathbb{E} 58'05		evening max el	14728 May 04 06:15	18° \mathbb{II} 02'56	24°01'18
inferior conj	14727 Jun 11 20:34	1° \mathbb{E} 35'32	2°58'10	retrograde	14728 May 15 09:43	24° \mathbb{II} 35'08	
minimum elong	14727 Jun 11 19:14	1° \mathbb{E} 40'11	2°56'57	asc. node	14728 May 16 06:11	24° \mathbb{II} 31'57	
min. Earth dist.	14727 Jun 11 14:32	1° \mathbb{E} 56'32	0.69032 AU	evening set	14728 May 20 19:01	22° \mathbb{II} 18'19	
	14727 Jun 13 00:14	30° \mathbb{R} \mathbb{II}		min. Earth dist.	14728 May 25 10:53	16° \mathbb{II} 53'37	0.68742 AU
morning rise	14727 Jun 17 00:55	25° \mathbb{II} 24'31		inferior conj	14728 May 26 05:40	15° \mathbb{II} 49'45	2°36'54
direct	14727 Jun 21 14:09	23° \mathbb{II} 31'29		minimum elong	14728 May 26 03:43	15° \mathbb{II} 56'21	2°35'32
morning max el	14727 Jun 30 11:49	28° \mathbb{II} 41'39	21°30'38	morning rise	14728 May 31 12:27	9° \mathbb{II} 46'59	
	14727 Jul 01 18:04	0° \mathbb{E}		direct	14728 Jun 04 13:30	8° \mathbb{II} 14'08	
desc. node	14727 Jul 02 05:55	0° \mathbb{E} 32'08		morning max el	14728 Jun 12 08:36	12° \mathbb{II} 37'40	20°14'36
	14727 Jul 23 18:38	0° \mathbb{Q}		desc. node	14728 Jun 18 03:00	19° \mathbb{II} 18'27	
morning set	14727 Aug 01 04:31	12° \mathbb{Q} 59'07			14728 Jun 25 20:54	0° \mathbb{E}	
max. Earth dist.	14727 Aug 07 16:29	23° \mathbb{Q} 26'48	1.42392 AU	morning set	14728 Jul 10 11:19	21° \mathbb{E} 53'31	
	14727 Aug 11 15:04	0° \mathbb{P}			14728 Jul 15 16:33	0° \mathbb{Q}	
superior conj	14727 Aug 15 04:31	6° \mathbb{P} 04'11	-1°28'30	max. Earth dist.	14728 Jul 20 02:54	7° \mathbb{Q} 00'35	1.44214 AU
minimum elong	14727 Aug 15 11:21	6° \mathbb{P} 33'38	1°28'10	superior conj	14728 Jul 26 01:07	16° \mathbb{Q} 35'31	-1°57'22
evening rise	14727 Aug 26 08:34	25° \mathbb{P} 58'00		minimum elong	14728 Jul 26 08:18	17° \mathbb{Q} 05'01	1°57'36
asc. node	14727 Aug 26 09:37	26° \mathbb{P} 02'45			14728 Aug 03 01:38	0° \mathbb{P}	
	14727 Aug 28 13:53	0° $\underline{\mathbf{A}}$		evening rise	14728 Aug 07 22:10	8° \mathbb{P} 20'04	
evening max el	14727 Sep 11 11:27	21° $\underline{\mathbf{A}}$ 25'27	18°06'51	asc. node	14728 Aug 12 06:11	15° \mathbb{P} 48'14	
retrograde	14727 Sep 18 10:01	24° $\underline{\mathbf{A}}$ 58'30			14728 Aug 21 03:56	0° $\underline{\mathbf{A}}$	
evening set	14727 Sep 20 16:14	24° $\underline{\mathbf{A}}$ 36'18		evening max el	14728 Aug 25 01:31	4° $\underline{\mathbf{A}}$ 40'11	18°02'52
inferior conj	14727 Sep 27 18:20	19° $\underline{\mathbf{A}}$ 44'31	0°06'23				

retrograde	14728 Aug 31 12:16	8°♄01'14		asc. node	14729 Jul 30 02:50	5°♄17'06	
evening set	14728 Sep 03 02:44	7°♄27'27		evening max el	14729 Aug 08 15:54	18°♄13'45	18°17'09
inferior conj	14728 Sep 09 13:07	2°♄16'36	1°18'55	retrograde	14729 Aug 15 00:44	21°♄36'42	
minimum elong	14728 Sep 09 15:09	2°♄11'20	1°18'10	evening set	14729 Aug 17 23:50	20°♄48'38	
	14728 Sep 11 17:48	30°♄		inferior conj	14729 Aug 23 22:02	15°♄21'01	2°10'55
min. Earth dist.	14728 Sep 12 10:34	29°♄17'51	0.62228 AU	minimum elong	14729 Aug 24 00:26	15°♄14'04	2°09'54
desc. node	14728 Sep 14 00:01	27°♄49'24		min. Earth dist.	14729 Aug 26 06:51	12°♄37'35	0.64360 AU
morning rise	14728 Sep 16 01:09	26°♄10'21		morning rise	14729 Aug 29 23:29	9°♄01'21	
direct	14728 Sep 22 17:33	23°♄47'18		desc. node	14729 Aug 31 21:32	7°♄43'02	
	14728 Oct 04 23:23	0°♄		direct	14729 Sep 05 13:08	6°♄25'59	
morning max el	14728 Oct 06 19:57	1°♄46'04	27°57'32	morning max el	14729 Sep 19 06:07	14°♄24'00	27°29'55
	14728 Oct 27 14:42	0°♄			14729 Oct 01 22:49	0°♄	
asc. node	14728 Nov 08 08:07	21°♄31'01			14729 Oct 20 06:32	0°♄	
morning set	14728 Nov 09 20:00	24°♄32'52		morning set	14729 Oct 24 10:50	8°♄01'16	
	14728 Nov 12 10:48	0°♄		asc. node	14729 Oct 26 04:50	11°♄30'54	
max. Earth dist.	14728 Nov 15 04:38	5°♄53'19	1.31685 AU	max. Earth dist.	14729 Oct 29 01:46	17°♄24'49	1.32773 AU
superior conj	14728 Nov 17 07:43	10°♄33'01	1°15'39	superior conj	14729 Nov 01 13:04	24°♄46'21	0°56'30
minimum elong	14728 Nov 17 05:30	10°♄20'51	1°16'17	minimum elong	14729 Nov 01 10:48	24°♄34'11	0°56'53
evening rise	14728 Nov 24 01:32	25°♄23'02			14729 Nov 03 23:05	0°♄	
	14728 Nov 26 05:30	0°♄		evening rise	14729 Nov 08 12:28	9°♄51'51	
desc. node	14728 Dec 10 21:11	26°♄08'48			14729 Nov 18 18:46	0°♄	
	14728 Dec 13 17:51	0°♄		desc. node	14729 Nov 27 18:16	13°♄00'44	
evening max el	14728 Dec 19 06:25	6°♄09'40	24°27'32	evening max el	14729 Nov 30 16:04	16°♄07'26	22°44'40
retrograde	14729 Jan 01 22:41	12°♄58'31		retrograde	14729 Dec 13 16:28	22°♄34'43	
evening set	14729 Jan 07 03:50	11°♄58'53		evening set	14729 Dec 17 14:26	22°♄01'17	
min. Earth dist.	14729 Jan 12 18:08	9°♄08'09	0.55897 AU	min. Earth dist.	14729 Dec 25 00:39	18°♄38'02	0.54745 AU
inferior conj	14729 Jan 15 00:39	7°♄43'52	-5°27'23	inferior conj	14729 Dec 26 00:10	18°♄04'43	-5°59'46
minimum elong	14729 Jan 15 08:25	7°♄31'51	5°25'08	minimum elong	14729 Dec 26 00:42	18°♄03'57	5°58'46
morning rise	14729 Jan 23 14:59	3°♄42'14		morning rise	14730 Jan 03 12:18	14°♄16'38	
direct	14729 Jan 25 23:30	3°♄27'27		direct	14730 Jan 06 14:26	13°♄54'43	
asc. node	14729 Feb 04 06:54	7°♄37'39		morning max el	14730 Jan 18 05:21	19°♄29'17	21°06'58
morning max el	14729 Feb 05 00:38	8°♄19'03	19°43'23	asc. node	14730 Jan 22 04:15	23°♄52'44	
	14729 Feb 19 04:01	0°♄			14730 Jan 26 11:50	0°♄	
morning set	14729 Feb 22 12:27	6°♄39'57		morning set	14730 Feb 06 21:09	21°♄21'32	
					14730 Feb 11 00:04	0°♄	
superior conj	14729 Mar 02 10:33	22°♄37'13	0°52'01	superior conj	14730 Feb 14 05:02	6°♄40'57	1°13'15
minimum elong	14729 Mar 02 13:06	22°♄49'52	0°51'51	minimum elong	14730 Feb 14 07:34	6°♄54'00	1°13'25
	14729 Mar 06 05:52	0°♄		max. Earth dist.	14730 Feb 19 01:30	16°♄28'15	1.35382 AU
max. Earth dist.	14729 Mar 08 15:55	4°♄32'29	1.37504 AU	evening rise	14730 Feb 23 01:21	24°♄07'55	
desc. node	14729 Mar 08 22:23	5°♄02'24		desc. node	14730 Feb 23 18:55	25°♄29'42	
evening rise	14729 Mar 12 08:51	11°♄15'44			14730 Feb 26 06:14	0°♄	
	14729 Mar 23 14:54	0°♄			14730 Mar 17 05:28	0°♄	
	14729 Apr 14 22:09	0°♄		evening max el	14730 Mar 30 09:29	15°♄45'41	26°24'47
evening max el	14729 Apr 16 19:51	1°♄57'04	25°18'37	retrograde	14730 Apr 12 08:19	23°♄07'29	
retrograde	14729 Apr 28 23:33	8°♄59'33		evening set	14730 Apr 18 15:31	20°♄35'31	
asc. node	14729 May 03 03:27	7°♄46'55		asc. node	14730 Apr 20 00:48	19°♄20'42	
evening set	14729 May 04 20:19	6°♄32'52		min. Earth dist.	14730 Apr 22 17:37	16°♄22'29	0.66790 AU
min. Earth dist.	14729 May 09 04:36	1°♄44'39	0.67990 AU	inferior conj	14730 Apr 24 13:56	14°♄07'52	1°22'04
inferior conj	14729 May 10 12:09	0°♄02'13	2°05'05	minimum elong	14730 Apr 24 12:06	14°♄13'27	1°20'49
minimum elong	14729 May 10 09:59	0°♄09'15	2°03'38	morning rise	14730 Apr 30 09:39	8°♄25'47	
	14729 May 10 12:50	30°♄		direct	14730 May 03 12:31	7°♄31'06	
morning rise	14729 May 16 00:03	24°♄09'03		morning max el	14730 May 10 00:03	10°♄57'17	18°26'53
direct	14729 May 19 13:35	22°♄56'06		desc. node	14730 May 22 20:51	28°♄29'12	
morning max el	14729 May 26 12:55	26°♄44'22	19°12'41		14730 May 23 20:11	0°♄	
	14729 May 29 12:20	0°♄		morning set	14730 May 30 13:07	10°♄33'19	
desc. node	14729 Jun 04 23:59	8°♄40'47			14730 Jun 11 22:15	0°♄	
greatest brilliancy	14729 Jun 08 08:49	13°♄36'47	-0.7m				
	14729 Jun 19 03:21	0°♄		superior conj	14730 Jun 15 08:25	5°♄20'38	-2°09'02
morning set	14729 Jun 19 15:26	0°♄46'30		minimum elong	14730 Jun 15 03:13	5°♄00'18	2°09'52
max. Earth dist.	14729 Jul 02 19:25	21°♄13'24	1.45427 AU	max. Earth dist.	14730 Jun 15 15:02	5°♄46'26	1.45915 AU
				evening rise	14730 Jul 01 04:38	0°♄08'37	
superior conj	14729 Jul 05 23:17	26°♄12'08	-2°12'50		14730 Jul 01 02:26	0°♄	
minimum elong	14729 Jul 06 01:48	26°♄22'05	2°13'45	greatest brilliancy	14730 Jul 10 05:07	14°♄17'26	-0.8m
	14729 Jul 08 08:46	0°♄		asc. node	14730 Jul 16 23:33	24°♄23'08	
evening rise	14729 Jul 20 13:48	19°♄45'18			14730 Jul 21 07:40	0°♄	
	14729 Jul 26 19:47	0°♄					

evening max el	14730 Jul 23 03:41	1° \cap 58'34	18°49'00	evening rise	14731 Jun 10 22:43	9° \ominus 43'39	
retrograde	14730 Jul 29 19:32	5° \cap 36'45			14731 Jun 24 08:08	0° Ω	
evening set	14730 Aug 02 03:41	4° \cap 32'36		greatest brilliancy	14731 Jun 24 17:52	0° Ω 35'43	-0.6m
	14730 Aug 06 18:53	30° κ Ω		asc. node	14731 Jul 03 20:23	12° Ω 57'33	
inferior conj	14730 Aug 07 17:18	28° Ω 50'19	2°45'01	evening max el	14731 Jul 06 10:42	15° Ω 48'17	19°37'20
minimum elong	14730 Aug 07 19:14	28° Ω 44'14	2°44'02	retrograde	14731 Jul 13 17:35	19° Ω 53'51	
min. Earth dist.	14730 Aug 09 12:01	26° Ω 36'25	0.66171 AU	evening set	14731 Jul 17 11:23	18° Ω 32'37	
morning rise	14730 Aug 13 09:53	22° Ω 25'06		inferior conj	14731 Jul 22 19:43	12° Ω 37'14	3°04'08
desc. node	14730 Aug 18 19:00	19° Ω 49'24		minimum elong	14731 Jul 22 20:47	12° Ω 33'42	3°03'12
direct	14730 Aug 19 16:27	19° Ω 46'24		min. Earth dist.	14731 Jul 24 00:15	11° Ω 02'16	0.67577 AU
morning max el	14730 Sep 01 17:37	27° Ω 30'46	26°32'59	morning rise	14731 Jul 28 05:40	6° Ω 12'11	
	14730 Sep 04 01:59	0° \cap		direct	14731 Aug 03 02:19	3° Ω 38'38	
	14730 Sep 25 15:14	0° \ominus		desc. node	14731 Aug 05 16:28	4° Ω 04'15	
morning set	14730 Oct 07 14:08	20° \ominus 57'17		morning max el	14731 Aug 15 04:33	10° Ω 53'30	25°15'45
max. Earth dist.	14730 Oct 11 13:19	28° \ominus 37'03	1.34393 AU		14731 Aug 30 10:24	0° \cap	
	14730 Oct 12 06:02	0° \cap			14731 Sep 18 06:56	0° \ominus	
asc. node	14730 Oct 13 01:29	1° \cap 37'21		morning set	14731 Sep 20 01:58	3° \ominus 10'54	
				max. Earth dist.	14731 Sep 23 15:32	9° \ominus 41'44	1.36461 AU
superior conj	14730 Oct 16 12:05	8° \cap 39'22	0°31'36	asc. node	14731 Sep 29 22:05	21° \ominus 45'45	
minimum elong	14730 Oct 16 10:27	8° \cap 30'56	0°31'50				
evening rise	14730 Oct 23 22:00	24° \cap 15'31		superior conj	14731 Sep 30 01:47	22° \ominus 04'08	0°01'26
	14730 Oct 26 16:34	0° \nearrow		minimum elong	14731 Sep 30 01:40	22° \ominus 03'35	0°01'42
evening max el	14730 Nov 12 08:12	26° \nearrow 18'02	21°08'01	behind sun begin	14731 Sep 29 19:18	21° \ominus 32'02	
desc. node	14730 Nov 14 15:27	28° \nearrow 21'40		behind sun end	14731 Sep 30 08:02	22° \ominus 35'12	
	14730 Nov 16 23:23	0° \searrow			14731 Oct 04 00:22	0° \cap	
retrograde	14730 Nov 24 03:10	2° \searrow 09'08		evening rise	14731 Oct 08 03:52	8° \cap 27'36	
evening set	14730 Nov 26 18:55	1° \searrow 52'33			14731 Oct 19 21:01	0° \nearrow	
	14730 Dec 01 22:37	30° κ \nearrow		evening max el	14731 Oct 25 13:59	7° \nearrow 11'01	19°49'25
inferior conj	14730 Dec 05 15:15	28° \nearrow 00'08	-5°33'07	desc. node	14731 Nov 01 12:45	11° \nearrow 45'23	
minimum elong	14730 Dec 05 07:18	28° \nearrow 11'22	5°30'46	retrograde	14731 Nov 04 17:50	12° \nearrow 15'03	
min. Earth dist.	14730 Dec 06 06:20	27° \nearrow 38'45	0.54464 AU	evening set	14731 Nov 06 17:19	12° \nearrow 04'25	
morning rise	14730 Dec 13 20:04	24° \nearrow 08'57		inferior conj	14731 Nov 15 12:28	8° \nearrow 03'36	-4°12'43
direct	14730 Dec 17 21:38	23° \nearrow 33'24		minimum elong	14731 Nov 15 02:37	8° \nearrow 18'48	4°08'44
morning max el	14730 Dec 30 20:50	29° \nearrow 49'56	22°49'35	min. Earth dist.	14731 Nov 17 14:18	6° \nearrow 46'48	0.55128 AU
	14730 Dec 31 01:04	0° \searrow		morning rise	14731 Nov 23 10:24	3° \nearrow 49'41	
asc. node	14731 Jan 09 01:32	11° \searrow 15'36		direct	14731 Nov 28 11:07	2° \nearrow 53'57	
	14731 Jan 19 10:18	0° \approx		morning max el	14731 Dec 12 06:03	9° \nearrow 45'34	24°38'59
morning set	14731 Jan 22 08:26	6° \approx 06'19		asc. node	14731 Dec 26 22:43	29° \nearrow 30'02	
					14731 Dec 27 05:40	0° \searrow	
superior conj	14731 Jan 29 07:26	21° \approx 04'21	1°27'47	morning set	14732 Jan 06 20:23	20° \searrow 48'55	
minimum elong	14731 Jan 29 09:18	21° \approx 14'20	1°28'21		14732 Jan 11 01:19	0° \approx	
max. Earth dist.	14731 Feb 01 17:36	28° \approx 17'42	1.33595 AU				
	14731 Feb 02 13:24	0° \times		superior conj	14732 Jan 13 15:01	5° \approx 39'39	1°35'55
evening rise	14731 Feb 06 07:38	7° \times 33'25		minimum elong	14732 Jan 13 15:54	5° \approx 44'31	1°36'46
desc. node	14731 Feb 10 15:30	15° \times 47'16		max. Earth dist.	14732 Jan 15 17:21	10° \approx 14'16	1.32256 AU
	14731 Feb 18 20:19	0° Υ		evening rise	14732 Jan 21 00:28	21° \approx 24'19	
evening max el	14731 Mar 12 22:57	29° Υ 20'31	27°12'26		14732 Jan 25 08:53	0° \times	
	14731 Mar 13 15:34	0° \times		desc. node	14732 Jan 28 12:09	5° \times 50'10	
retrograde	14731 Mar 26 11:15	6° \times 50'26			14732 Feb 12 18:09	0° Υ	
evening set	14731 Apr 02 02:39	4° \times 19'16		evening max el	14732 Feb 23 11:03	12° Υ 30'46	27°34'22
min. Earth dist.	14731 Apr 05 23:57	0° \times 38'59	0.65183 AU	retrograde	14732 Mar 08 07:14	19° Υ 59'00	
asc. node	14731 Apr 06 22:13	29° Υ 37'37		evening set	14732 Mar 15 03:18	17° Υ 35'58	
	14731 Apr 06 14:10	30° κ Υ		min. Earth dist.	14732 Mar 18 21:50	14° Υ 24'16	0.63244 AU
inferior conj	14731 Apr 08 08:37	28° Υ 01'09	0°27'02	inferior conj	14732 Mar 21 17:21	11° Υ 35'10	-0°40'34
minimum elong	14731 Apr 08 07:53	28° Υ 03'12	0°26'21	minimum elong	14732 Mar 21 18:40	11° Υ 31'52	0°40'08
morning rise	14731 Apr 14 14:52	22° Υ 31'59		asc. node	14732 Mar 23 19:41	9° Υ 33'05	
direct	14731 Apr 17 08:10	21° Υ 52'42		morning rise	14732 Mar 28 12:37	6° Υ 21'16	
morning max el	14731 Apr 23 15:54	25° Υ 09'31	17°57'58	direct	14732 Mar 30 21:45	5° Υ 53'57	
	14731 Apr 27 18:46	0° \times		morning max el	14732 Apr 06 09:38	9° Υ 12'48	17°46'25
desc. node	14731 May 09 17:39	18° \times 36'31			14732 Apr 20 09:27	0° \times	
morning set	14731 May 11 14:19	21° \times 40'06		morning set	14732 Apr 22 17:38	4° \times 01'50	
	14731 May 16 16:29	0° \cap		desc. node	14732 Apr 25 14:21	8° \times 57'15	
superior conj	14731 May 25 21:21	14° \cap 45'41	-1°46'09	superior conj	14732 May 05 04:36	25° \times 04'08	-1°11'00
minimum elong	14731 May 25 12:26	14° \cap 10'26	1°46'18	minimum elong	14732 May 04 21:42	24° \times 35'49	1°10'51
max. Earth dist.	14731 May 29 11:01	20° \cap 22'49	1.45654 AU		14732 May 08 05:18	0° \cap	
	14731 Jun 04 15:17	0° \ominus		max. Earth dist.	14732 May 11 05:22	4° \cap 48'52	1.44681 AU

evening rise	14732 May 20 09:38	19° Π 08'51		max. Earth dist.	14733 Apr 23 20:14	18° \mathcal{B} 49'36	1.43093 AU
	14732 May 27 13:31	0° \mathfrak{E}		evening rise	14733 Apr 30 05:22	29° \mathcal{B} 03'15	
evening max el	14732 Jun 18 11:55	29° \mathfrak{E} 40'04	20°40'09		14733 Apr 30 19:51	0° Π	
	14732 Jun 18 19:59	0° Ω			14733 May 21 05:03	0° \mathfrak{E}	
asc. node	14732 Jun 19 17:18	0° Ω 50'09		evening max el	14733 Jun 01 07:32	13° \mathfrak{E} 31'48	21°54'10
retrograde	14732 Jun 26 16:34	4° Ω 22'59		asc. node	14733 Jun 06 14:19	17° \mathfrak{E} 46'27	
evening set	14732 Jun 30 20:46	2° Ω 44'27		retrograde	14733 Jun 10 14:41	18° \mathfrak{E} 58'08	
	14732 Jul 03 13:20	30° \mathcal{R} \mathfrak{E}		evening set	14733 Jun 15 05:57	17° \mathfrak{E} 03'00	
inferior conj	14732 Jul 06 02:43	26° \mathfrak{E} 37'16	3°10'30	inferior conj	14733 Jun 20 12:02	10° \mathfrak{E} 45'35	3°05'40
minimum elong	14732 Jul 06 02:47	26° \mathfrak{E} 37'02	3°09'32	minimum elong	14733 Jun 20 11:10	10° \mathfrak{E} 48'36	3°04'35
min. Earth dist.	14732 Jul 06 17:26	25° \mathfrak{E} 46'30	0.68528 AU	min. Earth dist.	14733 Jun 20 13:26	10° \mathfrak{E} 40'41	0.68993 AU
morning rise	14732 Jul 11 08:30	20° \mathfrak{E} 16'09		morning rise	14733 Jun 25 16:12	4° \mathfrak{E} 30'37	
direct	14732 Jul 16 17:30	17° \mathfrak{E} 54'49		direct	14733 Jun 30 12:42	2° \mathfrak{E} 26'28	
desc. node	14732 Jul 22 13:50	20° \mathfrak{E} 04'56		desc. node	14733 Jul 09 11:07	7° \mathfrak{E} 25'35	
morning max el	14732 Jul 27 15:04	24° \mathfrak{E} 25'33	23°48'01	morning max el	14733 Jul 10 03:21	8° \mathfrak{E} 05'30	22°19'10
	14732 Aug 01 15:00	0° Ω			14733 Jul 27 04:49	0° Ω	
	14732 Aug 22 20:31	0° \mathcal{M}		morning set	14733 Aug 12 10:20	24° Ω 50'55	
morning set	14732 Aug 31 17:59	14° \mathcal{M} 31'43			14733 Aug 15 13:57	0° \mathcal{M}	
max. Earth dist.	14732 Sep 04 13:34	21° \mathcal{M} 07'35	1.38807 AU	max. Earth dist.	14733 Aug 17 14:21	3° \mathcal{M} 21'33	1.41157 AU
	14732 Sep 09 11:50	0° \mathfrak{L}					
superior conj	14732 Sep 12 02:36	4° \mathfrak{L} 52'24	-0°32'49	superior conj	14733 Aug 25 10:18	16° \mathcal{M} 54'17	-1°08'41
minimum elong	14732 Sep 12 04:57	5° \mathfrak{L} 03'28	0°32'25	minimum elong	14733 Aug 25 15:39	17° \mathcal{M} 18'08	1°08'13
asc. node	14732 Sep 15 18:39	11° \mathfrak{L} 52'56		asc. node	14733 Sep 01 14:31	0° \mathfrak{L}	
evening rise	14732 Sep 21 03:27	22° \mathfrak{L} 21'48		evening rise	14733 Sep 02 15:13	1° \mathfrak{L} 55'07	
	14732 Sep 25 02:15	0° \mathcal{M}			14733 Sep 04 17:25	5° \mathfrak{L} 49'41	
evening max el	14732 Oct 07 09:42	18° \mathcal{M} 53'51	18°52'45	evening max el	14733 Sep 19 09:46	0° \mathcal{M}	
retrograde	14732 Oct 16 00:01	23° \mathcal{M} 13'24		retrograde	14733 Sep 20 15:48	1° \mathcal{M} 20'20	18°17'41
evening set	14732 Oct 17 21:16	23° \mathcal{M} 01'43		evening set	14733 Sep 28 01:46	5° \mathcal{M} 06'41	
desc. node	14732 Oct 18 10:08	22° \mathcal{M} 54'18		desc. node	14733 Sep 30 03:51	4° \mathcal{M} 49'25	
inferior conj	14732 Oct 26 03:22	18° \mathcal{M} 42'42	-2°27'12	inferior conj	14733 Oct 05 07:33	2° \mathcal{M} 02'14	
minimum elong	14732 Oct 25 21:14	18° \mathcal{M} 53'36	2°24'07	minimum elong	14733 Oct 07 16:05	0° \mathcal{M} 09'02	-0°44'54
min. Earth dist.	14732 Oct 29 02:52	16° \mathcal{M} 36'03	0.56611 AU		14733 Oct 07 14:25	0° \mathcal{M} 12'29	0°43'48
morning rise	14732 Nov 02 18:12	13° \mathcal{M} 53'40		min. Earth dist.	14733 Oct 07 20:24	30° \mathcal{R} \mathfrak{L}	
direct	14732 Nov 08 13:45	12° \mathcal{M} 33'03		morning rise	14733 Oct 10 22:43	27° \mathfrak{L} 26'17	0.58639 AU
morning max el	14732 Nov 22 17:51	19° \mathcal{M} 51'28	26°16'46	direct	14733 Oct 14 21:34	24° \mathfrak{L} 43'32	
	14732 Dec 01 09:41	0° \mathcal{X}			14733 Oct 21 06:01	22° \mathfrak{L} 56'14	
asc. node	14732 Dec 12 19:47	18° \mathcal{X} 23'00		morning max el	14733 Nov 03 22:22	0° \mathcal{M}	
	14732 Dec 18 17:46	0° \mathfrak{Z}			14733 Nov 04 13:19	0° \mathcal{M} 35'51	27°25'59
morning set	14732 Dec 21 07:11	5° \mathfrak{Z} 24'28		asc. node	14733 Nov 25 12:54	0° \mathcal{X}	
				morning set	14733 Nov 29 16:44	7° \mathcal{X} 44'17	
superior conj	14732 Dec 28 01:32	20° \mathfrak{Z} 20'14	1°37'53		14733 Dec 05 15:10	19° \mathcal{X} 48'42	
minimum elong	14732 Dec 28 01:21	20° \mathfrak{Z} 19'10	1°38'53		14733 Dec 10 07:14	0° \mathfrak{Z}	
max. Earth dist.	14732 Dec 28 22:57	22° \mathfrak{Z} 19'27	1.31419 AU	superior conj	14733 Dec 12 13:05	5° \mathfrak{Z} 00'42	1°33'54
	14733 Jan 01 10:41	0° \approx		minimum elong	14733 Dec 12 11:54	4° \mathfrak{Z} 54'04	1°34'51
evening rise	14733 Jan 04 01:04	5° \approx 33'22		max. Earth dist.	14733 Dec 12 07:09	4° \mathfrak{Z} 27'29	1.31101 AU
desc. node	14733 Jan 14 08:51	25° \approx 31'44		evening rise	14733 Dec 19 07:06	19° \mathfrak{Z} 54'53	
	14733 Jan 16 23:31	0° \mathcal{H}			14733 Dec 24 04:10	0° \approx	
evening max el	14733 Feb 04 19:21	25° \mathcal{H} 02'53	27°24'22	desc. node	14734 Jan 01 05:38	14° \approx 43'45	
	14733 Feb 11 03:38	0° \mathcal{Y}			14734 Jan 11 17:12	0° \mathcal{H}	
retrograde	14733 Feb 18 18:45	2° \mathcal{Y} 22'54		evening max el	14734 Jan 17 21:02	6° \mathcal{H} 45'44	26°39'21
evening set	14733 Feb 25 14:29	0° \mathcal{Y} 15'33		retrograde	14734 Jan 31 20:24	13° \mathcal{H} 55'13	
	14733 Feb 26 00:22	30° \mathcal{R} \mathcal{H}		evening set	14734 Feb 07 08:46	12° \mathcal{H} 10'25	
min. Earth dist.	14733 Mar 01 09:37	27° \mathcal{H} 25'59	0.61092 AU	min. Earth dist.	14734 Feb 11 10:44	9° \mathcal{H} 32'48	0.58891 AU
inferior conj	14733 Mar 04 12:42	24° \mathcal{H} 40'16	-1°59'53	inferior conj	14734 Feb 14 14:58	7° \mathcal{H} 06'39	-3°26'29
minimum elong	14733 Mar 04 17:01	24° \mathcal{H} 30'41	1°57'57	minimum elong	14734 Feb 14 22:35	6° \mathcal{H} 52'00	3°23'19
asc. node	14733 Mar 10 17:10	20° \mathcal{H} 12'05		morning rise	14734 Feb 22 15:38	2° \mathcal{H} 32'07	
morning rise	14733 Mar 11 22:43	19° \mathcal{H} 44'34		direct	14734 Feb 24 15:43	2° \mathcal{H} 17'51	
direct	14733 Mar 14 01:43	19° \mathcal{H} 25'33		asc. node	14734 Feb 25 14:36	2° \mathcal{H} 21'12	
morning max el	14733 Mar 21 02:00	22° \mathcal{H} 57'03	17°52'54	morning max el	14734 Feb 25 14:36	6° \mathcal{H} 12'30	18°18'48
	14733 Mar 26 15:09	0° \mathcal{Y}			14734 Mar 19 14:56	0° \mathcal{Y}	
morning set	14733 Apr 05 17:04	17° \mathcal{Y} 19'20		morning set	14734 Mar 20 06:53	1° \mathcal{Y} 15'31	
desc. node	14733 Apr 12 10:57	29° \mathcal{Y} 26'07					
	14733 Apr 12 18:37	0° \mathcal{B}		superior conj	14734 Mar 29 16:38	18° \mathcal{Y} 51'56	0°05'05
superior conj	14733 Apr 16 11:31	6° \mathcal{B} 27'43	-0°31'54	minimum elong	14734 Mar 29 16:59	18° \mathcal{Y} 53'34	0°04'47
minimum elong	14733 Apr 16 08:37	6° \mathcal{B} 15'15	0°31'57	behind sun begin	14734 Mar 29 09:55	18° \mathcal{Y} 21'22	
				behind sun end	14734 Mar 30 00:03	19° \mathcal{Y} 25'40	

desc. node	14734 Mar 30 07:31	19° Υ 59'28		desc. node	14735 Mar 17 04:02	10° Υ 33'30	
	14734 Apr 04 23:33	0° B		max. Earth dist.	14735 Mar 19 12:51	14° Υ 51'12	1.38795 AU
max. Earth dist.	14734 Apr 06 06:28	2° B 12'20	1.41056 AU	evening rise	14735 Mar 23 07:33	21° Υ 29'30	
evening rise	14734 Apr 10 19:51	9° B 48'52			14735 Mar 28 09:20	0° B	
	14734 Apr 23 19:42	0° II			14735 Apr 17 19:12	0° II	
evening max el	14734 May 14 23:02	27° II 23'54	23°14'33	evening max el	14735 Apr 27 12:36	11° II 17'13	24°35'08
	14734 May 17 19:10	0° S		retrograde	14735 May 09 03:06	18° II 04'28	
asc. node	14734 May 24 11:26	3° S 29'45		asc. node	14735 May 11 08:38	17° II 42'56	
retrograde	14734 May 25 10:36	3° S 33'53		evening set	14735 May 14 17:21	15° II 42'44	
evening set	14734 May 30 13:20	1° S 23'58		min. Earth dist.	14735 May 19 05:41	10° II 33'43	0.68469 AU
	14734 May 31 23:43	30° R II		inferior conj	14735 May 20 05:58	9° II 12'29	2°24'45
inferior conj	14734 Jun 04 21:44	24° II 58'27	2°50'22	minimum elong	14735 May 20 03:53	9° II 19'30	2°23'19
minimum elong	14734 Jun 04 20:06	25° II 04'05	2°49'07	morning rise	14735 May 25 14:36	3° II 13'43	
min. Earth dist.	14734 Jun 04 10:11	25° II 38'23	0.68970 AU	direct	14735 May 29 10:32	1° II 49'41	
morning rise	14734 Jun 10 02:50	18° II 51'04		morning max el	14735 Jun 05 20:32	5° II 57'03	19°46'28
direct	14734 Jun 14 10:48	17° II 06'43		desc. node	14735 Jun 13 05:22	14° II 48'37	
morning max el	14734 Jun 22 20:28	21° II 55'39	20°56'50	greatest brilliancy	14735 Jun 18 22:53	22° II 55'09	-0.6m
desc. node	14734 Jun 26 08:18	25° II 45'22			14735 Jun 23 17:35	0° S	
	14734 Jun 29 17:59	0° S		morning set	14735 Jul 02 06:17	12° S 57'27	
	14734 Jul 20 10:30	0° Q			14735 Jul 13 05:03	0° Q	
morning set	14734 Jul 23 03:09	4° Q 10'13		max. Earth dist.	14735 Jul 13 10:12	0° Q 20'24	1.44802 AU
max. Earth dist.	14734 Jul 30 21:16	16° Q 28'59	1.43232 AU				
				superior conj	14735 Jul 18 07:05	8° Q 06'42	-2°06'00
superior conj	14734 Aug 06 20:29	27° Q 59'52	-1°41'54	minimum elong	14735 Jul 18 12:58	8° Q 30'26	2°06'33
minimum elong	14734 Aug 07 03:57	28° Q 31'21	1°41'45	evening rise	14735 Jul 31 22:22	0° R 39'50	
	14734 Aug 08 00:53	0° R			14735 Jul 31 12:56	0° R	
evening rise	14734 Aug 18 17:26	18° R 39'53		asc. node	14735 Aug 07 08:23	11° R 27'46	
asc. node	14734 Aug 20 11:46	21° R 48'06		evening max el	14735 Aug 18 18:40	27° R 44'33	18°06'45
	14734 Aug 25 04:06	0° A			14735 Aug 21 14:23	0° A	
evening max el	14734 Sep 04 04:02	14° A 20'12	18°02'46	retrograde	14735 Aug 25 03:38	1° A 05'01	
retrograde	14734 Sep 10 20:27	17° A 46'48		evening set	14735 Aug 27 21:36	0° A 25'37	
evening set	14734 Sep 13 06:00	17° A 20'08			14735 Aug 28 16:47	30° R R	
inferior conj	14734 Sep 20 01:01	12° A 19'45	0°39'46	inferior conj	14735 Sep 03 02:23	25° R 07'33	1°43'18
minimum elong	14734 Sep 20 02:13	12° A 16'51	0°39'26	minimum elong	14735 Sep 03 04:43	25° R 01'13	1°42'23
desc. node	14734 Sep 22 05:02	10° A 14'01		min. Earth dist.	14735 Sep 05 18:53	22° R 12'57	0.63162 AU
min. Earth dist.	14734 Sep 23 03:51	9° A 20'39	0.60913 AU	morning rise	14735 Sep 09 09:45	18° R 54'16	
morning rise	14734 Sep 26 19:28	6° A 25'08		desc. node	14735 Sep 09 02:33	19° R 08'04	
direct	14734 Oct 03 10:37	4° A 13'20		direct	14735 Sep 16 01:33	16° R 24'36	
morning max el	14734 Oct 17 16:30	12° A 08'15	27°57'18	morning max el	14735 Sep 30 00:54	24° R 25'23	27°49'47
	14734 Oct 31 20:00	0° M			14735 Oct 05 02:17	0° A	
asc. node	14734 Nov 16 13:36	27° M 25'16			14735 Oct 25 05:49	0° M	
	14734 Nov 17 20:26	0° J		asc. node	14735 Nov 03 10:23	17° M 20'05	
morning set	14734 Nov 19 18:19	3° J 55'45		morning set	14735 Nov 03 14:26	17° M 40'33	
max. Earth dist.	14734 Nov 25 13:56	16° J 27'21	1.31315 AU	max. Earth dist.	14735 Nov 08 15:25	28° M 10'19	1.32082 AU
					14735 Nov 09 11:51	0° J	
superior conj	14734 Nov 26 23:46	19° J 34'55	1°24'01	superior conj	14735 Nov 11 07:43	3° J 57'59	1°08'14
minimum elong	14734 Nov 26 21:50	19° J 24'07	1°24'46	minimum elong	14735 Nov 11 05:25	3° J 45'25	1°08'46
	14734 Dec 01 16:20	0° Z		evening rise	14735 Nov 18 03:22	18° J 52'46	
evening rise	14734 Dec 03 16:27	4° Z 22'44			14735 Nov 23 11:53	0° Z	
	14734 Dec 17 01:18	0° \approx		desc. node	14735 Dec 05 23:31	20° Z 48'06	
desc. node	14734 Dec 19 02:31	3° \approx 14'15		evening max el	14735 Dec 12 00:40	27° Z 43'55	23°44'00
evening max el	14734 Dec 30 14:07	17° \approx 34'59	25°22'14		14735 Dec 14 14:39	0° \approx	
retrograde	14735 Jan 13 10:46	24° \approx 33'09		retrograde	14735 Dec 25 12:10	4° \approx 25'31	
evening set	14735 Jan 19 06:15	23° \approx 16'19		evening set	14735 Dec 30 04:28	3° \approx 37'58	
min. Earth dist.	14735 Jan 24 02:28	20° \approx 35'29	0.56865 AU	min. Earth dist.	14736 Jan 05 11:46	0° \approx 35'24	0.55312 AU
inferior conj	14735 Jan 26 21:00	18° \approx 44'46	-4°49'14		14736 Jan 06 11:45	30° R Z	
minimum elong	14735 Jan 27 06:05	18° \approx 29'37	4°46'10	inferior conj	14736 Jan 07 06:28	29° Z 32'12	-5°47'28
morning rise	14735 Feb 04 08:36	14° \approx 32'14		minimum elong	14736 Jan 07 11:50	29° Z 24'14	5°45'57
direct	14735 Feb 06 11:21	14° \approx 19'03		morning rise	14736 Jan 15 20:54	25° Z 37'32	
asc. node	14735 Feb 12 12:01	16° \approx 13'59		direct	14736 Jan 18 11:31	25° Z 20'38	
morning max el	14735 Feb 15 15:49	18° \approx 47'22	19°06'01		14736 Jan 28 16:08	0° \approx	
	14735 Feb 23 22:14	0° H		morning max el	14736 Jan 29 05:13	0° \approx 30'46	20°16'13
morning set	14735 Mar 04 06:34	15° H 36'48		asc. node	14736 Jan 30 09:26	1° \approx 42'19	
	14735 Mar 11 13:48	0° Υ			14736 Feb 16 10:09	0° H	
superior conj	14735 Mar 12 15:38	2° Υ 04'25	0°36'44	morning set	14736 Feb 16 12:45	0° H 13'19	
minimum elong	14735 Mar 12 17:46	2° Υ 14'41	0°36'26				

superior conj	14736 Feb 24 04:07	15° X 52'39	1°01'51	morning set	14737 Jan 30 22:52	14° \approx 57'46	
minimum elong	14736 Feb 24 06:46	16° X 06'00	1°01'49				
max. Earth dist.	14736 Feb 29 19:39	26° X 56'34	1.36565 AU	superior conj	14737 Feb 07 02:23	0° X 06'27	1°20'12
	14736 Mar 02 10:39	0° Y		minimum elong	14737 Feb 07 04:42	0° X 18'33	1°20'33
desc. node	14736 Mar 03 00:32	1° Y 04'30			14737 Feb 07 01:09	0° X	
evening rise	14736 Mar 04 14:34	3° Y 58'47		max. Earth dist.	14737 Feb 11 07:56	8° X 49'06	1.34577 AU
	14736 Mar 20 08:47	0° Z		evening rise	14737 Feb 15 13:28	17° X 07'24	
evening max el	14736 Apr 09 02:09	25° Z 09'45	25°48'45	desc. node	14737 Feb 17 21:05	21° X 28'48	
	14736 Apr 14 22:13	0° II			14737 Feb 22 15:18	0° Y	
retrograde	14736 Apr 21 15:04	2° II 22'34			14737 Mar 14 16:55	0° Z	
asc. node	14736 Apr 27 05:57	0° II 14'02		evening max el	14737 Mar 22 16:05	8° Z 55'09	26°47'51
evening set	14736 Apr 27 16:17	29° Z 53'09		retrograde	14737 Apr 04 21:22	16° Z 21'09	
	14736 Apr 27 12:58	30° R Z		evening set	14737 Apr 11 08:18	13° Z 49'03	
min. Earth dist.	14736 May 01 21:46	25° Z 19'53	0.67519 AU	asc. node	14737 Apr 14 03:20	11° Z 10'47	
inferior conj	14736 May 03 10:44	23° Z 22'49	1°48'18	min. Earth dist.	14737 Apr 15 08:18	9° Z 50'05	0.66152 AU
minimum elong	14736 May 03 08:38	23° Z 29'29	1°46'53	inferior conj	14737 Apr 17 09:51	7° Z 24'39	1°00'17
morning rise	14736 May 09 01:36	17° Z 33'58		minimum elong	14737 Apr 17 08:22	7° Z 29'00	0°59'12
direct	14736 May 12 10:25	16° Z 29'08		morning rise	14737 Apr 23 09:41	1° Z 47'30	
morning max el	14736 May 19 03:53	20° Z 06'50	18°51'11	direct	14737 Apr 26 08:24	0° Z 59'38	
	14736 May 27 02:13	0° II		morning max el	14737 May 02 17:15	4° Z 20'21	18°12'28
desc. node	14736 May 30 02:18	4° II 23'10		desc. node	14737 May 16 23:10	24° Z 20'46	
greatest brilliancy	14736 Jun 01 19:23	8° II 28'14	-0.8m		14737 May 20 11:58	0° II	
morning set	14736 Jun 10 15:40	22° II 07'00		morning set	14737 May 22 00:41	2° II 27'15	
	14736 Jun 15 17:25	0° Z					
max. Earth dist.	14736 Jun 25 03:51	14° Z 42'00	1.45718 AU	superior conj	14737 Jun 06 06:31	26° II 36'34	-2°01'22
				minimum elong	14737 Jun 05 22:56	26° II 06'52	2°01'55
superior conj	14736 Jun 26 22:00	17° Z 26'57	-2°13'45	max. Earth dist.	14737 Jun 08 00:08	29° II 19'10	1.45899 AU
minimum elong	14736 Jun 26 21:13	17° Z 23'52	2°14'45		14737 Jun 08 10:36	0° Z	
	14736 Jul 04 21:00	0° Z		evening rise	14737 Jun 22 08:17	21° Z 37'21	
evening rise	14736 Jul 12 03:26	11° Z 37'59			14737 Jun 27 17:55	0° Z	
	14736 Jul 23 16:25	0° Z		greatest brilliancy	14737 Jul 03 13:52	8° Z 56'05	-0.7m
asc. node	14736 Jul 24 05:04	0° Z 47'56		asc. node	14737 Jul 11 01:50	19° Z 41'35	
evening max el	14736 Aug 01 08:20	11° Z 24'09	18°28'41	evening max el	14737 Jul 15 18:22	25° Z 11'50	19°07'42
retrograde	14736 Aug 07 19:05	14° Z 51'47		retrograde	14737 Jul 22 15:30	28° Z 59'50	
evening set	14736 Aug 10 22:00	13° Z 57'06		evening set	14737 Jul 26 03:47	27° Z 48'19	
inferior conj	14736 Aug 16 16:08	8° Z 23'21	2°27'20	inferior conj	14737 Jul 31 14:46	22° Z 00'21	2°54'46
minimum elong	14736 Aug 16 18:25	8° Z 16'31	2°26'19	minimum elong	14737 Jul 31 16:21	21° Z 55'12	2°53'49
min. Earth dist.	14736 Aug 18 19:09	5° Z 50'50	0.65178 AU	min. Earth dist.	14737 Aug 02 03:23	20° Z 02'20	0.66827 AU
morning rise	14736 Aug 22 13:35	2° Z 00'38		morning rise	14737 Aug 06 04:16	15° Z 34'57	
	14736 Aug 25 20:06	30° R Z		direct	14737 Aug 12 06:59	12° Z 57'32	
desc. node	14736 Aug 26 00:04	29° Z 56'09		desc. node	14737 Aug 12 21:34	12° Z 58'56	
direct	14736 Aug 29 00:50	29° Z 22'26		morning max el	14737 Aug 24 22:54	20° Z 30'25	26°02'03
	14736 Sep 01 10:19	0° Z			14737 Sep 02 03:12	0° Z	
morning max el	14736 Sep 11 11:42	7° Z 16'28	27°08'40		14737 Sep 22 05:17	0° Z	
	14736 Sep 29 01:49	0° Z		morning set	14737 Sep 29 22:01	13° Z 35'26	
	14736 Oct 16 13:07	0° Z		max. Earth dist.	14737 Oct 03 15:46	20° Z 39'01	1.35228 AU
morning set	14736 Oct 17 00:49	0° Z 56'29		asc. node	14737 Oct 07 03:43	27° Z 43'22	
asc. node	14736 Oct 20 07:05	7° Z 23'34			14737 Oct 08 09:15	0° Z	
max. Earth dist.	14736 Oct 21 08:26	9° Z 32'09	1.33400 AU				
				superior conj	14737 Oct 09 06:12	1° Z 46'21	0°19'24
superior conj	14736 Oct 25 10:44	18° Z 04'08	0°46'37	minimum elong	14737 Oct 09 05:06	1° Z 40'46	0°19'39
minimum elong	14736 Oct 25 08:39	17° Z 53'04	0°46'57	evening rise	14737 Oct 16 22:13	17° Z 40'11	
	14736 Oct 31 00:25	0° Z			14737 Oct 23 02:23	0° Z	
evening rise	14736 Nov 01 13:57	3° Z 20'23		evening max el	14737 Nov 04 09:41	18° Z 10'42	20°31'59
	14736 Nov 16 02:21	0° Z		desc. node	14737 Nov 08 17:53	21° Z 39'54	
desc. node	14736 Nov 21 20:38	7° Z 05'10		retrograde	14737 Nov 15 12:10	23° Z 42'05	
evening max el	14736 Nov 22 12:10	7° Z 44'04	22°01'57	evening set	14737 Nov 17 19:16	23° Z 29'00	
retrograde	14736 Dec 05 01:39	13° Z 57'06		inferior conj	14737 Nov 26 16:48	19° Z 34'23	-5°04'10
evening set	14736 Dec 08 09:40	13° Z 32'25		minimum elong	14737 Nov 26 07:04	19° Z 48'31	5°00'53
min. Earth dist.	14736 Dec 16 17:45	9° Z 49'45	0.54515 AU	min. Earth dist.	14737 Nov 27 23:43	18° Z 49'31	0.54639 AU
inferior conj	14736 Dec 17 00:55	9° Z 39'44	-5°56'05	morning rise	14737 Dec 04 18:37	15° Z 36'15	
minimum elong	14736 Dec 16 21:25	9° Z 44'37	5°54'49	direct	14737 Dec 09 06:36	14° Z 52'47	
morning rise	14736 Dec 25 10:04	5° Z 52'28		morning max el	14737 Dec 22 15:19	21° Z 24'24	23°36'16
direct	14736 Dec 28 22:04	5° Z 25'21			14737 Dec 29 23:44	0° Z	
morning max el	14737 Jan 10 03:47	11° Z 18'45	21°48'42	asc. node	14738 Jan 03 04:00	6° Z 16'07	
asc. node	14737 Jan 16 06:46	18° Z 29'08		morning set	14738 Jan 15 10:41	29° Z 42'52	
	14737 Jan 23 10:05	0° \approx			14738 Jan 15 13:53	0° \approx	

superior conj	14738 Jan 22 07:17	14° \approx 36'02	1°31'59	direct	14738 Nov 20 00:42	24° \mathbb{M} 17'40	
minimum elong	14738 Jan 22 08:46	14° \approx 44'01	1°32'42		14738 Dec 02 13:10	0° \mathbb{A}	
max. Earth dist.	14738 Jan 25 03:42	20° \approx 42'41	1.32974 AU	morning max el	14738 Dec 04 00:55	1° \mathbb{A} 21'20	25°23'08
	14738 Jan 29 15:39	0° \mathbb{H}		asc. node	14738 Dec 21 01:08	24° \mathbb{A} 48'40	
evening rise	14738 Jan 30 00:38	0° \mathbb{H} 44'59			14738 Dec 23 20:48	0° \mathbb{B}	
desc. node	14738 Feb 04 17:40	11° \mathbb{H} 41'02		morning set	14738 Dec 30 22:22	14° \mathbb{B} 23'38	
	14738 Feb 15 15:18	0° \mathbb{Y}					
evening max el	14738 Mar 05 05:17	22° \mathbb{Y} 21'26	27°25'12	superior conj	14739 Jan 06 16:22	29° \mathbb{B} 14'42	1°37'29
retrograde	14738 Mar 18 21:11	29° \mathbb{Y} 50'46		minimum elong	14739 Jan 06 16:48	29° \mathbb{B} 17'05	1°38'25
evening set	14738 Mar 25 15:13	27° \mathbb{Y} 22'13			14739 Jan 07 00:34	0° \approx	
min. Earth dist.	14738 Mar 29 11:07	23° \mathbb{Y} 54'48	0.64403 AU	max. Earth dist.	14739 Jan 08 06:20	2° \approx 43'54	1.31841 AU
inferior conj	14738 Apr 01 00:39	21° \mathbb{Y} 10'46	-0°00'06	evening rise	14739 Jan 13 21:04	14° \approx 44'26	
minimum elong	14738 Apr 01 00:40	21° \mathbb{Y} 10'44	0°00'22		14739 Jan 21 17:06	0° \mathbb{H}	
transit middle	14738 Apr 01 00:40	21° \mathbb{Y} 10'44	0°00'22	desc. node	14739 Jan 22 14:19	1° \mathbb{H} 35'51	
transit begin	14738 Mar 31 21:34	21° \mathbb{Y} 19'01			14739 Feb 10 16:49	0° \mathbb{Y}	
transit end	14738 Apr 01 03:45	21° \mathbb{Y} 02'29		evening max el	14739 Feb 15 15:52	5° \mathbb{Y} 16'19	27°34'02
asc. node	14738 Apr 01 00:46	21° \mathbb{Y} 10'26		retrograde	14739 Mar 01 13:40	12° \mathbb{Y} 41'48	
morning rise	14738 Apr 07 12:10	15° \mathbb{Y} 47'46		evening set	14739 Mar 08 10:30	10° \mathbb{Y} 24'09	
direct	14738 Apr 10 01:56	15° \mathbb{Y} 13'52		min. Earth dist.	14739 Mar 12 04:37	7° \mathbb{Y} 23'10	0.62356 AU
morning max el	14738 Apr 16 10:14	18° \mathbb{Y} 29'48	17°50'54	inferior conj	14739 Mar 15 04:05	4° \mathbb{Y} 33'22	-1°12'58
	14738 Apr 25 00:06	0° \mathbb{B}		minimum elong	14739 Mar 15 06:34	4° \mathbb{Y} 27'25	1°11'55
morning set	14738 May 03 13:34	14° \mathbb{B} 07'52		asc. node	14739 Mar 18 22:15	1° \mathbb{Y} 16'40	
desc. node	14738 May 03 19:54	14° \mathbb{B} 34'27			14739 Mar 20 22:48	30° \mathbb{R} \mathbb{H}	
	14738 May 13 03:34	0° \mathbb{I}		morning rise	14739 Mar 22 05:32	29° \mathbb{H} 27'10	
				direct	14739 Mar 24 11:47	29° \mathbb{H} 03'51	
superior conj	14738 May 17 01:52	6° \mathbb{I} 20'46	-1°32'13		14739 Mar 27 23:00	0° \mathbb{Y}	
minimum elong	14738 May 16 17:18	5° \mathbb{I} 46'26	1°32'09	morning max el	14739 Mar 31 03:51	2° \mathbb{Y} 26'31	17°46'54
max. Earth dist.	14738 May 21 20:09	13° \mathbb{I} 54'42	1.45327 AU	morning set	14739 Apr 16 02:07	26° \mathbb{Y} 55'15	
	14738 Jun 01 04:50	0° \mathbb{E}			14739 Apr 17 20:08	0° \mathbb{B}	
evening rise	14738 Jun 01 21:18	1° \mathbb{E} 03'02		desc. node	14739 Apr 20 16:32	4° \mathbb{B} 59'06	
greatest brilliancy	14738 Jun 16 18:48	23° \mathbb{E} 22'05	-0.6m				
	14738 Jun 21 11:52	0° \mathbb{Q}		superior conj	14739 Apr 27 19:02	17° \mathbb{B} 06'58	-0°54'27
asc. node	14738 Jun 27 22:40	7° \mathbb{Q} 59'41		minimum elong	14739 Apr 27 13:48	16° \mathbb{B} 45'07	0°54'21
evening max el	14738 Jun 28 22:55	9° \mathbb{Q} 02'33	20°02'27	max. Earth dist.	14739 May 04 13:07	28° \mathbb{B} 11'27	1.44070 AU
retrograde	14738 Jul 06 14:13	13° \mathbb{Q} 22'56			14739 May 05 16:13	0° \mathbb{I}	
evening set	14738 Jul 10 12:26	11° \mathbb{Q} 54'05		evening rise	14739 May 12 10:07	10° \mathbb{I} 35'57	
inferior conj	14738 Jul 15 19:23	5° \mathbb{Q} 53'18	3°08'16		14739 May 25 08:11	0° \mathbb{E}	
minimum elong	14738 Jul 15 20:02	5° \mathbb{Q} 51'07	3°07'21	evening max el	14739 Jun 11 21:26	22° \mathbb{E} 53'30	21°10'32
min. Earth dist.	14738 Jul 16 17:52	4° \mathbb{Q} 37'03	0.68035 AU	asc. node	14739 Jun 14 19:37	25° \mathbb{E} 30'02	
	14738 Jul 20 14:17	30° \mathbb{R} \mathbb{E}		retrograde	14739 Jun 20 13:06	27° \mathbb{E} 55'04	
morning rise	14738 Jul 21 03:16	29° \mathbb{E} 29'42		evening set	14739 Jun 24 21:53	26° \mathbb{E} 09'17	
direct	14738 Jul 26 19:01	27° \mathbb{E} 00'55		inferior conj	14739 Jun 30 03:35	19° \mathbb{E} 57'16	3°09'46
desc. node	14738 Jul 30 19:00	28° \mathbb{E} 01'58		minimum elong	14739 Jun 30 03:14	19° \mathbb{E} 58'27	3°08'46
	14738 Aug 02 22:46	0° \mathbb{Q}		min. Earth dist.	14739 Jun 30 12:32	19° \mathbb{E} 26'06	0.68777 AU
morning max el	14738 Aug 07 09:40	3° \mathbb{Q} 58'13	24°39'17	morning rise	14739 Jul 05 08:21	13° \mathbb{E} 38'23	
	14738 Aug 27 09:05	0° \mathbb{M}		direct	14739 Jul 10 11:56	11° \mathbb{E} 24'04	
morning set	14738 Sep 12 02:00	25° \mathbb{M} 28'12		desc. node	14739 Jul 17 16:21	14° \mathbb{E} 39'21	
	14738 Sep 14 15:15	0° \mathbb{L}		morning max el	14739 Jul 20 20:42	17° \mathbb{E} 33'55	23°09'54
max. Earth dist.	14738 Sep 15 15:54	1° \mathbb{L} 51'20	1.37436 AU		14739 Jul 31 05:10	0° \mathbb{Q}	
					14739 Aug 20 10:28	0° \mathbb{M}	
superior conj	14738 Sep 22 14:55	14° \mathbb{L} 56'56	-0°12'42	morning set	14739 Aug 24 08:15	6° \mathbb{M} 23'31	
minimum elong	14738 Sep 22 15:45	15° \mathbb{L} 00'57	0°12'23	max. Earth dist.	14739 Aug 28 14:09	13° \mathbb{M} 34'22	1.39814 AU
behind sun begin	14738 Sep 22 11:25	14° \mathbb{L} 39'56					
behind sun end	14738 Sep 22 20:04	15° \mathbb{L} 22'00		superior conj	14739 Sep 05 08:53	27° \mathbb{M} 25'59	-0°48'03
asc. node	14738 Sep 24 00:17	17° \mathbb{L} 39'55		minimum elong	14739 Sep 05 12:30	27° \mathbb{M} 42'37	0°47'36
	14738 Sep 30 04:37	0° \mathbb{M}			14739 Sep 06 18:11	0° \mathbb{L}	
evening rise	14738 Oct 01 01:48	1° \mathbb{M} 46'13		asc. node	14739 Sep 10 20:48	7° \mathbb{L} 45'03	
evening max el	14738 Oct 17 21:33	29° \mathbb{M} 24'57	19°22'35	evening rise	14739 Sep 14 21:43	15° \mathbb{L} 30'02	
	14738 Oct 18 11:59	0° \mathbb{A}			14739 Sep 22 17:38	0° \mathbb{M}	
desc. node	14738 Oct 26 15:13	4° \mathbb{A} 08'06		evening max el	14739 Sep 30 22:07	11° \mathbb{M} 27'04	18°35'21
retrograde	14738 Oct 27 08:52	4° \mathbb{A} 09'45		retrograde	14739 Oct 08 23:19	15° \mathbb{M} 31'07	
evening set	14738 Oct 29 05:59	3° \mathbb{A} 59'19		evening set	14739 Oct 10 21:55	15° \mathbb{M} 17'41	
inferior conj	14738 Nov 06 20:36	29° \mathbb{M} 51'11	-3°29'10	desc. node	14739 Oct 13 12:39	14° \mathbb{M} 20'49	
minimum elong	14738 Nov 06 11:57	0° \mathbb{A} 05'19	3°25'18	inferior conj	14739 Oct 18 20:40	10° \mathbb{M} 49'56	-1°42'18
	14738 Nov 06 15:12	30° \mathbb{M} \mathbb{M}		minimum elong	14739 Oct 18 16:33	10° \mathbb{M} 57'46	1°40'03
min. Earth dist.	14738 Nov 09 09:15	28° \mathbb{M} 12'17	0.55668 AU	min. Earth dist.	14739 Oct 22 00:54	8° \mathbb{M} 25'29	0.57417 AU
morning rise	14738 Nov 14 15:42	25° \mathbb{M} 23'08		morning rise	14739 Oct 26 07:43	5° \mathbb{M} 44'33	

direct	14739 Nov 01 09:25	4°♍12'25		transit begin	14740 Sep 29 14:55	22°♌42'40	
morning max el	14739 Nov 15 15:50	11°♍41'34	26°50'27	transit end	14740 Sep 29 21:12	22°♌28'43	
	14739 Nov 29 21:38	0°♌		min. Earth dist.	14740 Oct 03 00:33	19°♌42'44	0.59597 AU
asc. node	14739 Dec 07 22:09	13°♌54'31		morning rise	14740 Oct 06 19:11	16°♌56'21	
morning set	14739 Dec 15 08:12	28°♌55'02		direct	14740 Oct 13 07:32	14°♌57'39	
	14739 Dec 15 20:17	0°♌		morning max el	14740 Oct 27 14:29	22°♌44'47	27°44'08
					14740 Nov 03 01:31	0°♍	
superior conj	14739 Dec 22 03:34	13°♌56'09	1°36'56		14740 Nov 22 00:41	0°♌	
minimum elong	14739 Dec 22 02:56	13°♌52'37	1°37'55	asc. node	14740 Nov 23 19:03	3°♌24'38	
max. Earth dist.	14739 Dec 22 13:16	14°♌50'21	1.31214 AU	morning set	14740 Nov 28 14:20	13°♌12'07	
evening rise	14739 Dec 29 00:13	28°♌59'24		max. Earth dist.	14740 Dec 04 21:08	26°♌54'55	1.31119 AU
	14739 Dec 29 11:40	0°♍					
desc. node	14740 Jan 09 11:03	21°♍06'12		superior conj	14740 Dec 05 14:59	28°♌34'32	1°30'26
	14740 Jan 14 22:26	0°♋		minimum elong	14740 Dec 05 13:26	28°♌25'55	1°31'19
evening max el	14740 Jan 28 21:31	17°♋28'31	27°09'27		14740 Dec 06 06:16	0°♌	
retrograde	14740 Feb 11 21:37	24°♋45'08		evening rise	14740 Dec 12 07:53	13°♌24'08	
evening set	14740 Feb 18 15:03	22°♋46'28			14740 Dec 20 13:24	0°♍	
min. Earth dist.	14740 Feb 22 11:59	20°♋03'25	0.60148 AU	desc. node	14740 Dec 26 07:53	10°♍02'07	
inferior conj	14740 Feb 25 16:39	17°♋23'40	-2°36'13	evening max el	14741 Jan 09 19:51	28°♍49'15	26°10'14
minimum elong	14740 Feb 25 22:24	17°♋11'38	2°33'40		14741 Jan 11 02:53	0°♋	
morning rise	14740 Mar 04 09:06	12°♋36'55		retrograde	14741 Jan 23 18:51	5°♋53'59	
asc. node	14740 Mar 04 19:43	12°♋30'39		evening set	14741 Jan 30 01:01	4°♋20'59	
direct	14740 Mar 06 10:12	12°♋20'29		min. Earth dist.	14741 Feb 03 09:11	1°♋43'49	0.57986 AU
morning max el	14740 Mar 13 18:40	16°♋00'47	18°01'24		14741 Feb 05 18:50	30°♋	
	14740 Mar 23 12:57	0°♎		inferior conj	14741 Feb 06 10:40	29°♍31'07	-4°03'04
morning set	14740 Mar 29 08:20	10°♎31'37		minimum elong	14741 Feb 06 19:19	29°♍15'28	3°59'43
desc. node	14740 Apr 06 13:06	25°♎30'39		morning rise	14741 Feb 14 16:40	25°♍05'41	
				direct	14741 Feb 16 16:53	24°♍52'24	
superior conj	14740 Apr 08 11:54	28°♎58'27	-0°15'44	asc. node	14741 Feb 19 17:11	25°♍23'52	
minimum elong	14740 Apr 08 10:33	28°♎52'30	0°15'55	morning max el	14741 Feb 25 02:46	29°♍00'39	18°36'04
behind sun begin	14740 Apr 08 09:57	28°♎49'49			14741 Feb 26 01:48	0°♋	
behind sun end	14740 Apr 08 11:10	28°♎55'11		morning set	14741 Mar 13 02:53	24°♋40'27	
	14740 Apr 09 01:54	0°♏			14741 Mar 15 20:59	0°♎	
max. Earth dist.	14740 Apr 16 01:31	11°♏55'47	1.42267 AU	superior conj	14741 Mar 22 01:12	11°♎44'54	0°19'14
evening rise	14740 Apr 21 13:10	20°♏51'32		minimum elong	14741 Mar 22 02:29	11°♎50'55	0°18'55
	14740 Apr 27 09:27	0°♐		desc. node	14741 Mar 24 09:37	16°♎04'47	
	14740 May 18 15:32	0°♑		max. Earth dist.	14741 Mar 29 09:52	25°♎00'08	1.40113 AU
evening max el	14740 May 24 15:02	6°♑45'48	22°27'57		14741 Apr 01 07:50	0°♏	
asc. node	14740 May 31 16:41	11°♑58'03		evening rise	14741 Apr 02 12:50	2°♏01'48	
retrograde	14740 Jun 03 10:32	12°♑31'32			14741 Apr 20 16:29	0°♐	
evening set	14740 Jun 08 06:30	10°♑30'04		evening max el	14741 May 07 05:41	20°♐39'25	23°49'13
inferior conj	14740 Jun 13 13:19	4°♑08'49	3°00'27	retrograde	14741 May 18 05:01	27°♐05'50	
minimum elong	14740 Jun 13 12:06	4°♑13'04	2°59'17	asc. node	14741 May 18 13:52	27°♐05'14	
min. Earth dist.	14740 Jun 13 09:15	4°♑23'02	0.69040 AU	evening set	14741 May 23 12:39	24°♐50'43	
	14740 Jun 16 16:55	30°♋♐		min. Earth dist.	14741 May 28 05:46	19°♐20'39	0.68822 AU
morning rise	14740 Jun 18 17:33	27°♐56'40		inferior conj	14741 May 28 22:40	18°♐22'56	2°40'47
direct	14740 Jun 23 08:40	26°♐00'37		minimum elong	14741 May 28 20:47	18°♐29'19	2°39'26
	14740 Jul 01 01:54	0°♑		morning rise	14741 Jun 03 04:56	12°♐18'58	
morning max el	14740 Jul 02 10:36	1°♑18'08	21°42'52	direct	14741 Jun 07 07:47	10°♐43'04	
desc. node	14740 Jul 03 13:34	2°♑27'45		morning max el	14741 Jun 15 06:23	15°♐12'40	20°25'05
	14740 Jul 24 00:43	0°♒		desc. node	14741 Jun 20 10:40	21°♐07'35	
morning set	14740 Aug 03 14:04	16°♒15'48			14741 Jun 27 00:20	0°♑	
max. Earth dist.	14740 Aug 09 16:41	26°♒09'04	1.42089 AU	morning set	14741 Jul 13 23:04	25°♑15'40	
	14740 Aug 12 00:14	0°♓			14741 Jul 17 00:20	0°♒	
superior conj	14740 Aug 17 07:53	9°♓04'56	-1°23'27	max. Earth dist.	14741 Jul 23 02:27	9°♒37'28	1.43981 AU
minimum elong	14740 Aug 17 14:22	9°♓33'11	1°23'04	superior conj	14741 Jul 29 08:05	19°♒45'34	-1°53'42
asc. node	14740 Aug 27 17:20	27°♓43'44		minimum elong	14741 Jul 29 15:30	20°♒16'13	1°53'48
evening rise	14740 Aug 28 06:17	28°♓42'59			14741 Aug 04 10:38	0°♓	
	14740 Aug 28 23:06	0°♈		evening rise	14741 Aug 10 22:47	11°♓13'11	
evening max el	14740 Sep 13 07:22	24°♈09'03	18°09'02	asc. node	14741 Aug 14 13:57	17°♓31'46	
retrograde	14740 Sep 20 08:28	27°♈44'56			14741 Aug 22 03:20	0°♈	
evening set	14740 Sep 22 13:37	27°♈24'06		evening max el	14741 Aug 27 21:07	7°♈20'43	18°02'14
desc. node	14740 Sep 29 10:06	22°♈53'18		retrograde	14741 Sep 03 08:58	10°♈42'45	
inferior conj	14740 Sep 29 18:17	22°♈35'13	-0°06'25	evening set	14741 Sep 05 22:10	10°♈10'51	
minimum elong	14740 Sep 29 18:04	22°♈35'42	0°06'02	inferior conj	14741 Sep 12 10:41	5°♈02'32	1°09'18
transit middle	14740 Sep 29 18:04	22°♈35'42	0°06'02				

minimum elong	14741 Sep 12 12:32	4°♄57'47	1°08'38	evening set	14742 Aug 20 18:02	23°♎28'35	
min. Earth dist.	14741 Sep 15 09:38	2°♄03'11	0.61892 AU	inferior conj	14742 Aug 26 17:48	18°♎03'16	2°04'13
desc. node	14741 Sep 16 07:36	1°♄11'13		minimum elong	14742 Aug 26 20:13	17°♎56'24	2°03'13
	14741 Sep 17 16:17	30°♎		min. Earth dist.	14742 Aug 29 04:38	15°♎16'30	0.64056 AU
morning rise	14741 Sep 19 00:22	28°♎59'02		morning rise	14742 Sep 01 20:44	11°♎44'56	
direct	14741 Sep 25 16:36	26°♎38'46		desc. node	14742 Sep 03 05:08	10°♎47'46	
	14741 Oct 04 11:06	0°♄		direct	14742 Sep 08 11:02	9°♎10'50	
morning max el	14741 Oct 09 20:03	4°♄36'34	27°58'43	morning max el	14742 Sep 22 05:58	17°♎10'07	27°36'06
	14741 Oct 28 20:31	0°♌			14742 Oct 02 22:47	0°♄	
asc. node	14741 Nov 10 15:52	23°♌12'11			14742 Oct 21 16:26	0°♌	
morning set	14741 Nov 12 14:48	27°♌10'22		morning set	14742 Oct 27 07:07	10°♌43'33	
	14741 Nov 13 23:28	0°♊		asc. node	14742 Oct 28 12:36	13°♌11'06	
max. Earth dist.	14741 Nov 18 02:14	8°♊49'11	1.31572 AU	max. Earth dist.	14742 Nov 01 00:42	20°♌24'23	1.32578 AU
superior conj	14741 Nov 20 00:46	13°♊04'51	1°18'03	superior conj	14742 Nov 04 06:52	27°♌21'03	0°59'47
minimum elong	14741 Nov 19 22:37	12°♊52'57	1°18'43	minimum elong	14742 Nov 04 04:34	27°♌08'39	1°00'12
evening rise	14741 Nov 26 18:10	27°♊53'57			14742 Nov 05 12:13	0°♊	
	14741 Nov 27 17:37	0°♊		evening rise	14742 Nov 11 05:10	12°♊23'27	
desc. node	14741 Dec 13 04:50	28°♊10'56			14742 Nov 20 00:32	0°♊	
	14741 Dec 14 11:32	0°♋		desc. node	14742 Nov 30 01:55	15°♊14'48	
evening max el	14741 Dec 22 09:51	9°♋19'35	24°42'14	evening max el	14742 Dec 03 19:21	19°♊18'48	22°59'55
retrograde	14742 Jan 05 03:20	16°♋10'52		retrograde	14742 Dec 16 23:06	25°♊50'28	
evening set	14742 Jan 10 12:38	15°♋06'44		evening set	14742 Dec 21 01:55	25°♊13'35	
min. Earth dist.	14742 Jan 15 21:40	12°♋19'16	0.56129 AU	min. Earth dist.	14742 Dec 28 04:45	21°♊56'13	0.54865 AU
inferior conj	14742 Jan 18 07:47	10°♋47'53	-5°18'26	inferior conj	14742 Dec 29 09:36	21°♊14'59	-5°58'26
minimum elong	14742 Jan 18 16:06	10°♋34'46	5°15'57	minimum elong	14742 Dec 29 11:32	21°♊12'13	5°57'22
morning rise	14742 Jan 26 21:43	6°♋43'38		morning rise	14743 Jan 06 22:35	17°♊25'43	
direct	14742 Jan 29 04:28	6°♋29'25		direct	14743 Jan 09 21:25	17°♊05'22	
asc. node	14742 Feb 06 14:36	9°♋59'11		morning max el	14743 Jan 21 07:02	22°♊33'35	20°53'12
morning max el	14742 Feb 07 24:00	11°♋14'36	19°33'00	asc. node	14743 Jan 24 11:58	26°♊02'33	
	14742 Feb 20 13:41	0°♋			14743 Jan 27 11:34	0°♋	
morning set	14742 Feb 25 05:47	9°♋09'59		morning set	14743 Feb 09 13:55	23°♋50'29	
					14743 Feb 12 12:46	0°♋	
superior conj	14742 Mar 05 06:30	25°♋14'22	0°48'11	superior conj	14743 Feb 16 23:34	9°♋14'32	1°10'27
minimum elong	14742 Mar 05 08:59	25°♋26'32	0°47'59	minimum elong	14743 Feb 17 02:09	9°♋27'47	1°10'34
	14742 Mar 07 17:27	0°♌		max. Earth dist.	14743 Feb 22 01:03	19°♋22'38	1.35675 AU
desc. node	14742 Mar 11 06:09	6°♌38'09		evening rise	14743 Feb 25 23:19	26°♋51'05	
max. Earth dist.	14742 Mar 11 16:26	7°♌25'30	1.37837 AU	desc. node	14743 Feb 26 02:41	27°♋06'39	
evening rise	14742 Mar 15 09:11	14°♌04'32			14743 Feb 27 16:29	0°♌	
	14742 Mar 24 21:59	0°♌			14743 Mar 18 07:28	0°♌	
evening max el	14742 Apr 15 13:03	0°♍		evening max el	14743 Apr 02 08:47	18°♌23'28	26°16'01
retrograde	14742 Apr 19 19:13	4°♍33'26	25°07'37	retrograde	14743 Apr 15 05:17	25°♌43'38	
asc. node	14742 May 01 19:34	11°♍32'13		evening set	14743 Apr 21 11:01	23°♌12'02	
evening set	14742 May 07 14:43	9°♍06'35		asc. node	14743 Apr 22 08:30	22°♌24'51	
min. Earth dist.	14742 May 11 23:59	4°♍13'07	0.68132 AU	min. Earth dist.	14743 Apr 25 13:53	18°♌53'55	0.66990 AU
inferior conj	14742 May 13 05:41	2°♍35'55	2°10'38	inferior conj	14743 Apr 27 08:21	16°♌43'25	1°29'25
minimum elong	14742 May 13 03:32	2°♍43'00	2°09'11	minimum elong	14743 Apr 27 06:25	16°♌49'21	1°28'06
	14742 May 15 06:51	30°♌		morning rise	14743 May 03 02:44	10°♌59'37	
morning rise	14742 May 18 16:40	26°♌41'21		direct	14743 May 06 07:04	10°♌02'27	
direct	14742 May 22 07:50	25°♌25'37		morning max el	14743 May 12 19:57	13°♌31'17	18°32'40
morning max el	14742 May 29 09:40	29°♌18'16	19°20'55	desc. node	14743 May 25 04:37	0°♍10'41	
	14742 May 30 02:13	0°♍			14743 May 25 01:50	0°♍	
desc. node	14742 Jun 07 07:42	10°♍25'14		morning set	14743 Jun 02 20:24	13°♍42'04	
greatest brilliancy	14742 Jun 11 02:09	15°♍53'12	-0.7m		14743 Jun 13 06:05	0°♍	
	14742 Jun 20 10:17	0°♍		superior conj	14743 Jun 18 19:26	8°♍40'07	-2°10'56
morning set	14742 Jun 23 02:15	4°♍05'23		minimum elong	14743 Jun 18 15:17	8°♍23'58	2°11'50
max. Earth dist.	14742 Jul 05 18:15	23°♍45'46	1.45287 AU	max. Earth dist.	14743 Jun 18 13:23	8°♍16'34	1.45886 AU
					14743 Jul 02 09:49	0°♎	
superior conj	14742 Jul 09 09:13	29°♍29'16	-2°11'39	evening rise	14743 Jul 04 12:32	3°♎20'31	
minimum elong	14742 Jul 09 12:47	29°♍43'25	2°12'29	greatest brilliancy	14743 Jul 12 16:44	16°♎14'52	-0.8m
	14742 Jul 09 16:58	0°♎		asc. node	14743 Jul 19 07:19	26°♎14'16	
evening rise	14742 Jul 23 18:01	22°♎47'54			14743 Jul 22 01:04	0°♎	
	14742 Jul 28 02:32	0°♎		evening max el	14743 Jul 26 00:02	4°♎36'09	18°43'11
asc. node	14742 Aug 01 10:36	7°♎03'54		retrograde	14743 Aug 01 14:21	8°♎11'19	
evening max el	14742 Aug 11 11:40	20°♎52'16	18°13'54	evening set	14743 Aug 04 21:06	7°♎09'44	
retrograde	14742 Aug 17 20:18	24°♎14'18					

inferior conj	14743 Aug 10 11:47	1° \mathbb{M} 29'39	2°40'48	asc. node	14744 Jul 05 04:08	14° \mathcal{Q} 54'21	
minimum elong	14743 Aug 10 13:49	1° \mathbb{M} 23'18	2°39'49	evening max el	14744 Jul 08 07:53	18° \mathcal{Q} 25'45	19°29'09
	14743 Aug 11 16:34	30° $\mathcal{R}\mathcal{Q}$		retrograde	14744 Jul 15 12:01	22° \mathcal{Q} 26'18	
min. Earth dist.	14743 Aug 12 08:41	29° \mathcal{Q} 10'29	0.65926 AU	evening set	14744 Jul 19 04:21	21° \mathcal{Q} 07'40	
morning rise	14743 Aug 16 05:33	25° \mathcal{Q} 04'46		inferior conj	14744 Jul 24 13:17	15° \mathcal{Q} 14'15	3°02'01
desc. node	14743 Aug 21 02:38	22° \mathcal{Q} 33'43		minimum elong	14744 Jul 24 14:30	15° \mathcal{Q} 10'15	3°01'06
direct	14743 Aug 22 13:24	22° \mathcal{Q} 25'51		min. Earth dist.	14744 Jul 25 19:56	13° \mathcal{Q} 33'02	0.67401 AU
morning max el	14743 Sep 04 17:23	0° \mathbb{M} 13'31	26°42'53	morning rise	14744 Jul 30 00:05	8° \mathcal{Q} 48'59	
	14743 Sep 04 12:01	0° \mathbb{M}		direct	14744 Aug 04 22:26	6° \mathcal{Q} 14'05	
	14743 Sep 26 21:46	0° \mathcal{Q}		desc. node	14744 Aug 07 00:06	6° \mathcal{Q} 30'26	
morning set	14743 Oct 10 12:21	23° \mathcal{Q} 45'03		morning max el	14744 Aug 17 04:20	13° \mathcal{Q} 34'05	25°28'04
	14743 Oct 13 17:45	0° \mathbb{M}			14744 Aug 30 12:40	0° \mathbb{M}	
max. Earth dist.	14743 Oct 14 13:36	1° \mathbb{M} 38'29	1.34121 AU		14744 Sep 18 16:14	0° \mathcal{Q}	
asc. node	14743 Oct 15 09:16	3° \mathbb{M} 17'00		morning set	14744 Sep 22 02:44	6° \mathcal{Q} 05'34	
				max. Earth dist.	14744 Sep 25 16:49	12° \mathcal{Q} 42'07	1.36131 AU
superior conj	14743 Oct 19 06:59	11° \mathbb{M} 17'38	0°35'44	asc. node	14744 Oct 01 05:52	23° \mathcal{Q} 25'32	
minimum elong	14743 Oct 19 05:12	11° \mathbb{M} 08'22	0°36'00				
evening rise	14743 Oct 26 15:00	26° \mathbb{M} 48'07		superior conj	14744 Oct 01 22:17	24° \mathcal{Q} 47'18	0°06'19
	14743 Oct 28 03:42	0° \mathcal{X}		minimum elong	14744 Oct 01 21:53	24° \mathcal{Q} 45'19	0°06'34
evening max el	14743 Nov 15 09:59	29° \mathcal{X} 25'32	21°21'26	behind sun begin	14744 Oct 01 16:06	24° \mathcal{Q} 16'24	
	14743 Nov 16 00:19	0° \mathcal{Z}		behind sun end	14744 Oct 02 03:41	25° \mathcal{Q} 14'18	
desc. node	14743 Nov 16 23:05	0° \mathcal{Z} 51'19			14744 Oct 04 12:16	0° \mathbb{M}	
retrograde	14743 Nov 27 10:15	5° \mathcal{Z} 22'44		evening rise	14744 Oct 09 21:33	11° \mathbb{M} 02'26	
evening set	14743 Nov 30 05:43	5° \mathcal{Z} 04'29			14744 Oct 19 21:59	0° \mathcal{X}	
inferior conj	14743 Dec 09 01:04	1° \mathcal{Z} 12'27	-5°41'02	evening max el	14744 Oct 27 13:38	10° \mathcal{X} 11'48	19°59'47
minimum elong	14743 Dec 08 18:05	1° \mathcal{Z} 22'16	5°39'02	desc. node	14744 Nov 02 20:21	14° \mathcal{X} 34'47	
min. Earth dist.	14743 Dec 09 10:30	0° \mathcal{Z} 59'10	0.54447 AU	retrograde	14744 Nov 06 23:19	15° \mathcal{X} 22'46	
	14743 Dec 11 05:07	30° $\mathcal{R}\mathcal{X}$		evening set	14744 Nov 09 00:18	15° \mathcal{X} 11'43	
morning rise	14743 Dec 17 06:59	27° \mathcal{X} 22'49		inferior conj	14744 Nov 17 20:31	11° \mathcal{X} 13'00	-4°27'16
direct	14743 Dec 21 05:00	26° \mathcal{X} 49'37		minimum elong	14744 Nov 17 10:27	11° \mathcal{X} 28'12	4°23'24
	14743 Dec 30 08:05	0° \mathcal{Z}		min. Earth dist.	14744 Nov 19 17:53	10° \mathcal{X} 04'20	0.54973 AU
morning max el	14744 Jan 03 00:09	3° \mathcal{Z} 00'39	22°33'28	morning rise	14744 Nov 25 19:26	7° \mathcal{X} 03'44	
asc. node	14744 Jan 11 09:14	13° \mathcal{Z} 16'27		direct	14744 Nov 30 17:03	6° \mathcal{X} 11'16	
	14744 Jan 20 21:09	0° \approx		morning max el	14744 Dec 14 09:36	12° \mathcal{X} 57'57	24°22'56
morning set	14744 Jan 25 00:54	8° \approx 35'07			14744 Dec 27 10:10	0° \mathcal{Z}	
				asc. node	14744 Dec 28 06:25	1° \mathcal{Z} 24'33	
superior conj	14744 Feb 01 00:56	23° \approx 35'34	1°26'00	morning set	14745 Jan 08 12:52	23° \mathcal{Z} 18'53	
minimum elong	14744 Feb 01 02:56	23° \approx 46'12	1°26'30		14745 Jan 11 14:39	0° \approx	
	14744 Feb 04 02:04	0° \mathcal{X}					
max. Earth dist.	14744 Feb 04 15:58	1° \mathcal{X} 11'50	1.33832 AU	superior conj	14745 Jan 15 07:53	8° \approx 09'58	1°35'05
evening rise	14744 Feb 09 03:46	10° \mathcal{X} 12'25		minimum elong	14745 Jan 15 08:56	8° \approx 15'41	1°35'53
desc. node	14744 Feb 12 23:15	17° \mathcal{X} 26'06		max. Earth dist.	14745 Jan 17 14:46	13° \approx 08'11	1.32428 AU
	14744 Feb 20 03:28	0° \mathcal{Y}		evening rise	14745 Jan 22 19:15	24° \approx 00'37	
	14744 Mar 12 22:18	0° \mathcal{Z}			14745 Jan 25 19:40	0° \mathcal{X}	
evening max el	14744 Mar 14 22:24	2° \mathcal{Z} 01'23	27°06'55	desc. node	14745 Jan 29 19:50	7° \mathcal{X} 31'54	
retrograde	14744 Mar 28 09:13	9° \mathcal{Z} 30'55			14745 Feb 12 17:48	0° \mathcal{Y}	
evening set	14744 Apr 03 23:28	6° \mathcal{Z} 59'19		evening max el	14745 Feb 25 10:54	15° \mathcal{Y} 16'37	27°32'59
min. Earth dist.	14744 Apr 07 21:24	3° \mathcal{Z} 14'14	0.65440 AU	retrograde	14745 Mar 11 06:08	22° \mathcal{Y} 45'10	
asc. node	14744 Apr 08 05:55	2° \mathcal{Z} 50'38		evening set	14745 Mar 18 01:47	20° \mathcal{Y} 20'36	
inferior conj	14744 Apr 10 04:15	0° \mathcal{Z} 39'13	0°36'13	min. Earth dist.	14745 Mar 21 20:38	17° \mathcal{Y} 04'54	0.63554 AU
minimum elong	14744 Apr 10 03:18	0° \mathcal{Z} 41'57	0°35'26	inferior conj	14745 Mar 24 14:39	14° \mathcal{Y} 16'47	-0°29'30
	14744 Apr 10 18:10	30° $\mathcal{R}\mathcal{Y}$		minimum elong	14745 Mar 24 15:35	14° \mathcal{Y} 14'23	0°29'16
morning rise	14744 Apr 16 08:45	25° \mathcal{Y} 07'52		asc. node	14745 Mar 26 03:21	12° \mathcal{Y} 44'58	
direct	14744 Apr 19 03:22	24° \mathcal{Y} 26'30		morning rise	14745 Mar 31 07:49	9° \mathcal{Y} 00'17	
morning max el	14744 Apr 25 11:12	27° \mathcal{Y} 44'07	18°01'12	direct	14745 Apr 02 18:07	8° \mathcal{Y} 31'21	
	14744 Apr 27 13:26	0° \mathcal{Z}		morning max el	14745 Apr 09 04:47	11° \mathcal{Y} 49'06	17°47'00
desc. node	14744 May 11 01:24	20° \mathcal{Z} 15'43			14745 Apr 21 17:19	0° \mathcal{Z}	
morning set	14744 May 13 17:24	24° \mathcal{Z} 36'58		morning set	14745 Apr 25 17:08	6° \mathcal{Z} 48'32	
	14744 May 17 00:43	0° \mathbb{I}		desc. node	14745 Apr 27 22:06	10° \mathcal{Z} 34'43	
superior conj	14744 May 28 06:43	18° \mathbb{I} 00'11	-1°50'38	superior conj	14745 May 08 10:35	28° \mathcal{Z} 08'52	-1°16'44
minimum elong	14744 May 27 21:57	17° \mathbb{I} 25'36	1°50'52	minimum elong	14745 May 08 03:09	27° \mathcal{Z} 38'35	1°16'37
max. Earth dist.	14744 May 31 09:24	22° \mathbb{I} 53'22	1.45740 AU		14745 May 09 13:56	0° \mathbb{I}	
	14744 Jun 04 22:54	0° \mathcal{Z}		max. Earth dist.	14745 May 14 04:14	7° \mathbb{I} 22'14	1.44872 AU
evening rise	14744 Jun 13 09:03	13° \mathcal{Z} 00'56		evening rise	14745 May 23 19:57	22° \mathbb{I} 24'46	
	14744 Jun 24 12:22	0° \mathcal{Q}			14745 May 28 19:45	0° \mathcal{Z}	
greatest brilliancy	14744 Jun 26 13:48	3° \mathcal{Q} 03'50	-0.7m		14745 Jun 19 06:42	0° \mathcal{Q}	

evening max el	14745 Jun 21 09:59	2°♎17'17	20°29'57			14746 May 22 07:06	0°♊	
asc. node	14745 Jun 22 01:01	2°♎54'00		evening max el	14746 Jun 04 06:17	16°♊08'50	21°42'36	
retrograde	14745 Jun 29 10:54	6°♎53'54		asc. node	14746 Jun 08 22:01	19°♊59'54		
evening set	14745 Jul 03 13:34	5°♎17'48		retrograde	14746 Jun 13 09:18	21°♊28'39		
	14745 Jul 08 05:46	30°♋♊		evening set	14746 Jun 17 22:53	19°♊35'47		
inferior conj	14745 Jul 08 19:42	29°♊12'19	3°10'14	inferior conj	14746 Jun 23 04:47	13°♊19'39	3°07'06	
minimum elong	14745 Jul 08 19:55	29°♊11'33	3°09'18	minimum elong	14746 Jun 23 04:03	13°♊22'13	3°06'02	
min. Earth dist.	14745 Jul 09 12:25	28°♊14'52	0.68420 AU	min. Earth dist.	14746 Jun 23 08:06	13°♊08'05	0.68951 AU	
morning rise	14745 Jul 14 01:58	22°♊50'32		morning rise	14746 Jun 28 09:02	7°♊03'43		
direct	14745 Jul 19 12:46	20°♊27'06		direct	14746 Jul 03 07:22	4°♊56'56		
desc. node	14745 Jul 24 21:30	22°♊16'43		desc. node	14746 Jul 11 18:48	9°♊26'53		
morning max el	14745 Jul 30 14:46	27°♊04'42	24°01'23	morning max el	14746 Jul 13 02:42	10°♊43'55	22°32'13	
	14745 Aug 02 08:11	0°♎			14746 Jul 28 08:33	0°♎		
	14745 Aug 24 03:11	0°♐		morning set	14746 Aug 15 18:02	28°♎03'54		
morning set	14745 Sep 03 21:57	17°♐34'46			14746 Aug 16 22:26	0°♐		
max. Earth dist.	14745 Sep 07 15:14	24°♐03'49	1.38451 AU	max. Earth dist.	14746 Aug 20 15:31	6°♐10'51	1.40816 AU	
	14745 Sep 10 22:17	0°♊						
				superior conj	14746 Aug 28 11:49	19°♐51'13	-1°03'18	
superior conj	14745 Sep 15 01:17	7°♊41'39	-0°27'27	minimum elong	14746 Aug 28 16:43	20°♐13'16	1°02'49	
minimum elong	14745 Sep 15 03:12	7°♊50'49	0°27'04		14746 Sep 03 00:43	0°♊		
asc. node	14745 Sep 18 02:25	13°♊33'05		asc. node	14746 Sep 04 22:58	3°♊36'20		
evening rise	14745 Sep 23 22:15	24°♊59'53		evening rise	14746 Sep 07 13:56	8°♊32'41		
	14745 Sep 26 11:37	0°♌			14746 Sep 20 00:57	0°♌		
evening max el	14745 Oct 10 07:23	21°♌47'09	18°59'46	evening max el	14746 Sep 23 12:11	4°♌07'41	18°21'34	
retrograde	14745 Oct 19 02:48	26°♌12'56		retrograde	14746 Oct 01 01:48	7°♌58'20		
evening set	14745 Oct 20 23:48	26°♌01'41		evening set	14746 Oct 03 02:50	7°♌42'13		
desc. node	14745 Oct 20 17:43	26°♌04'29		desc. node	14746 Oct 07 15:11	5°♌28'02		
inferior conj	14745 Oct 29 08:18	21°♌45'33	-2°43'32	inferior conj	14746 Oct 10 17:48	3°♌04'58	-0°59'28	
minimum elong	14745 Oct 29 01:27	21°♌57'26	2°40'10	minimum elong	14746 Oct 10 15:33	3°♌09'34	0°58'05	
min. Earth dist.	14745 Nov 01 05:26	19°♌45'48	0.56346 AU	min. Earth dist.	14746 Oct 14 00:08	0°♌26'23	0.58312 AU	
morning rise	14745 Nov 06 00:18	17°♌02'13			14746 Oct 14 13:56	30°♋♊		
direct	14745 Nov 11 17:19	15°♌45'41		morning rise	14746 Oct 18 00:47	27°♊44'24		
morning max el	14745 Nov 25 20:34	23°♌00'13	26°03'45	direct	14746 Oct 24 07:36	26°♊01'04		
	14745 Dec 02 03:00	0°♊			14746 Nov 03 09:30	0°♌		
asc. node	14745 Dec 15 03:29	20°♊12'27		morning max el	14746 Nov 07 14:57	3°♌38'12	27°17'59	
	14745 Dec 20 05:04	0°♊			14746 Nov 26 19:51	0°♊		
morning set	14745 Dec 23 23:57	7°♊55'55		asc. node	14746 Dec 02 00:28	9°♊29'47		
				morning set	14746 Dec 08 08:28	22°♊22'01		
superior conj	14745 Dec 30 18:04	22°♊50'05	1°37'58		14746 Dec 11 20:43	0°♊		
minimum elong	14745 Dec 30 18:03	22°♊49'56	1°38'57					
max. Earth dist.	14745 Dec 31 19:47	25°♊12'54	1.31513 AU	superior conj	14746 Dec 15 05:36	7°♊30'42	1°34'53	
	14746 Jan 02 23:54	0°♌		minimum elong	14746 Dec 15 04:33	7°♊24'52	1°35'51	
evening rise	14746 Jan 06 18:49	8°♌07'17		max. Earth dist.	14746 Dec 15 03:47	7°♊20'35	1.31113 AU	
desc. node	14746 Jan 16 16:30	27°♌17'10		evening rise	14746 Dec 22 00:09	22°♊26'54		
	14746 Jan 18 05:54	0°♋			14746 Dec 25 15:08	0°♌		
evening max el	14746 Feb 07 19:54	27°♋55'01	27°27'57	desc. node	14747 Jan 03 13:17	16°♌34'06		
	14746 Feb 10 03:52	0°♐			14747 Jan 12 10:43	0°♋		
retrograde	14746 Feb 21 18:51	5°♐16'15		evening max el	14747 Jan 20 22:35	9°♋45'01	26°48'12	
evening set	14746 Feb 28 15:07	3°♐06'01		retrograde	14747 Feb 03 22:10	16°♋56'33		
min. Earth dist.	14746 Mar 04 09:51	0°♐13'49	0.61427 AU	evening set	14747 Feb 10 12:11	15°♋07'50		
	14746 Mar 04 16:12	30°♋♋		min. Earth dist.	14747 Feb 14 12:29	12°♋29'20	0.59214 AU	
inferior conj	14746 Mar 07 12:11	27°♋26'35	-1°47'14	inferior conj	14747 Feb 17 17:12	9°♋59'03	-3°13'16	
minimum elong	14746 Mar 07 16:00	27°♋17'57	1°45'32	minimum elong	14747 Feb 18 00:22	9°♋44'59	3°10'14	
asc. node	14746 Mar 13 00:49	23°♋13'23		morning rise	14747 Feb 25 15:51	5°♋21'26		
morning rise	14746 Mar 14 19:57	22°♋28'03		direct	14747 Feb 27 16:01	5°♋06'44		
direct	14746 Mar 16 23:46	22°♋07'58		asc. node	14747 Feb 27 22:17	5°♋06'59		
morning max el	14746 Mar 23 21:33	25°♋36'42	17°50'44	morning max el	14747 Mar 07 10:00	8°♋57'12	18°13'38	
	14746 Mar 27 14:32	0°♐			14747 Mar 21 00:53	0°♐		
morning set	14746 Apr 08 13:53	19°♐58'36		morning set	14747 Mar 23 01:51	3°♐49'43		
	14746 Apr 14 04:32	0°♋						
desc. node	14746 Apr 14 18:41	1°♋02'24		superior conj	14747 Apr 01 15:58	21°♐38'33	-0°00'16	
				minimum elong	14747 Apr 01 15:56	21°♐38'21	0°00'31	
superior conj	14746 Apr 19 13:55	9°♋22'37	-0°37'47	behind sun begin	14747 Apr 01 08:26	21°♐04'32		
minimum elong	14746 Apr 19 10:25	9°♋07'42	0°37'48	behind sun end	14747 Apr 01 23:25	22°♐12'04		
max. Earth dist.	14746 Apr 26 19:50	21°♋28'01	1.43363 AU	desc. node	14747 Apr 01 15:12	21°♐35'05		
	14746 May 02 03:41	0°♐			14747 Apr 06 09:22	0°♋		
evening rise	14746 May 03 13:27	2°♐12'30		max. Earth dist.	14747 Apr 09 06:33	4°♋56'11	1.41377 AU	

evening rise	14747 Apr 14 00:48	12°♄49'40			14748 Mar 28 17:46	0°♄	
	14747 Apr 25 01:21	0°♄			14748 Apr 17 19:12	0°♄	
	14747 May 17 22:00	0°♄		evening max el	14748 Apr 29 12:01	13°♄54'05	24°23'23
evening max el	14747 May 17 22:11	0°♄00'27	23°02'27	retrograde	14748 May 10 22:49	20°♄36'24	
asc. node	14747 May 26 19:08	5°♄55'25		asc. node	14748 May 12 16:22	20°♄23'22	
retrograde	14747 May 28 05:41	6°♄04'38		evening set	14748 May 16 11:18	18°♄16'20	
evening set	14747 Jun 02 06:40	3°♄56'45		min. Earth dist.	14748 May 21 00:50	13°♄01'46	0.68575 AU
	14747 Jun 05 19:18	30°♄11		inferior conj	14748 May 21 23:11	11°♄46'32	2°29'21
min. Earth dist.	14747 Jun 07 04:56	28°♄05'35	0.68999 AU	minimum elong	14748 May 21 21:09	11°♄53'25	2°27'56
inferior conj	14747 Jun 07 14:35	27°♄32'10	2°53'24	morning rise	14748 May 27 07:07	5°♄46'16	
minimum elong	14747 Jun 07 13:03	27°♄37'28	2°52'09	direct	14748 May 31 04:49	4°♄19'10	
morning rise	14747 Jun 12 19:22	21°♄23'28		morning max el	14748 Jun 07 17:53	8°♄32'03	19°55'58
direct	14747 Jun 17 05:07	19°♄36'09		desc. node	14748 Jun 14 13:02	16°♄36'08	
morning max el	14747 Jun 25 18:57	24°♄32'27	21°08'26		14748 Jun 23 22:55	0°♄	
desc. node	14747 Jun 28 15:58	27°♄38'46		morning set	14748 Jul 04 18:02	16°♄19'36	
	14747 Jun 30 15:15	0°♄			14748 Jul 13 13:01	0°♄	
	14747 Jul 21 17:19	0°♄		max. Earth dist.	14748 Jul 15 09:06	2°♄54'18	1.44611 AU
morning set	14747 Jul 26 14:01	7°♄31'10					
max. Earth dist.	14747 Aug 02 21:09	19°♄09'24	1.42947 AU	superior conj	14748 Jul 20 15:29	11°♄20'38	-2°03'15
	14747 Aug 09 09:59	0°♄		minimum elong	14748 Jul 20 21:57	11°♄46'53	2°03'41
					14748 Jul 31 21:21	0°♄	
superior conj	14747 Aug 10 01:25	1°♄05'28	-1°37'18	evening rise	14748 Aug 03 00:27	3°♄36'59	
minimum elong	14747 Aug 10 08:43	1°♄36'31	1°37'03	asc. node	14748 Aug 08 16:11	13°♄12'51	
evening rise	14747 Aug 21 16:21	21°♄29'12			14748 Aug 20 04:40	0°♄	
asc. node	14747 Aug 22 19:32	23°♄30'59		evening max el	14748 Aug 20 14:20	0°♄24'26	18°05'01
	14747 Aug 26 11:03	0°♄		retrograde	14748 Aug 26 23:44	3°♄44'46	
evening max el	14747 Sep 06 23:48	17°♄03'15	18°03'47	evening set	14748 Aug 29 16:28	3°♄07'24	
retrograde	14747 Sep 13 18:12	20°♄31'53			14748 Sep 02 21:25	30°♄11	
evening set	14747 Sep 16 02:31	20°♄06'54		inferior conj	14748 Sep 04 23:09	27°♄51'53	1°34'58
inferior conj	14747 Sep 22 23:58	15°♄09'29	0°28'18	minimum elong	14748 Sep 05 01:23	27°♄45'52	1°34'05
minimum elong	14747 Sep 23 00:51	15°♄07'23	0°28'06	min. Earth dist.	14748 Sep 07 17:28	24°♄55'25	0.62842 AU
desc. node	14747 Sep 24 12:41	13°♄42'17		desc. node	14748 Sep 10 10:12	22°♄23'48	
min. Earth dist.	14747 Sep 26 03:57	12°♄11'20	0.60572 AU	morning rise	14748 Sep 11 08:07	21°♄40'53	
morning rise	14747 Sep 29 20:05	9°♄18'31		direct	14748 Sep 18 00:17	19°♄13'16	
direct	14747 Oct 06 10:42	7°♄09'49		morning max el	14748 Oct 02 00:46	27°♄13'36	27°53'10
morning max el	14747 Oct 20 17:05	15°♄03'14	27°55'05		14748 Oct 04 15:53	0°♄	
	14747 Nov 01 20:50	0°♄			14748 Oct 25 13:47	0°♄	
asc. node	14747 Nov 18 21:20	29°♄07'55		asc. node	14748 Nov 04 18:08	19°♄00'45	
	14747 Nov 19 07:49	0°♄		morning set	14748 Nov 05 09:51	20°♄20'07	
morning set	14747 Nov 22 12:30	6°♄31'48			14748 Nov 10 00:55	0°♄	
max. Earth dist.	14747 Nov 28 10:55	19°♄21'25	1.31245 AU	max. Earth dist.	14748 Nov 10 13:25	1°♄07'07	1.31931 AU
superior conj	14747 Nov 29 16:34	22°♄06'10	1°25'53	superior conj	14748 Nov 13 01:05	6°♄31'15	1°11'01
minimum elong	14747 Nov 29 14:43	21°♄55'53	1°26'42	minimum elong	14748 Nov 12 22:48	6°♄18'46	1°11'35
	14747 Dec 03 05:40	0°♄		evening rise	14748 Nov 19 19:59	21°♄23'59	
evening rise	14747 Dec 06 09:10	6°♄53'57			14748 Nov 23 22:16	0°♄	
	14747 Dec 18 05:37	0°♄		desc. node	14748 Dec 07 07:13	22°♄55'20	
desc. node	14747 Dec 21 10:12	5°♄11'46			14748 Dec 13 05:43	0°♄	
evening max el	14748 Jan 02 17:02	20°♄42'10	25°35'30	evening max el	14748 Dec 14 04:22	0°♄55'56	23°59'23
retrograde	14748 Jan 16 14:36	27°♄42'25		retrograde	14748 Dec 27 17:50	7°♄40'10	
evening set	14748 Jan 22 13:06	26°♄21'21		evening set	14749 Jan 01 14:42	6°♄48'34	
min. Earth dist.	14748 Jan 27 05:41	23°♄41'59	0.57138 AU	min. Earth dist.	14749 Jan 07 15:47	3°♄50'29	0.55498 AU
inferior conj	14748 Jan 30 02:26	21°♄45'05	-4°37'45	inferior conj	14749 Jan 09 14:49	2°♄39'53	-5°41'22
minimum elong	14748 Jan 30 11:34	21°♄29'33	4°34'33	minimum elong	14749 Jan 09 21:11	2°♄30'19	5°39'35
morning rise	14748 Feb 07 12:50	17°♄29'20			14749 Jan 14 11:08	30°♄30	
direct	14748 Feb 09 14:35	17°♄16'19		morning rise	14749 Jan 18 05:25	28°♄42'52	
asc. node	14748 Feb 14 19:43	18°♄44'24		direct	14749 Jan 20 17:39	28°♄26'50	
morning max el	14748 Feb 18 14:05	21°♄39'19	18°57'32		14749 Jan 26 13:45	0°♄	
	14748 Feb 25 01:39	0°♄		morning max el	14749 Jan 31 05:36	3°♄30'38	20°04'18
morning set	14748 Mar 06 00:24	18°♄08'24		asc. node	14749 Jan 31 17:07	3°♄59'05	
	14748 Mar 12 01:23	0°♄			14749 Feb 16 21:38	0°♄	
				morning set	14749 Feb 18 05:51	2°♄43'20	
superior conj	14748 Mar 14 12:41	4°♄45'03	0°32'18				
minimum elong	14748 Mar 14 14:38	4°♄54'22	0°32'00	superior conj	14749 Feb 25 23:27	18°♄28'38	0°58'27
desc. node	14748 Mar 18 11:44	12°♄09'22		minimum elong	14749 Feb 26 02:05	18°♄41'49	0°58'22
max. Earth dist.	14748 Mar 21 13:15	17°♄41'11	1.39136 AU		14749 Mar 03 21:45	0°♄	
evening rise	14748 Mar 25 09:31	24°♄23'06		max. Earth dist.	14749 Mar 03 19:54	29°♄51'18	1.36888 AU

desc. node	14749 Mar 05 08:15	2° Υ 40'59		evening rise	14750 Feb 18 10:38	19° Υ 48'39	
evening rise	14749 Mar 07 13:55	6° Υ 45'53		desc. node	14750 Feb 20 04:49	23° Υ 06'18	
	14749 Mar 21 14:11	0° Υ			14750 Feb 24 00:31	0° Υ	
evening max el	14749 Apr 12 01:37	27° Υ 47'21	25°38'29		14750 Mar 15 14:37	0° Υ	
	14749 Apr 14 10:58	0° Π		evening max el	14750 Mar 25 15:28	11° Υ 33'55	26°40'12
retrograde	14749 Apr 24 11:25	4° Π 56'43		retrograde	14750 Apr 07 18:33	18° Υ 58'28	
asc. node	14749 Apr 29 13:41	3° Π 09'57		evening set	14750 Apr 14 04:15	16° Υ 26'19	
evening set	14749 Apr 30 11:06	2° Π 28'13		asc. node	14750 Apr 16 11:02	14° Υ 18'57	
	14749 May 02 22:27	30° Υ 8		min. Earth dist.	14750 Apr 18 04:58	12° Υ 22'31	0.66385 AU
min. Earth dist.	14749 May 04 17:34	27° Υ 49'42	0.67696 AU	inferior conj	14750 Apr 20 04:42	10° Υ 00'42	1°08'21
inferior conj	14749 May 06 04:37	25° Υ 57'40	1°54'34	minimum elong	14750 Apr 20 03:05	10° Υ 05'32	1°07'12
minimum elong	14749 May 06 02:29	26° Υ 04'31	1°53'09	morning rise	14750 Apr 26 03:02	4° Υ 21'48	
morning rise	14749 May 11 18:23	20° Υ 07'12		direct	14750 Apr 29 03:13	3° Υ 31'32	
direct	14749 May 15 04:50	18° Υ 59'32		morning max el	14750 May 05 12:47	6° Υ 53'48	18°17'08
morning max el	14749 May 22 00:10	22° Υ 40'38	18°58'19	desc. node	14750 May 19 06:50	26° Υ 00'28	
	14749 May 28 02:58	0° Π			14750 May 21 19:13	0° Π	
desc. node	14749 Jun 01 09:59	6° Π 06'17		morning set	14750 May 25 06:04	5° Π 30'09	
greatest brilliancy	14749 Jun 04 07:00	10° Π 23'35	-0.7m				
morning set	14749 Jun 14 01:10	25° Π 22'03		superior conj	14750 Jun 09 17:00	29° Π 53'40	-2°04'29
	14749 Jun 17 00:56	0° Ξ		minimum elong	14750 Jun 09 10:08	29° Π 26'51	2°05'07
max. Earth dist.	14749 Jun 28 02:24	17° Ξ 12'56	1.45634 AU		14750 Jun 09 18:37	0° Ξ	
				max. Earth dist.	14750 Jun 10 22:38	1° Ξ 49'20	1.45922 AU
superior conj	14749 Jun 30 08:41	20° Ξ 45'46	-2°13'51	evening rise	14750 Jun 25 17:24	24° Ξ 51'29	
minimum elong	14749 Jun 30 09:07	20° Ξ 47'25	2°14'50		14750 Jun 29 00:32	0° Ω	
	14749 Jul 06 05:01	0° Ω		greatest brilliancy	14750 Jul 06 04:58	11° Ω 06'26	-0.8m
evening rise	14749 Jul 15 09:13	14° Ω 44'23		asc. node	14750 Jul 13 09:36	21° Ω 34'16	
	14749 Jul 24 20:37	0° Π		evening max el	14750 Jul 18 14:58	27° Ω 48'31	19°00'50
asc. node	14749 Jul 26 12:52	2° Π 36'15			14750 Jul 21 04:45	0° Π	
evening max el	14749 Aug 04 04:20	14° Π 02'07	18°24'20	retrograde	14750 Jul 25 10:04	1° Π 32'50	
retrograde	14749 Aug 10 14:12	17° Π 27'46		evening set	14750 Jul 28 20:55	0° Π 23'51	
evening set	14749 Aug 13 15:47	16° Π 35'24			14750 Jul 29 10:18	30° Υ 8	
inferior conj	14749 Aug 19 11:16	11° Π 03'47	2°21'44	inferior conj	14750 Aug 03 08:44	24° Ω 37'47	2°51'31
minimum elong	14749 Aug 19 13:36	10° Π 56'51	2°20'45	minimum elong	14750 Aug 03 10:28	24° Ω 32'16	2°50'35
min. Earth dist.	14749 Aug 21 16:20	8° Π 27'14	0.64897 AU	min. Earth dist.	14750 Aug 04 23:28	22° Ω 34'07	0.66605 AU
morning rise	14749 Aug 25 10:06	4° Π 42'04		morning rise	14750 Aug 08 23:17	18° Ω 12'22	
desc. node	14749 Aug 28 07:42	2° Π 51'59		direct	14750 Aug 15 03:22	15° Ω 34'26	
direct	14749 Aug 31 22:17	2° Π 04'42		desc. node	14750 Aug 15 05:11	15° Ω 34'27	
morning max el	14749 Sep 14 11:22	10° Π 00'15	27°16'43	morning max el	14750 Aug 27 22:40	23° Ω 11'32	26°13'16
	14749 Sep 30 05:21	0° Ξ			14750 Sep 02 23:43	0° Π	
	14749 Oct 18 00:01	0° Π			14750 Sep 23 13:18	0° Ξ	
morning set	14749 Oct 19 21:52	3° Π 40'51		morning set	14750 Oct 02 21:13	16° Ξ 25'28	
asc. node	14749 Oct 22 14:50	9° Π 03'15		max. Earth dist.	14750 Oct 06 16:47	23° Ξ 41'12	1.34926 AU
max. Earth dist.	14749 Oct 24 07:58	12° Π 32'48	1.33170 AU	asc. node	14750 Oct 09 11:27	29° Ξ 10'22	
					14750 Oct 09 21:20	0° Π	
superior conj	14749 Oct 28 05:00	20° Π 40'27	0°50'18				
minimum elong	14749 Oct 28 02:50	20° Π 28'54	0°50'38	superior conj	14750 Oct 12 01:42	4° Π 26'06	0°23'54
	14749 Nov 01 13:05	0° Υ		minimum elong	14750 Oct 12 00:24	4° Π 19'24	0°24'07
evening rise	14749 Nov 04 06:46	5° Υ 52'32		evening rise	14750 Oct 19 15:28	20° Π 13'27	
	14749 Nov 17 01:02	0° Υ			14750 Oct 24 11:10	0° Υ	
desc. node	14749 Nov 24 04:20	9° Υ 25'37		evening max el	14750 Nov 07 10:31	21° Υ 14'58	20°44'12
evening max el	14749 Nov 25 15:04	10° Υ 54'49	22°16'40	desc. node	14750 Nov 11 01:34	24° Υ 17'14	
retrograde	14749 Dec 08 08:32	17° Υ 12'56		retrograde	14750 Nov 18 18:53	26° Υ 53'31	
evening set	14749 Dec 11 21:26	16° Υ 45'22		evening set	14750 Nov 21 04:45	26° Υ 39'23	
inferior conj	14749 Dec 20 10:50	12° Υ 51'43	-5°58'41	inferior conj	14750 Nov 30 02:06	22° Υ 45'43	-5°15'28
minimum elong	14749 Dec 20 08:45	12° Υ 54'38	5°57'35	minimum elong	14750 Nov 29 16:51	22° Υ 59'01	5°12'31
min. Earth dist.	14749 Dec 19 21:53	13° Υ 09'52	0.54580 AU	min. Earth dist.	14750 Dec 01 03:34	22° Υ 09'08	0.54560 AU
morning rise	14749 Dec 28 21:07	9° Υ 04'30		morning rise	14750 Dec 08 04:58	18° Υ 50'28	
direct	14750 Jan 01 05:38	8° Υ 39'19		direct	14750 Dec 12 13:20	18° Υ 09'57	
morning max el	14750 Jan 13 06:15	14° Υ 26'05	21°33'43	morning max el	14750 Dec 25 18:59	24° Υ 36'18	23°19'50
asc. node	14750 Jan 18 14:26	20° Υ 34'48			14750 Dec 30 16:41	0° Υ	
	14750 Jan 24 16:38	0° \approx		asc. node	14751 Jan 05 11:39	8° Υ 13'15	
morning set	14750 Feb 02 15:30	17° \approx 26'45			14751 Jan 17 02:18	0° \approx	
	14750 Feb 08 14:07	0° Υ		morning set	14751 Jan 18 03:08	2° \approx 11'41	
superior conj	14750 Feb 09 20:26	2° Υ 38'47	1°17'51	superior conj	14751 Jan 25 00:28	17° \approx 06'10	1°30'37
minimum elong	14750 Feb 09 22:50	2° Υ 51'17	1°18'07	minimum elong	14751 Jan 25 02:06	17° \approx 14'54	1°31'15
max. Earth dist.	14750 Feb 14 07:11	11° Υ 44'30	1.34853 AU	max. Earth dist.	14751 Jan 28 01:41	23° \approx 36'25	1.33183 AU

	14751 Jan 31 03:53	0° H			14751 Dec 01 08:20	0° X	
evening rise	14751 Feb 01 20:07	3° H 21'54		morning max el	14751 Dec 07 04:15	4° X 31'45	25°08'03
desc. node	14751 Feb 07 01:24	13° H 20'27		asc. node	14751 Dec 23 08:47	26° X 39'19	
	14751 Feb 16 20:17	0° Y			14751 Dec 25 05:24	0° Z	
evening max el	14751 Mar 08 04:46	25° Y 03'14	27°21'18	morning set	14752 Jan 02 14:55	16° Z 53'04	
	14751 Mar 14 07:34	0° Z			14752 Jan 08 14:17	0° Z	
retrograde	14751 Mar 21 19:27	2° Z 32'59					
evening set	14751 Mar 28 12:41	0° Z 03'17		superior conj	14752 Jan 09 09:04	1° Z 43'43	1°37'03
	14751 Mar 28 14:26	30° R Y		minimum elong	14752 Jan 09 09:39	1° Z 47'00	1°37'57
min. Earth dist.	14751 Apr 01 08:59	26° Y 31'34	0.64681 AU	max. Earth dist.	14752 Jan 11 03:18	5° Z 35'46	1.31974 AU
asc. node	14751 Apr 03 08:26	24° Y 23'23		evening rise	14752 Jan 16 15:20	17° Z 18'21	
inferior conj	14751 Apr 03 20:54	23° Y 49'22	0°09'53		14752 Jan 23 02:44	0° H	
minimum elong	14751 Apr 03 20:37	23° Y 50'08	0°09'28	desc. node	14752 Jan 24 22:03	3° H 18'11	
transit middle	14751 Apr 03 20:37	23° Y 50'08	0°09'28		14752 Feb 11 09:20	0° Y	
transit begin	14751 Apr 03 18:09	23° Y 56'52		evening max el	14752 Feb 18 15:50	8° Y 03'23	27°34'50
transit end	14751 Apr 03 23:06	23° Y 43'25		retrograde	14752 Mar 03 13:14	15° Y 30'13	
morning rise	14751 Apr 10 06:31	18° Y 24'15		evening set	14752 Mar 10 09:53	13° Y 10'28	
direct	14751 Apr 12 21:30	17° Y 48'32		min. Earth dist.	14752 Mar 14 04:03	10° Y 05'52	0.62668 AU
morning max el	14751 Apr 19 05:26	21° Y 04'30	17°53'03	inferior conj	14752 Mar 17 02:14	7° Y 15'55	-1°01'09
	14751 Apr 26 03:58	0° Z		minimum elong	14752 Mar 17 04:17	7° Y 10'56	1°00'20
desc. node	14751 May 06 03:35	16° Z 12'02		asc. node	14752 Mar 20 05:54	4° Y 24'01	
morning set	14751 May 06 14:58	16° Z 59'23		morning rise	14752 Mar 24 01:30	2° Y 07'02	
	14751 May 14 12:12	0° H		direct	14752 Mar 26 08:41	1° Y 42'25	
				morning max el	14752 Apr 01 23:09	5° Y 03'34	17°46'22
superior conj	14751 May 20 09:54	9° H 30'56	-1°37'23	morning set	14752 Apr 18 00:23	29° Y 37'49	
minimum elong	14751 May 20 01:06	8° H 55'52	1°37'24		14752 Apr 18 05:28	0° Z	
max. Earth dist.	14751 May 24 18:48	16° H 26'06	1.45455 AU	desc. node	14752 Apr 22 00:14	6° Z 35'06	
	14751 Jun 02 12:12	0° Z					
evening rise	14751 Jun 05 07:56	4° Z 20'00		superior conj	14752 Apr 29 23:31	20° Z 07'06	-1°00'23
greatest brilliancy	14751 Jun 20 00:07	26° Z 22'30	-0.6m	minimum elong	14752 Apr 29 17:41	19° Z 42'50	1°00'16
	14751 Jun 22 12:55	0° H			14752 May 06 00:45	0° H	
asc. node	14751 Jun 30 06:26	9° H 58'35		max. Earth dist.	14752 May 06 12:05	0° H 45'24	1.44293 AU
evening max el	14751 Jul 01 20:23	11° H 38'59	19°53'19	evening rise	14752 May 14 19:43	13° H 49'04	
retrograde	14751 Jul 09 08:37	15° H 54'02			14752 May 25 13:21	0° Z	
evening set	14751 Jul 13 05:15	14° H 27'52		evening max el	14752 Jun 13 19:49	25° Z 30'08	20°59'39
inferior conj	14751 Jul 18 12:38	8° H 28'53	3°07'00	asc. node	14752 Jun 16 03:23	27° Z 37'10	
minimum elong	14751 Jul 18 13:26	8° H 26'11	3°06'05		14752 Jun 20 01:31	0° H	
min. Earth dist.	14751 Jul 19 13:13	7° H 06'01	0.67886 AU	retrograde	14752 Jun 22 07:36	0° H 25'10	
morning rise	14751 Jul 23 21:12	2° H 04'36			14752 Jun 24 11:05	30° R Z	
	14751 Jul 27 04:23	30° R Z		evening set	14752 Jun 26 14:44	28° Z 41'57	
direct	14751 Jul 29 14:39	29° Z 34'06		inferior conj	14752 Jul 01 20:28	22° Z 31'35	3°10'15
	14751 Aug 01 04:23	0° H		minimum elong	14752 Jul 01 20:16	22° Z 32'16	3°09'15
desc. node	14751 Aug 02 02:36	0° H 20'50		min. Earth dist.	14752 Jul 02 07:27	21° Z 53'27	0.68701 AU
morning max el	14751 Aug 10 09:32	6° H 37'55	24°52'10	morning rise	14752 Jul 07 01:32	16° Z 11'48	
	14751 Aug 28 13:54	0° H		direct	14752 Jul 12 07:01	13° Z 54'53	
morning set	14751 Sep 15 03:59	28° H 25'22		desc. node	14752 Jul 18 23:56	16° Z 45'31	
	14751 Sep 16 01:20	0° Z		morning max el	14752 Jul 22 20:19	20° Z 12'18	23°23'11
max. Earth dist.	14751 Sep 18 17:27	4° Z 49'42	1.37091 AU		14752 Jul 31 04:56	0° H	
					14752 Aug 20 18:17	0° H	
superior conj	14751 Sep 25 12:11	17° Z 41'19	-0°07'36	morning set	14752 Aug 26 13:45	9° H 29'50	
minimum elong	14751 Sep 25 12:39	17° Z 43'39	0°07'18	max. Earth dist.	14752 Aug 30 15:21	16° H 25'35	1.39465 AU
behind sun begin	14751 Sep 25 06:44	17° Z 14'43					
behind sun end	14751 Sep 25 18:34	18° Z 12'39		superior conj	14752 Sep 07 08:40	0° Z 17'17	-0°42'37
asc. node	14751 Sep 26 08:02	19° Z 18'47		minimum elong	14752 Sep 07 11:49	0° Z 31'56	0°42'10
	14751 Oct 01 16:07	0° H			14752 Sep 07 04:56	0° Z	
evening rise	14751 Oct 03 19:51	4° H 21'17		asc. node	14752 Sep 12 04:36	9° Z 24'46	
	14751 Oct 18 17:07	0° X		evening rise	14752 Sep 16 17:08	18° Z 08'49	
evening max el	14751 Oct 20 20:12	2° X 21'08	19°31'32		14752 Sep 22 23:58	0° H	
desc. node	14751 Oct 28 22:52	7° X 04'59		evening max el	14752 Oct 02 19:10	14° H 16'35	18°40'59
retrograde	14751 Oct 30 13:18	7° X 12'39		retrograde	14752 Oct 11 00:44	18° H 25'45	
evening set	14751 Nov 01 10:56	7° X 02'18		evening set	14752 Oct 12 22:44	18° H 13'02	
inferior conj	14751 Nov 10 03:20	2° X 56'54	-3°45'02	desc. node	14752 Oct 14 20:15	17° H 37'07	
minimum elong	14751 Nov 09 18:10	3° X 11'34	3°41'03	inferior conj	14752 Oct 21 00:08	13° H 48'28	-1°58'05
min. Earth dist.	14751 Nov 12 12:29	1° X 25'33	0.55461 AU	minimum elong	14752 Oct 20 19:18	13° H 57'26	1°55'32
	14751 Nov 14 22:17	30° R H		min. Earth dist.	14752 Oct 24 03:05	11° H 29'50	0.57124 AU
morning rise	14751 Nov 17 23:25	28° H 33'57		morning rise	14752 Oct 28 12:32	8° H 48'48	
direct	14751 Nov 23 05:36	27° H 31'58		direct	14752 Nov 03 12:15	7° H 20'36	

morning max el	14752 Nov 17 17:58	14° \mathbb{M} 46'17	26°39'24	direct	14753 Oct 16 08:26	17° \mathbb{L} 58'00	
	14752 Nov 29 23:17	0° \mathbb{A}		morning max el	14753 Oct 30 15:30	25° \mathbb{L} 42'28	27°38'38
asc. node	14752 Dec 09 05:50	15° \mathbb{A} 40'48			14753 Nov 03 15:44	0° \mathbb{M}	
	14752 Dec 16 09:02	0° \mathbb{B}			14753 Nov 23 10:12	0° \mathbb{A}	
morning set	14752 Dec 17 01:09	1° \mathbb{B} 26'08		asc. node	14753 Nov 26 02:47	5° \mathbb{A} 07'43	
				morning set	14753 Dec 01 07:58	15° \mathbb{A} 45'26	
superior conj	14752 Dec 23 20:05	16° \mathbb{B} 25'12	1°37'23	max. Earth dist.	14753 Dec 07 17:54	29° \mathbb{A} 47'35	1.31100 AU
minimum elong	14752 Dec 23 19:37	16° \mathbb{B} 22'33	1°38'23		14753 Dec 07 20:08	0° \mathbb{B}	
max. Earth dist.	14752 Dec 24 09:50	17° \mathbb{B} 41'56	1.31271 AU				
	14752 Dec 30 00:25	0° \mathbb{R}		superior conj	14753 Dec 08 07:35	1° \mathbb{B} 04'04	1°31'47
evening rise	14752 Dec 30 17:39	1° \mathbb{R} 31'37		minimum elong	14753 Dec 08 06:10	0° \mathbb{B} 56'07	1°32'43
desc. node	14753 Jan 10 18:46	22° \mathbb{R} 52'48		evening rise	14753 Dec 15 00:47	15° \mathbb{B} 55'01	
	14753 Jan 15 01:37	0° \mathbb{H}			14753 Dec 21 22:35	0° \mathbb{R}	
evening max el	14753 Jan 30 22:33	20° \mathbb{H} 23'15	27°15'27	desc. node	14753 Dec 28 15:36	11° \mathbb{R} 54'27	
retrograde	14753 Feb 13 22:33	27° \mathbb{H} 41'09			14754 Jan 11 01:19	0° \mathbb{H}	
evening set	14753 Feb 20 16:53	25° \mathbb{H} 39'23		evening max el	14754 Jan 12 22:09	1° \mathbb{H} 51'38	26°21'07
min. Earth dist.	14753 Feb 24 13:03	22° \mathbb{H} 54'13	0.60479 AU	retrograde	14754 Jan 26 21:18	8° \mathbb{H} 57'52	
inferior conj	14753 Feb 27 17:18	20° \mathbb{H} 12'00	-2°23'05	evening set	14754 Feb 02 05:49	7° \mathbb{H} 20'44	
minimum elong	14753 Feb 27 22:33	20° \mathbb{H} 00'47	2°20'46	min. Earth dist.	14754 Feb 06 11:37	4° \mathbb{H} 43'43	0.58297 AU
morning rise	14753 Mar 07 07:31	15° \mathbb{H} 21'59		inferior conj	14754 Feb 09 14:17	2° \mathbb{H} 26'05	-3°50'12
asc. node	14753 Mar 07 03:22	15° \mathbb{H} 24'56		minimum elong	14754 Feb 09 22:37	2° \mathbb{H} 10'40	3°46'52
direct	14753 Mar 09 09:10	15° \mathbb{H} 04'44			14754 Feb 13 02:30	30° \mathbb{R} \mathbb{R}	
morning max el	14753 Mar 16 14:38	18° \mathbb{H} 41'49	17°57'59	morning rise	14754 Feb 17 18:30	27° \mathbb{R} 57'23	
	14753 Mar 24 19:27	0° \mathbb{Y}		direct	14754 Feb 19 18:34	27° \mathbb{R} 43'49	
morning set	14753 Apr 01 04:22	13° \mathbb{Y} 08'00		asc. node	14754 Feb 22 00:50	28° \mathbb{R} 01'57	
desc. node	14753 Apr 08 20:49	27° \mathbb{Y} 05'44			14754 Feb 25 22:12	0° \mathbb{H}	
	14753 Apr 10 12:10	0° \mathbb{B}		morning max el	14754 Feb 27 23:58	1° \mathbb{H} 47'07	18°29'34
				morning set	14754 Mar 15 21:23	27° \mathbb{H} 12'43	
superior conj	14753 Apr 11 12:58	1° \mathbb{B} 48'54	-0°21'27		14754 Mar 17 08:12	0° \mathbb{Y}	
minimum elong	14753 Apr 11 11:06	1° \mathbb{B} 40'43	0°21'35	superior conj	14754 Mar 24 23:31	14° \mathbb{Y} 27'46	0°14'17
max. Earth dist.	14753 Apr 19 01:18	14° \mathbb{B} 35'23	1.42568 AU	minimum elong	14754 Mar 25 00:30	14° \mathbb{Y} 32'20	0°13'58
evening rise	14753 Apr 24 20:03	23° \mathbb{B} 56'49		behind sun begin	14754 Mar 24 21:03	14° \mathbb{Y} 16'20	
	14753 Apr 28 16:48	0° \mathbb{I}		behind sun end	14754 Mar 25 03:58	14° \mathbb{Y} 48'19	
	14753 May 19 13:36	0° \mathbb{E}		desc. node	14754 Mar 26 17:22	17° \mathbb{Y} 39'33	
evening max el	14753 May 27 14:08	9° \mathbb{E} 22'07	22°16'02	max. Earth dist.	14754 Apr 01 10:25	27° \mathbb{Y} 46'44	1.40450 AU
asc. node	14753 Jun 03 00:26	14° \mathbb{E} 15'23			14754 Apr 02 17:30	0° \mathbb{B}	
retrograde	14753 Jun 06 05:16	15° \mathbb{E} 00'57		evening rise	14754 Apr 05 16:30	4° \mathbb{B} 58'30	
evening set	14753 Jun 10 23:36	13° \mathbb{E} 01'44			14754 Apr 21 20:46	0° \mathbb{I}	
inferior conj	14753 Jun 16 06:07	6° \mathbb{E} 41'49	3°02'33	evening max el	14754 May 10 05:04	23° \mathbb{I} 15'20	23°37'08
minimum elong	14753 Jun 16 05:01	6° \mathbb{E} 45'39	3°01'24	asc. node	14754 May 20 21:36	29° \mathbb{I} 35'57	
min. Earth dist.	14753 Jun 16 03:58	6° \mathbb{E} 49'18	0.69035 AU	retrograde	14754 May 21 00:17	29° \mathbb{I} 36'00	
morning rise	14753 Jun 21 10:16	0° \mathbb{E} 28'38		evening set	14754 May 26 06:14	27° \mathbb{I} 22'35	
	14753 Jun 22 00:35	30° \mathbb{R} \mathbb{I}		min. Earth dist.	14754 May 31 00:37	21° \mathbb{I} 47'09	0.68885 AU
direct	14753 Jun 26 03:17	28° \mathbb{I} 29'39		inferior conj	14754 May 31 15:39	20° \mathbb{I} 55'36	2°44'28
	14753 Jun 30 16:14	0° \mathbb{E}		minimum elong	14754 May 31 13:52	21° \mathbb{I} 01'45	2°43'08
morning max el	14753 Jul 05 09:33	3° \mathbb{E} 54'33	21°55'21	morning rise	14754 Jun 05 21:28	14° \mathbb{I} 50'28	
desc. node	14753 Jul 05 21:12	4° \mathbb{E} 24'06		direct	14754 Jun 10 02:07	13° \mathbb{I} 11'35	
	14753 Jul 25 06:23	0° \mathbb{Q}		morning max el	14754 Jun 18 04:24	17° \mathbb{I} 47'37	20°35'54
morning set	14753 Aug 06 23:14	19° \mathbb{Q} 31'16		desc. node	14754 Jun 22 18:20	22° \mathbb{I} 57'01	
max. Earth dist.	14753 Aug 12 17:17	28° \mathbb{Q} 53'08	1.41772 AU		14754 Jun 28 02:49	0° \mathbb{E}	
	14753 Aug 13 09:22	0° \mathbb{M}		morning set	14754 Jul 17 10:44	28° \mathbb{E} 37'24	
superior conj	14753 Aug 20 10:49	12° \mathbb{M} 04'29	-1°18'17		14754 Jul 18 08:03	0° \mathbb{Q}	
minimum elong	14753 Aug 20 16:56	12° \mathbb{M} 31'19	1°17'51	max. Earth dist.	14754 Jul 26 02:15	12° \mathbb{Q} 15'14	1.43730 AU
asc. node	14753 Aug 30 01:10	29° \mathbb{M} 24'45		superior conj	14754 Aug 01 14:34	22° \mathbb{Q} 54'06	-1°49'43
	14753 Aug 30 08:49	0° \mathbb{L}		minimum elong	14754 Aug 01 22:06	23° \mathbb{Q} 25'26	1°49'44
evening rise	14753 Aug 31 03:43	1° \mathbb{L} 27'09			14754 Aug 05 19:50	0° \mathbb{M}	
evening max el	14753 Sep 16 03:27	26° \mathbb{L} 53'26	18°11'38	evening rise	14754 Aug 13 23:00	14° \mathbb{M} 04'57	
	14753 Sep 20 13:26	0° \mathbb{M}		asc. node	14754 Aug 16 21:47	19° \mathbb{M} 14'53	
retrograde	14753 Sep 23 07:21	0° \mathbb{M} 32'36			14754 Aug 23 06:06	0° \mathbb{L}	
evening set	14753 Sep 25 11:26	0° \mathbb{M} 13'03		evening max el	14754 Aug 30 16:48	10° \mathbb{L} 01'31	18°02'02
	14753 Sep 26 02:57	30° \mathbb{R} \mathbb{L}		retrograde	14754 Sep 06 06:03	13° \mathbb{L} 24'55	
desc. node	14753 Oct 01 17:43	26° \mathbb{L} 20'40		evening set	14754 Sep 08 17:57	12° \mathbb{L} 54'54	
inferior conj	14753 Oct 02 18:43	25° \mathbb{L} 27'06	-0°19'42	inferior conj	14754 Sep 15 08:39	7° \mathbb{L} 49'10	0°59'09
minimum elong	14753 Oct 02 18:01	25° \mathbb{L} 28'36	0°19'06	minimum elong	14754 Sep 15 10:19	7° \mathbb{L} 45'02	0°58'35
min. Earth dist.	14753 Oct 06 01:19	22° \mathbb{L} 37'37	0.59261 AU	min. Earth dist.	14754 Sep 18 09:01	4° \mathbb{L} 49'38	0.61552 AU
morning rise	14753 Oct 09 21:14	19° \mathbb{L} 52'48					

desc. node	14754 Sep 18 15:14	4°♌34'56		minimum elong	14755 Aug 29 16:14	20°♏38'39	1°56'06
morning rise	14754 Sep 21 24:00	1°♌48'36		min. Earth dist.	14755 Sep 01 02:41	17°♏55'32	0.63748 AU
	14754 Sep 25 14:16	30°♏		morning rise	14755 Sep 04 18:16	14°♏28'33	
direct	14754 Sep 28 15:57	29°♏31'12		desc. node	14755 Sep 05 12:45	13°♏54'50	
	14754 Oct 01 20:27	0°♌		direct	14755 Sep 11 09:07	11°♏55'51	
morning max el	14754 Oct 12 20:21	7°♌27'59	27°59'00	morning max el	14755 Sep 25 05:49	19°♏56'03	27°41'33
	14754 Oct 30 01:23	0°♌			14755 Oct 03 21:01	0°♌	
asc. node	14754 Nov 12 23:38	24°♌53'08			14755 Oct 23 02:02	0°♌	
morning set	14754 Nov 15 09:26	29°♌46'51		morning set	14755 Oct 30 03:09	13°♌24'14	
	14754 Nov 15 11:59	0°♌		asc. node	14755 Oct 30 20:23	14°♌50'43	
max. Earth dist.	14754 Nov 20 23:44	11°♌44'09	1.31474 AU	max. Earth dist.	14755 Nov 03 23:20	23°♌22'12	1.32393 AU
superior conj	14754 Nov 22 17:44	15°♌35'46	1°20'19	superior conj	14755 Nov 07 00:31	29°♌54'24	1°02'57
minimum elong	14754 Nov 22 15:39	15°♌24'12	1°21'01	minimum elong	14755 Nov 06 22:12	29°♌41'53	1°03'23
evening rise	14754 Nov 29 10:48	0°♌24'13			14755 Nov 07 01:33	0°♌	
	14754 Nov 29 06:20	0°♌		evening rise	14755 Nov 13 21:48	14°♌53'54	
	14754 Dec 15 09:33	0°♌			14755 Nov 21 08:10	0°♌	
desc. node	14754 Dec 15 12:33	0°♌11'10		desc. node	14755 Dec 02 09:36	17°♌26'12	
evening max el	14754 Dec 25 13:07	12°♌27'44	24°56'32	evening max el	14755 Dec 06 22:45	22°♌29'28	23°15'17
retrograde	14755 Jan 08 07:45	19°♌21'30		retrograde	14755 Dec 20 05:32	29°♌05'03	
evening set	14755 Jan 13 20:53	18°♌12'53		evening set	14755 Dec 24 13:07	28°♌24'36	
min. Earth dist.	14755 Jan 19 01:04	15°♌28'10	0.56375 AU	min. Earth dist.	14755 Dec 31 08:50	25°♌12'45	0.55002 AU
inferior conj	14755 Jan 21 14:26	13°♌49'50	-5°08'45	inferior conj	14756 Jan 01 18:45	24°♌23'43	-5°55'44
minimum elong	14755 Jan 21 23:10	13°♌35'50	5°06'01	minimum elong	14756 Jan 01 22:00	24°♌19'01	5°54'33
morning rise	14755 Jan 30 03:46	9°♌42'51		morning rise	14756 Jan 10 08:25	20°♌32'53	
direct	14755 Feb 01 08:56	9°♌29'06		direct	14756 Jan 13 04:08	20°♌13'55	
asc. node	14755 Feb 08 22:15	12°♌21'55		morning max el	14756 Jan 24 08:21	25°♌35'54	20°39'53
morning max el	14755 Feb 10 23:03	14°♌08'09	19°23'07	asc. node	14756 Jan 26 19:35	28°♌13'10	
	14755 Feb 21 22:26	0°♌			14756 Jan 28 06:36	0°♌	
morning set	14755 Feb 27 23:12	11°♌39'20		morning set	14756 Feb 12 06:41	26°♌18'42	
					14756 Feb 14 01:23	0°♌	
superior conj	14755 Mar 08 02:42	27°♌51'23	0°44'13	superior conj	14756 Feb 19 18:14	11°♌47'50	1°07'30
minimum elong	14755 Mar 08 05:05	28°♌02'59	0°43'58	minimum elong	14756 Feb 19 20:52	12°♌01'12	1°07'33
	14755 Mar 09 05:17	0°♌		max. Earth dist.	14756 Feb 25 00:42	22°♌16'09	1.35976 AU
desc. node	14755 Mar 13 13:54	8°♌13'05		desc. node	14756 Feb 28 10:26	28°♌42'48	
max. Earth dist.	14755 Mar 14 16:52	10°♌16'33	1.38169 AU	evening rise	14756 Feb 28 21:36	29°♌34'22	
evening rise	14755 Mar 18 09:52	16°♌53'28			14756 Feb 29 03:10	0°♌	
	14755 Mar 26 05:45	0°♌			14756 Mar 18 10:50	0°♌	
	14755 Apr 16 07:49	0°♌		evening max el	14756 Apr 04 08:04	21°♌00'14	26°06'47
evening max el	14755 Apr 22 18:33	7°♌09'03	24°56'25	retrograde	14756 Apr 17 02:06	28°♌18'19	
retrograde	14755 May 04 15:32	14°♌04'05		evening set	14756 Apr 23 06:16	25°♌47'18	
asc. node	14755 May 07 18:51	13°♌22'03		asc. node	14756 Apr 23 16:09	25°♌26'08	
evening set	14755 May 10 09:01	11°♌39'38		min. Earth dist.	14756 Apr 27 10:00	21°♌23'56	0.67184 AU
min. Earth dist.	14755 May 14 19:18	6°♌40'50	0.68261 AU	inferior conj	14756 Apr 29 02:34	19°♌17'53	1°36'26
inferior conj	14755 May 15 23:08	5°♌09'01	2°15'56	minimum elong	14756 Apr 29 00:34	19°♌24'08	1°35'05
minimum elong	14755 May 15 21:00	5°♌16'06	2°14'29	morning rise	14756 May 04 19:39	13°♌32'17	
	14755 May 20 09:40	30°♏		direct	14756 May 08 01:31	12°♌32'30	
morning rise	14755 May 21 09:15	29°♌13'01		morning max el	14756 May 14 15:53	16°♌04'17	18°38'47
direct	14755 May 25 02:03	27°♌54'28			14756 May 25 06:45	0°♌	
	14755 May 30 03:35	0°♌		desc. node	14756 May 26 12:17	1°♌51'34	
morning max el	14755 Jun 01 06:35	1°♌51'56	19°29'31	morning set	14756 Jun 05 04:14	16°♌51'32	
desc. node	14755 Jun 09 15:22	12°♌09'42			14756 Jun 13 14:05	0°♌	
greatest brilliancy	14755 Jun 13 21:36	18°♌16'47	-0.7m	max. Earth dist.	14756 Jun 20 11:39	10°♌45'31	1.45846 AU
	14755 Jun 21 17:04	0°♌		superior conj	14756 Jun 21 06:25	11°♌58'46	-2°12'22
morning set	14755 Jun 26 13:26	7°♌24'56		minimum elong	14756 Jun 21 03:26	11°♌47'07	2°13'19
max. Earth dist.	14755 Jul 08 17:05	26°♌17'50	1.45132 AU		14756 Jul 02 17:40	0°♌	
	14755 Jul 11 01:18	0°♌		evening rise	14756 Jul 06 19:53	6°♌30'02	
superior conj	14755 Jul 12 18:51	2°♌45'10	-2°10'01	greatest brilliancy	14756 Jul 14 01:12	17°♌58'49	-0.9m
minimum elong	14755 Jul 12 23:21	3°♌03'07	2°10'46	asc. node	14756 Jul 20 15:07	28°♌03'48	
evening rise	14755 Jul 26 21:42	25°♌48'32			14756 Jul 21 23:31	0°♌	
	14755 Jul 29 10:03	0°♌		evening max el	14756 Jul 27 20:14	7°♌12'41	18°37'45
asc. node	14755 Aug 03 18:25	8°♌49'46		retrograde	14756 Aug 03 09:10	10°♌44'58	
evening max el	14755 Aug 14 07:24	23°♌30'20	18°11'01	evening set	14756 Aug 06 14:31	9°♌45'53	
retrograde	14755 Aug 20 16:00	26°♌51'40		inferior conj	14756 Aug 12 06:21	4°♌08'01	2°36'16
evening set	14755 Aug 23 12:23	26°♌08'14		minimum elong	14756 Aug 12 08:29	4°♌01'27	2°35'16
inferior conj	14755 Aug 29 13:50	20°♌45'24	1°57'04				

min. Earth dist.	14756 Aug 14 05:26	1° \mathbb{M} 43'52	0.65675 AU	inferior conj	14757 Jul 27 06:54	17° Ω 50'19	2°59'40
	14756 Aug 15 17:29	30° \mathbb{R} Ω		minimum elong	14757 Jul 27 08:15	17° Ω 45'54	2°58'44
morning rise	14756 Aug 18 01:22	27° Ω 43'43		min. Earth dist.	14757 Jul 28 15:39	16° Ω 03'02	0.67211 AU
desc. node	14756 Aug 22 10:14	25° Ω 19'50		morning rise	14757 Aug 01 18:37	11° Ω 24'57	
direct	14756 Aug 24 10:30	25° Ω 04'47		direct	14757 Aug 07 18:34	8° Ω 48'59	
	14756 Sep 03 14:13	0° \mathbb{M}		desc. node	14757 Aug 09 07:41	8° Ω 58'06	
morning max el	14756 Sep 06 17:03	2° \mathbb{M} 55'11	26°52'21	morning max el	14757 Aug 20 04:02	16° Ω 13'42	25°40'13
	14756 Sep 27 03:53	0° $\underline{\Omega}$			14757 Aug 31 13:58	0° \mathbb{M}	
morning set	14756 Oct 12 10:12	26° $\underline{\Omega}$ 30'49			14757 Sep 20 01:23	0° $\underline{\Omega}$	
	14756 Oct 14 05:27	0° \mathbb{M}		morning set	14757 Sep 25 03:05	8° $\underline{\Omega}$ 58'18	
max. Earth dist.	14756 Oct 16 13:32	4° \mathbb{M} 38'08	1.33855 AU	max. Earth dist.	14757 Sep 28 18:06	15° $\underline{\Omega}$ 42'37	1.35806 AU
asc. node	14756 Oct 16 17:03	4° \mathbb{M} 55'49		asc. node	14757 Oct 03 13:40	25° $\underline{\Omega}$ 04'34	
superior conj	14756 Oct 21 01:40	13° \mathbb{M} 54'20	0°39'45	superior conj	14757 Oct 04 18:31	27° $\underline{\Omega}$ 29'01	0°11'06
minimum elong	14756 Oct 20 23:46	13° \mathbb{M} 44'21	0°40'01	minimum elong	14757 Oct 04 17:51	27° $\underline{\Omega}$ 25'38	0°11'21
evening rise	14756 Oct 28 07:54	29° \mathbb{M} 19'30		behind sun begin	14757 Oct 04 13:24	27° $\underline{\Omega}$ 03'16	
	14756 Oct 28 15:35	0° \mathbb{X}		behind sun end	14757 Oct 04 22:18	27° $\underline{\Omega}$ 48'03	
	14756 Nov 15 02:59	0° \mathbb{Z}			14757 Oct 06 00:23	0° \mathbb{M}	
evening max el	14756 Nov 17 12:06	2° \mathbb{Z} 33'19	21°35'19	evening rise	14757 Oct 12 15:06	13° \mathbb{M} 36'11	
desc. node	14756 Nov 18 06:45	3° \mathbb{Z} 17'48			14757 Oct 21 02:13	0° \mathbb{X}	
retrograde	14756 Nov 29 17:19	8° \mathbb{Z} 36'17		evening max el	14757 Oct 30 13:36	13° \mathbb{X} 12'56	20°10'40
evening set	14756 Dec 02 16:53	8° \mathbb{Z} 16'05		desc. node	14757 Nov 05 04:01	17° \mathbb{X} 20'28	
inferior conj	14756 Dec 11 10:59	4° \mathbb{Z} 24'10	-5°47'41	retrograde	14757 Nov 10 05:08	18° \mathbb{X} 30'59	
minimum elong	14756 Dec 11 05:07	4° \mathbb{Z} 32'23	5°45'59	evening set	14757 Nov 12 08:00	18° \mathbb{X} 19'22	
min. Earth dist.	14756 Dec 11 14:41	4° \mathbb{Z} 18'59	0.54448 AU	inferior conj	14757 Nov 21 04:57	14° \mathbb{X} 22'23	-4°41'10
morning rise	14756 Dec 19 18:01	0° \mathbb{Z} 35'43		minimum elong	14757 Nov 20 18:51	14° \mathbb{X} 37'24	4°37'27
direct	14756 Dec 23 12:30	0° \mathbb{Z} 04'44		min. Earth dist.	14757 Nov 22 21:31	13° \mathbb{X} 22'00	0.54837 AU
morning max el	14757 Jan 05 03:15	6° \mathbb{Z} 09'57	22°17'34	morning rise	14757 Nov 29 04:51	10° \mathbb{X} 17'26	
asc. node	14757 Jan 12 16:53	15° \mathbb{Z} 17'48		direct	14757 Dec 03 23:14	9° \mathbb{X} 28'11	
	14757 Jan 21 07:15	0° \approx		morning max el	14757 Dec 17 13:12	16° \mathbb{X} 09'39	24°06'40
morning set	14757 Jan 26 17:23	11° \approx 03'18			14757 Dec 28 12:43	0° \mathbb{Z}	
superior conj	14757 Feb 02 18:32	26° \approx 06'24	1°24'03	asc. node	14757 Dec 30 14:04	3° \mathbb{Z} 18'53	
minimum elong	14757 Feb 02 20:39	26° \approx 17'36	1°24'29	morning set	14758 Jan 11 05:19	25° \mathbb{Z} 47'47	
	14757 Feb 04 14:58	0° \mathbb{X}			14758 Jan 13 03:58	0° \approx	
max. Earth dist.	14757 Feb 06 14:33	4° \mathbb{X} 05'49	1.34082 AU	superior conj	14758 Jan 18 00:48	10° \approx 39'21	1°34'05
evening rise	14757 Feb 11 00:08	12° \mathbb{X} 51'25		minimum elong	14758 Jan 18 02:01	10° \approx 45'55	1°34'52
desc. node	14757 Feb 14 06:58	19° \mathbb{X} 04'07		max. Earth dist.	14758 Jan 20 12:22	16° \approx 01'29	1.32611 AU
	14757 Feb 20 11:24	0° \mathbb{Y}		evening rise	14758 Jan 25 14:11	26° \approx 36'13	
	14757 Mar 13 11:30	0° \mathbb{B}			14758 Jan 27 07:04	0° \mathbb{X}	
evening max el	14757 Mar 17 21:47	4° \mathbb{B} 40'56	27°00'46	desc. node	14758 Feb 01 03:35	9° \mathbb{X} 12'33	
retrograde	14757 Mar 31 06:52	12° \mathbb{B} 09'34			14758 Feb 13 19:32	0° \mathbb{Y}	
evening set	14757 Apr 06 19:59	9° \mathbb{B} 37'45		evening max el	14758 Feb 28 10:39	18° \mathbb{Y} 00'30	27°30'53
asc. node	14757 Apr 10 13:32	6° \mathbb{B} 01'58		retrograde	14758 Mar 14 04:47	25° \mathbb{Y} 29'14	
min. Earth dist.	14757 Apr 10 18:38	5° \mathbb{B} 47'48	0.65696 AU	evening set	14758 Mar 20 23:57	23° \mathbb{Y} 03'12	
inferior conj	14757 Apr 12 23:37	3° \mathbb{B} 15'55	0°45'06	min. Earth dist.	14758 Mar 24 19:09	19° \mathbb{Y} 43'29	0.63858 AU
minimum elong	14757 Apr 12 22:27	3° \mathbb{B} 19'16	0°44'13	inferior conj	14758 Mar 27 11:37	16° \mathbb{Y} 56'35	-0°18'42
	14757 Apr 16 00:33	30° \mathbb{R} \mathbb{Y}		minimum elong	14758 Mar 27 12:12	16° \mathbb{Y} 55'04	0°18'40
morning rise	14757 Apr 19 02:25	27° \mathbb{Y} 42'27		asc. node	14758 Mar 28 10:58	15° \mathbb{Y} 56'35	
direct	14757 Apr 21 22:27	26° \mathbb{Y} 58'52		morning rise	14758 Apr 03 02:45	11° \mathbb{Y} 37'40	
	14757 Apr 27 23:11	0° \mathbb{B}		direct	14758 Apr 05 14:15	11° \mathbb{Y} 07'02	
morning max el	14757 Apr 28 06:29	0° \mathbb{B} 17'23	18°04'47	morning max el	14758 Apr 11 23:53	14° \mathbb{Y} 23'54	17°47'58
desc. node	14757 May 13 09:04	21° \mathbb{B} 54'03			14758 Apr 23 00:39	0° \mathbb{B}	
morning set	14757 May 16 21:01	27° \mathbb{B} 34'23		morning set	14758 Apr 28 17:01	9° \mathbb{B} 35'20	
	14757 May 18 08:58	0° \mathbb{I}		desc. node	14758 Apr 30 05:46	12° \mathbb{B} 11'12	
superior conj	14757 May 31 16:23	21° \mathbb{I} 14'29	-1°54'46		14758 May 10 22:48	0° \mathbb{I}	
minimum elong	14757 May 31 07:53	20° \mathbb{I} 41'07	1°55'07	superior conj	14758 May 11 17:02	1° \mathbb{I} 13'55	-1°22'23
max. Earth dist.	14757 Jun 03 07:41	25° \mathbb{I} 22'30	1.45814 AU	minimum elong	14758 May 11 09:08	0° \mathbb{I} 41'54	1°22'16
	14757 Jun 06 06:51	0° \mathbb{E}		max. Earth dist.	14758 May 17 03:06	9° \mathbb{I} 54'27	1.45046 AU
evening rise	14757 Jun 16 19:05	16° \mathbb{E} 16'35		evening rise	14758 May 27 06:20	25° \mathbb{I} 40'08	
	14757 Jun 25 17:41	0° Ω			14758 May 30 02:31	0° \mathbb{E}	
greatest brilliancy	14757 Jun 29 08:09	5° Ω 25'21	-0.7m		14758 Jun 20 00:16	0° Ω	
asc. node	14757 Jul 07 11:53	16° Ω 49'12		asc. node	14758 Jun 24 08:46	4° Ω 55'52	
evening max el	14757 Jul 11 04:53	21° Ω 02'06	19°21'19	evening max el	14758 Jun 24 07:52	4° Ω 53'39	20°20'04
retrograde	14757 Jul 18 06:23	24° Ω 57'55		retrograde	14758 Jul 02 05:15	9° Ω 24'17	
evening set	14757 Jul 21 21:18	23° Ω 41'47		evening set	14758 Jul 06 06:22	7° Ω 50'40	

inferior conj	14758 Jul 11 12:44	1°♌46'49	3°09'46	evening set	14759 Jun 20 15:50	22°♊08'17	
minimum elong	14758 Jul 11 13:07	1°♌45'32	3°08'49	inferior conj	14759 Jun 25 21:36	15°♊53'30	3°08'16
min. Earth dist.	14758 Jul 12 07:27	0°♌42'47	0.68296 AU	minimum elong	14759 Jun 25 21:00	15°♊55'34	3°07'13
	14758 Jul 12 20:06	30°♋♊		min. Earth dist.	14759 Jun 26 02:51	15°♊35'09	0.68900 AU
morning rise	14758 Jul 16 19:32	25°♊24'24		morning rise	14759 Jul 01 01:59	9°♊36'31	
direct	14758 Jul 22 08:06	22°♊59'02		direct	14759 Jul 06 02:08	7°♊27'06	
desc. node	14758 Jul 27 05:04	24°♊29'38		desc. node	14759 Jul 14 02:22	11°♊28'53	
morning max el	14758 Aug 02 14:33	29°♊43'34	24°14'43	morning max el	14759 Jul 16 02:13	13°♊22'10	22°45'21
	14758 Aug 02 21:01	0°♌			14759 Jul 29 11:37	0°♌	
	14758 Aug 25 09:31	0°♍			14759 Aug 18 06:52	0°♍	
morning set	14758 Sep 07 01:26	20°♍35'55		morning set	14759 Aug 19 01:11	1°♍14'52	
max. Earth dist.	14758 Sep 10 17:07	27°♍01'06	1.38097 AU	max. Earth dist.	14759 Aug 23 16:42	9°♍00'11	1.40473 AU
	14758 Sep 12 08:48	0°♎					
superior conj	14758 Sep 17 23:36	10°♎29'17	-0°22'08	superior conj	14759 Aug 31 12:53	22°♍46'15	-0°57'52
minimum elong	14758 Sep 18 01:07	10°♎36'33	0°21'46	minimum elong	14759 Aug 31 17:20	23°♍06'25	0°57'23
asc. node	14758 Sep 20 10:14	15°♎12'43		asc. node	14759 Sep 04 11:15	0°♎	
evening rise	14758 Sep 26 16:53	27°♎36'54		evening rise	14759 Sep 07 06:50	5°♎17'08	
	14758 Sep 27 21:51	0°♏			14759 Sep 10 10:12	11°♎14'16	
evening max el	14758 Oct 13 05:19	24°♏40'45	19°07'16	evening max el	14759 Sep 20 23:17	0°♏	
retrograde	14758 Oct 22 06:06	29°♏13'03		retrograde	14759 Sep 26 08:44	6°♏55'10	18°25'54
desc. node	14758 Oct 23 01:22	29°♏11'01		retrograde	14759 Oct 04 02:15	10°♏50'18	
evening set	14758 Oct 24 03:00	29°♏02'11		evening set	14759 Oct 06 02:18	10°♏35'15	
inferior conj	14758 Nov 01 13:46	24°♏48'52	-2°59'49	desc. node	14759 Oct 09 22:46	8°♏51'29	
minimum elong	14758 Nov 01 06:15	25°♏01'39	2°56'15	inferior conj	14759 Oct 13 20:00	6°♏01'16	-1°14'24
min. Earth dist.	14758 Nov 04 08:12	22°♏56'15	0.56095 AU	minimum elong	14759 Oct 13 17:07	6°♏07'01	1°12'44
morning rise	14758 Nov 09 06:53	20°♏11'02		min. Earth dist.	14759 Oct 17 01:51	3°♏27'12	0.57995 AU
direct	14758 Nov 14 21:13	18°♏58'30		morning rise	14759 Oct 21 04:25	0°♏45'49	
morning max el	14758 Nov 28 23:33	26°♏09'13	25°50'05		14759 Oct 22 20:25	30°♋♊	
	14758 Dec 02 15:20	0°♐		direct	14759 Oct 27 09:34	29°♎06'21	
asc. node	14758 Dec 17 11:11	22°♐01'30			14759 Nov 01 01:13	0°♏	
	14758 Dec 21 15:54	0°♑		morning max el	14759 Nov 10 16:46	6°♏40'55	27°09'08
morning set	14758 Dec 26 16:41	10°♑26'20			14759 Nov 28 01:50	0°♐	
				asc. node	14759 Dec 04 08:13	11°♐15'04	
superior conj	14759 Jan 02 10:41	25°♑19'05	1°37'55	morning set	14759 Dec 11 01:44	24°♐54'28	
minimum elong	14759 Jan 02 10:49	25°♑19'50	1°38'53		14759 Dec 13 10:10	0°♑	
max. Earth dist.	14759 Jan 03 16:42	28°♑05'24	1.31617 AU	superior conj	14759 Dec 17 22:09	10°♑00'11	1°35'44
	14759 Jan 04 13:29	0°♒		minimum elong	14759 Dec 17 21:15	9°♑55'09	1°36'43
evening rise	14759 Jan 09 12:44	10°♒40'32		max. Earth dist.	14759 Dec 18 00:23	10°♑12'38	1.31134 AU
desc. node	14759 Jan 19 00:17	29°♒01'31		evening rise	14759 Dec 24 17:21	24°♑58'35	
	14759 Jan 19 13:31	0°♓			14759 Dec 27 02:49	0°♒	
	14759 Feb 10 01:43	0°♑		desc. node	14760 Jan 05 21:04	18°♒23'26	
evening max el	14759 Feb 10 20:17	0°♑45'04	27°30'48		14760 Jan 13 07:54	0°♓	
retrograde	14759 Feb 24 18:48	8°♑07'47		evening max el	14760 Jan 24 00:00	12°♓42'52	26°56'22
evening set	14759 Mar 03 15:28	5°♑54'46		retrograde	14760 Feb 06 23:52	19°♓56'28	
min. Earth dist.	14759 Mar 07 09:52	2°♑59'45	0.61754 AU	evening set	14760 Feb 13 15:15	18°♓04'05	
inferior conj	14759 Mar 10 11:19	0°♑11'17	-1°34'45	min. Earth dist.	14760 Feb 17 14:07	15°♓24'19	0.59535 AU
minimum elong	14759 Mar 10 14:39	0°♑03'36	1°33'18	inferior conj	14760 Feb 20 19:05	12°♓50'17	-3°00'03
	14759 Mar 10 16:13	30°♋♊		minimum elong	14760 Feb 21 01:45	12°♓36'52	2°57'10
asc. node	14759 Mar 15 08:26	26°♓16'05		morning rise	14760 Feb 28 15:37	8°♓09'33	
morning rise	14759 Mar 17 16:52	25°♓10'03		asc. node	14760 Mar 01 05:55	7°♓55'01	
direct	14759 Mar 19 21:31	24°♓48'53		direct	14760 Mar 01 15:59	7°♓54'21	
morning max el	14759 Mar 26 17:04	28°♓15'09	17°49'02	morning max el	14760 Mar 09 06:29	11°♓41'02	18°08'58
	14759 Mar 28 08:09	0°♑			14760 Mar 21 10:16	0°♑	
morning set	14759 Apr 11 11:05	22°♑38'12		morning set	14760 Mar 24 21:10	6°♑24'34	
	14759 Apr 15 14:28	0°♒		desc. node	14760 Apr 02 23:00	23°♑10'47	
desc. node	14759 Apr 17 02:25	2°♒38'16					
superior conj	14759 Apr 22 16:52	12°♒18'30	-0°43'44	superior conj	14760 Apr 03 15:50	24°♑26'20	-0°05'43
minimum elong	14759 Apr 22 12:46	12°♒01'06	0°43'42	minimum elong	14760 Apr 03 15:21	24°♑24'10	0°05'58
max. Earth dist.	14759 Apr 29 19:21	24°♒05'06	1.43619 AU	behind sun begin	14760 Apr 03 08:13	23°♑52'11	
	14759 May 03 11:54	0°♓		behind sun end	14760 Apr 03 22:29	24°♑56'05	
evening rise	14759 May 06 21:59	5°♓22'26			14760 Apr 06 19:22	0°♒	
	14759 May 23 10:20	0°♓		max. Earth dist.	14760 Apr 11 06:34	7°♒38'47	1.41692 AU
evening max el	14759 Jun 07 04:57	18°♓45'19	21°31'11	evening rise	14760 Apr 16 06:20	15°♒51'52	
asc. node	14759 Jun 11 05:45	22°♓11'14			14760 Apr 25 07:37	0°♓	
retrograde	14759 Jun 16 03:55	23°♓58'45			14760 May 17 10:00	0°♓	
				evening max el	14760 May 19 21:23	2°♓37'02	22°50'19

asc. node	14760 May 28 02:51	8°☿18'46		evening max el	14761 May 02 11:27	16°♊30'46	24°11'31
retrograde	14760 May 30 00:45	8°☿35'02		retrograde	14761 May 13 18:23	23°♊07'42	
evening set	14760 Jun 03 23:57	6°☿29'20		asc. node	14761 May 15 00:02	23°♊01'02	
inferior conj	14760 Jun 09 07:26	0°☿05'48	2°56'08	evening set	14761 May 19 05:08	20°♊49'21	
minimum elong	14760 Jun 09 06:01	0°☿10'45	2°54'56	min. Earth dist.	14761 May 23 19:54	15°♊29'17	0.68674 AU
min. Earth dist.	14760 Jun 08 23:44	0°☿32'34	0.69022 AU	inferior conj	14761 May 24 16:20	14°♊20'09	2°33'40
	14760 Jun 09 09:06	30°♈♊		minimum elong	14761 May 24 14:21	14°♊26'53	2°32'17
morning rise	14760 Jun 14 11:58	23°♊55'49		morning rise	14761 May 29 23:37	8°♊18'29	
direct	14760 Jun 18 23:33	22°♊05'27		direct	14761 Jun 02 23:07	6°♊48'17	
morning max el	14760 Jun 27 17:36	27°♊09'13	21°20'16	morning max el	14761 Jun 10 15:21	11°♊06'48	20°05'47
desc. node	14760 Jun 29 23:35	29°♊32'40		desc. node	14761 Jun 16 20:41	18°♊23'59	
	14760 Jun 30 09:14	0°☿			14761 Jun 25 03:40	0°☿	
	14760 Jul 21 23:56	0°♊		morning set	14761 Jul 08 05:47	19°☿41'35	
morning set	14760 Jul 29 00:31	10°♊50'42			14761 Jul 14 20:58	0°♊	
max. Earth dist.	14760 Aug 04 21:06	21°♊50'05	1.42656 AU	max. Earth dist.	14761 Jul 18 08:10	5°♊28'48	1.44404 AU
	14760 Aug 09 19:10	0°♊					
				superior conj	14761 Jul 23 23:21	14°♊33'00	-2°00'09
superior conj	14760 Aug 12 05:51	4°♊09'21	-1°32'30	minimum elong	14761 Jul 24 06:17	15°♊01'15	2°00'28
minimum elong	14760 Aug 12 12:55	4°♊39'40	1°32'11		14761 Aug 02 06:03	0°♊	
evening rise	14760 Aug 23 14:52	24°♊16'54		evening rise	14761 Aug 06 01:56	6°♊32'23	
asc. node	14760 Aug 24 03:24	25°♊13'27		asc. node	14761 Aug 10 23:59	14°♊57'24	
	14760 Aug 26 19:04	0°♊			14761 Aug 20 17:06	0°♊	
evening max el	14760 Sep 08 19:38	19°♊46'30	18°05'13	evening max el	14761 Aug 23 09:57	3°♊04'31	18°03'43
retrograde	14760 Sep 15 16:11	23°♊17'25		retrograde	14761 Aug 29 20:00	6°♊25'05	
evening set	14760 Sep 17 23:21	22°♊53'58		evening set	14761 Sep 01 11:30	5°♊49'41	
inferior conj	14760 Sep 24 23:17	17°♊59'36	0°16'15	inferior conj	14761 Sep 07 20:09	0°♊36'41	1°26'09
minimum elong	14760 Sep 24 23:49	17°♊58'22	0°16'16	minimum elong	14761 Sep 07 22:17	0°♊31'04	1°25'21
desc. node	14760 Sep 25 20:15	17°♊10'54			14761 Sep 08 10:02	30°♈♊	
min. Earth dist.	14760 Sep 28 04:16	15°♊02'55	0.60230 AU	min. Earth dist.	14761 Sep 10 16:11	27°♊38'51	0.62512 AU
morning rise	14760 Oct 01 21:05	12°♊12'38		desc. node	14761 Sep 12 17:45	25°♊42'01	
direct	14760 Oct 08 11:03	10°♊07'13		morning rise	14761 Sep 14 06:45	24°♊28'12	
morning max el	14760 Oct 22 17:45	17°♊58'48	27°52'04	direct	14761 Sep 20 23:08	22°♊02'57	
	14760 Nov 01 19:38	0°♊			14761 Oct 04 23:38	0°♊	
	14760 Nov 19 18:47	0°♊		morning max el	14761 Oct 05 00:39	0°♊02'32	27°55'52
asc. node	14760 Nov 20 05:08	0°♊50'59			14761 Oct 26 20:57	0°♊	
morning set	14760 Nov 24 06:35	9°♊07'25		asc. node	14761 Nov 07 01:55	20°♊42'07	
max. Earth dist.	14760 Nov 30 07:51	22°♊15'18	1.31187 AU	morning set	14761 Nov 08 05:01	22°♊59'12	
					14761 Nov 11 13:47	0°♊	
superior conj	14760 Dec 01 09:21	24°♊37'18	1°27'39	max. Earth dist.	14761 Nov 13 11:16	4°♊04'00	1.31794 AU
minimum elong	14760 Dec 01 07:37	24°♊27'34	1°28'29				
	14760 Dec 03 19:12	0°♊		superior conj	14761 Nov 15 18:19	9°♊04'21	1°13'41
evening rise	14760 Dec 08 01:58	9°♊25'23		minimum elong	14761 Nov 15 16:04	8°♊52'00	1°14'16
	14760 Dec 18 11:37	0°♊		evening rise	14761 Nov 22 12:36	23°♊55'26	
desc. node	14760 Dec 22 17:55	7°♊08'07			14761 Nov 25 09:21	0°♊	
evening max el	14761 Jan 04 19:52	23°♊48'41	25°48'15	desc. node	14761 Dec 09 14:54	25°♊01'01	
	14761 Jan 14 02:23	0°♊			14761 Dec 13 11:32	0°♊	
retrograde	14761 Jan 18 18:09	0°♊50'41		evening max el	14761 Dec 17 08:02	4°♊07'49	24°14'37
	14761 Jan 23 09:33	30°♈♊		retrograde	14761 Dec 30 23:06	10°♊54'30	
evening set	14761 Jan 24 19:27	29°♊25'26		evening set	14762 Jan 05 00:29	9°♊58'38	
min. Earth dist.	14761 Jan 29 08:47	26°♊47'09	0.57424 AU	min. Earth dist.	14762 Jan 10 19:41	7°♊04'39	0.55706 AU
inferior conj	14761 Feb 01 07:28	24°♊44'25	-4°25'45	inferior conj	14762 Jan 12 22:48	5°♊46'43	-5°34'05
minimum elong	14761 Feb 01 16:30	24°♊28'42	4°22'27	minimum elong	14762 Jan 13 06:00	5°♊35'44	5°32'04
morning rise	14761 Feb 09 16:28	20°♊25'17		morning rise	14762 Jan 21 13:23	1°♊47'15	
direct	14761 Feb 11 17:26	20°♊12'18		direct	14762 Jan 23 23:29	1°♊31'58	
asc. node	14761 Feb 16 03:22	21°♊16'57		morning max el	14762 Feb 03 05:36	6°♊29'13	19°52'50
morning max el	14761 Feb 20 12:06	24°♊30'05	18°49'33	asc. node	14762 Feb 03 00:46	6°♊17'37	
	14761 Feb 25 01:33	0°♊			14762 Feb 18 08:29	0°♊	
morning set	14761 Mar 08 18:24	20°♊40'19		morning set	14762 Feb 20 22:59	5°♊13'25	
	14761 Mar 13 12:56	0°♊					
				superior conj	14762 Feb 28 18:57	21°♊05'00	0°54'55
superior conj	14761 Mar 17 10:03	7°♊26'20	0°27'45	minimum elong	14762 Feb 28 21:33	21°♊17'55	0°54'46
minimum elong	14761 Mar 17 11:48	7°♊34'35	0°27'25		14762 Mar 05 09:03	0°♊	
desc. node	14761 Mar 20 19:32	13°♊45'22		max. Earth dist.	14762 Mar 06 20:14	2°♊45'33	1.37219 AU
max. Earth dist.	14761 Mar 24 13:43	20°♊30'31	1.39480 AU	desc. node	14762 Mar 07 16:04	4°♊17'38	
evening rise	14761 Mar 28 11:56	27°♊17'40		evening rise	14762 Mar 10 13:34	9°♊33'36	
	14761 Mar 30 02:34	0°♊			14762 Mar 22 20:16	0°♊	
	14761 Apr 18 20:41	0°♊			14762 Apr 14 15:07	0°♊	

evening max el	14762 Apr 15 01:03	0° Π 24'37	25°27'55	evening max el	14763 Mar 28 14:47	14° \mathcal{B} 12'26	26°32'08
retrograde	14762 Apr 27 07:36	7° Π 30'20		retrograde	14763 Apr 10 15:37	21° \mathcal{B} 35'35	
asc. node	14762 May 01 21:18	6° Π 03'31		evening set	14763 Apr 16 24:00	19° \mathcal{B} 03'28	
evening set	14762 May 03 05:44	5° Π 02'47		asc. node	14763 Apr 18 18:39	17° \mathcal{B} 26'04	
min. Earth dist.	14762 May 07 13:11	0° Π 19'03	0.67860 AU	min. Earth dist.	14763 Apr 21 01:25	14° \mathcal{B} 54'47	0.66606 AU
	14762 May 07 19:09	30° \mathcal{R} 8		inferior conj	14763 Apr 22 23:20	12° \mathcal{B} 36'43	1°16'10
inferior conj	14762 May 08 22:21	28° \mathcal{B} 32'09	2°00'35	minimum elong	14763 Apr 22 21:36	12° \mathcal{B} 41'59	1°14'57
minimum elong	14762 May 08 20:11	28° \mathcal{B} 39'07	1°59'09	morning rise	14763 Apr 28 20:14	6° \mathcal{B} 56'08	
morning rise	14762 May 14 11:04	22° \mathcal{B} 40'11		direct	14763 May 01 21:53	6° \mathcal{B} 03'29	
direct	14762 May 17 23:11	21° \mathcal{B} 29'41		morning max el	14763 May 08 08:24	9° \mathcal{B} 27'43	18°22'15
morning max el	14762 May 24 20:34	25° \mathcal{B} 14'26	19°05'52	desc. node	14763 May 21 14:33	27° \mathcal{B} 41'15	
	14762 May 29 00:58	0° Π			14763 May 23 01:53	0° Π	
desc. node	14762 Jun 03 17:41	7° Π 50'01		morning set	14763 May 28 12:08	8° Π 35'32	
greatest brilliancy	14762 Jun 06 20:51	12° Π 27'35	-0.7m		14763 Jun 11 02:30	0° \mathcal{E}	
morning set	14762 Jun 17 11:09	28° Π 38'45					
	14762 Jun 18 08:12	0° \mathcal{E}		superior conj	14763 Jun 13 03:45	3° \mathcal{E} 12'15	-2°07'10
max. Earth dist.	14762 Jul 01 01:05	19° \mathcal{E} 44'44	1.45529 AU	minimum elong	14763 Jun 12 21:44	2° \mathcal{E} 48'49	2°07'56
				max. Earth dist.	14763 Jun 13 21:10	4° \mathcal{E} 20'11	1.45926 AU
superior conj	14762 Jul 03 19:08	24° \mathcal{E} 04'17	-2°13'30	evening rise	14763 Jun 29 02:09	28° \mathcal{E} 05'30	
minimum elong	14762 Jul 03 20:45	24° \mathcal{E} 10'36	2°14'26		14763 Jun 30 07:23	0° \mathcal{O}	
	14762 Jul 07 13:03	0° \mathcal{O}		greatest brilliancy	14763 Jul 08 19:07	13° \mathcal{O} 13'48	-0.8m
evening rise	14762 Jul 18 14:26	17° \mathcal{O} 49'39		asc. node	14763 Jul 15 17:20	23° \mathcal{O} 26'35	
	14762 Jul 26 01:57	0° \mathcal{N}			14763 Jul 21 01:17	0° \mathcal{N}	
asc. node	14762 Jul 28 20:37	4° \mathcal{N} 24'05		evening max el	14763 Jul 21 11:27	0° \mathcal{N} 25'46	18°54'16
evening max el	14762 Aug 07 00:12	16° \mathcal{N} 40'17	18°20'20	retrograde	14763 Jul 28 04:43	4° \mathcal{N} 06'38	
retrograde	14762 Aug 13 09:24	20° \mathcal{N} 04'22		evening set	14763 Jul 31 14:06	3° \mathcal{N} 00'16	
evening set	14762 Aug 16 09:40	19° \mathcal{N} 14'19			14763 Aug 03 21:01	30° \mathcal{R} 8	
inferior conj	14762 Aug 22 06:34	13° \mathcal{N} 44'49	2°15'49	inferior conj	14763 Aug 06 02:51	27° \mathcal{O} 16'10	2°47'59
minimum elong	14762 Aug 22 08:57	13° \mathcal{N} 37'51	2°14'48	minimum elong	14763 Aug 06 04:42	27° \mathcal{O} 10'19	2°47'01
min. Earth dist.	14762 Aug 24 13:39	11° \mathcal{N} 04'30	0.64610 AU	min. Earth dist.	14763 Aug 07 19:43	25° \mathcal{O} 06'55	0.66377 AU
morning rise	14762 Aug 28 06:48	7° \mathcal{N} 24'11		morning rise	14763 Aug 11 18:29	20° \mathcal{O} 50'46	
desc. node	14762 Aug 30 15:15	5° \mathcal{N} 51'00		direct	14763 Aug 17 23:54	18° \mathcal{O} 12'25	
direct	14762 Sep 03 19:48	4° \mathcal{N} 47'51		desc. node	14763 Aug 17 12:45	18° \mathcal{O} 13'14	
morning max el	14762 Sep 17 11:00	12° \mathcal{N} 44'45	27°24'06	morning max el	14763 Aug 30 22:26	25° \mathcal{O} 53'34	26°24'02
	14762 Oct 01 07:40	0° \mathcal{A}			14763 Sep 03 17:10	0° \mathcal{N}	
	14762 Oct 19 10:31	0° \mathcal{M}			14763 Sep 24 20:44	0° \mathcal{A}	
morning set	14762 Oct 22 18:33	6° \mathcal{M} 24'17		morning set	14763 Oct 05 20:01	19° \mathcal{A} 14'40	
asc. node	14762 Oct 24 22:37	10° \mathcal{M} 43'26		max. Earth dist.	14763 Oct 09 17:30	26° \mathcal{A} 43'05	1.34634 AU
max. Earth dist.	14762 Oct 27 07:16	15° \mathcal{M} 33'13	1.32953 AU		14763 Oct 11 09:16	0° \mathcal{M}	
				asc. node	14763 Oct 11 19:15	0° \mathcal{M} 50'01	
superior conj	14762 Oct 30 23:00	23° \mathcal{M} 16'00	0°53'49				
minimum elong	14762 Oct 30 20:46	23° \mathcal{M} 04'04	0°54'11	superior conj	14763 Oct 14 20:56	7° \mathcal{M} 05'15	0°28'14
	14762 Nov 03 01:56	0° \mathcal{A}		minimum elong	14763 Oct 14 19:26	6° \mathcal{M} 57'32	0°28'28
evening rise	14762 Nov 06 23:27	8° \mathcal{A} 24'23		evening rise	14763 Oct 22 08:34	22° \mathcal{M} 46'25	
	14762 Nov 18 03:03	0° \mathcal{B}			14763 Oct 25 21:00	0° \mathcal{A}	
desc. node	14762 Nov 26 11:58	11° \mathcal{B} 43'37		evening max el	14763 Nov 10 11:37	24° \mathcal{A} 20'17	20°56'50
evening max el	14762 Nov 28 18:03	14° \mathcal{B} 05'48	22°31'37	desc. node	14763 Nov 13 09:09	26° \mathcal{A} 51'34	
retrograde	14762 Dec 11 15:18	20° \mathcal{B} 28'53			14763 Nov 20 13:25	0° \mathcal{B}	
evening set	14762 Dec 15 09:08	19° \mathcal{B} 58'13		retrograde	14763 Nov 22 01:47	0° \mathcal{B} 05'44	
min. Earth dist.	14762 Dec 23 01:53	16° \mathcal{B} 29'27	0.54664 AU		14763 Nov 23 14:43	30° \mathcal{R} 8	
inferior conj	14762 Dec 23 20:34	16° \mathcal{B} 03'09	-5°59'53	evening set	14763 Nov 24 14:40	29° \mathcal{A} 50'22	
minimum elong	14762 Dec 23 19:55	16° \mathcal{B} 04'03	5°58'52	inferior conj	14763 Dec 03 11:34	25° \mathcal{A} 57'29	-5°25'43
morning rise	14763 Jan 01 07:55	12° \mathcal{B} 15'37		minimum elong	14763 Dec 03 02:56	26° \mathcal{A} 09'45	5°23'04
direct	14763 Jan 04 12:58	11° \mathcal{B} 52'15		min. Earth dist.	14763 Dec 04 07:29	25° \mathcal{A} 29'06	0.54497 AU
morning max el	14763 Jan 16 08:24	17° \mathcal{B} 32'26	21°19'08	morning rise	14763 Dec 11 15:27	22° \mathcal{A} 04'40	
asc. node	14763 Jan 20 22:06	22° \mathcal{B} 41'59		direct	14763 Dec 15 20:10	21° \mathcal{A} 26'53	
	14763 Jan 25 21:06	0° \approx		morning max el	14763 Dec 28 22:32	27° \mathcal{A} 48'06	23°03'34
morning set	14763 Feb 05 08:06	19° \approx 55'47			14763 Dec 31 02:24	0° \mathcal{B}	
	14763 Feb 10 02:57	0° \mathcal{H}		asc. node	14764 Jan 07 19:21	10° \mathcal{B} 12'05	
					14764 Jan 18 14:07	0° \approx	
superior conj	14763 Feb 12 14:35	5° \mathcal{H} 11'36	1°15'19	morning set	14764 Jan 20 19:35	4° \approx 41'03	
minimum elong	14763 Feb 12 17:04	5° \mathcal{H} 24'26	1°15'33				
max. Earth dist.	14763 Feb 17 06:33	14° \mathcal{H} 39'47	1.35135 AU	superior conj	14764 Jan 27 17:46	19° \approx 37'17	1°29'05
evening rise	14763 Feb 21 08:01	22° \mathcal{H} 30'35		minimum elong	14764 Jan 27 19:32	19° \approx 46'44	1°29'41
desc. node	14763 Feb 22 12:35	24° \mathcal{H} 43'58		max. Earth dist.	14764 Jan 30 23:49	26° \approx 31'01	1.33398 AU
	14763 Feb 25 10:08	0° \mathcal{Y}			14764 Feb 01 16:13	0° \mathcal{H}	
	14763 Mar 16 14:11	0° \mathcal{B}		evening rise	14764 Feb 04 15:49	6° \mathcal{H} 00'07	

desc. node	14764 Feb 09 09:10	15° X 00'19		max. Earth dist.	14765 Jan 13 00:25	8° \approx 28'45	1.32117 AU
	14764 Feb 18 02:02	0° Y		evening rise	14765 Jan 18 09:46	19° \approx 53'41	
evening max el	14764 Mar 10 04:10	27° Y 45'09	27°16'48		14765 Jan 23 12:45	0° X	
	14764 Mar 12 15:38	0° B		desc. node	14765 Jan 26 05:47	5° X 00'56	
retrograde	14764 Mar 23 17:38	5° B 15'13			14765 Feb 11 04:58	0° Y	
evening set	14764 Mar 30 09:55	2° B 44'37		evening max el	14765 Feb 20 15:48	10° Y 50'51	27°34'54
	14764 Apr 02 11:01	30° R Y		retrograde	14765 Mar 06 12:40	18° Y 18'38	
min. Earth dist.	14764 Apr 03 06:44	29° Y 08'22	0.64954 AU	evening set	14765 Mar 13 09:01	15° Y 57'05	
asc. node	14764 Apr 04 16:04	27° Y 37'16		min. Earth dist.	14765 Mar 17 03:19	12° Y 48'43	0.62982 AU
inferior conj	14764 Apr 05 16:56	26° Y 28'20	0°19'37	inferior conj	14765 Mar 20 00:08	9° Y 59'00	-0°49'34
minimum elong	14764 Apr 05 16:23	26° Y 29'51	0°19'02	minimum elong	14765 Mar 20 01:46	9° Y 54'57	0°48'58
morning rise	14764 Apr 12 00:42	21° Y 01'04		asc. node	14765 Mar 22 13:33	7° Y 34'10	
direct	14764 Apr 14 16:55	20° Y 23'28		morning rise	14765 Mar 26 21:14	4° Y 47'24	
morning max el	14764 Apr 21 00:40	23° Y 39'46	17°55'33	direct	14765 Mar 29 05:27	4° Y 21'22	
	14764 Apr 26 05:18	0° B		morning max el	14765 Apr 04 18:27	7° Y 41'10	17°46'11
desc. node	14764 May 07 11:20	17° B 50'43			14765 Apr 19 14:13	0° B	
morning set	14764 May 08 16:57	19° B 53'09		morning set	14765 Apr 20 23:06	2° B 22'28	
	14764 May 14 20:38	0° II		desc. node	14765 Apr 24 08:00	8° B 12'19	
superior conj	14764 May 22 18:27	12° II 43'10	-1°42'21	superior conj	14765 May 03 04:33	23° B 09'24	-1°06'18
minimum elong	14764 May 22 09:32	12° II 07'49	1°42'26	minimum elong	14765 May 02 22:07	22° B 42'51	1°06'09
max. Earth dist.	14764 May 26 17:15	18° II 57'10	1.45570 AU		14765 May 07 09:14	0° II	
	14764 Jun 02 19:36	0° B		max. Earth dist.	14765 May 09 10:57	3° II 19'27	1.44510 AU
evening rise	14764 Jun 07 18:31	7° B 37'36		evening rise	14765 May 18 05:37	17° II 03'46	
greatest brilliancy	14764 Jun 22 00:18	29° B 05'24	-0.6m		14765 May 26 18:53	0° B	
	14764 Jun 22 15:20	0° Q		evening max el	14765 Jun 16 18:09	28° B 07'33	20°49'03
asc. node	14764 Jul 01 14:10	11° Q 56'58		asc. node	14765 Jun 18 11:07	29° B 43'28	
evening max el	14764 Jul 03 17:44	14° Q 16'06	19°44'30		14765 Jun 18 18:52	0° Q	
retrograde	14764 Jul 11 03:02	18° Q 25'58		retrograde	14765 Jun 25 02:04	2° Q 55'58	
evening set	14764 Jul 14 22:08	17° Q 02'28		evening set	14765 Jun 29 07:36	1° Q 15'18	
inferior conj	14764 Jul 20 06:00	11° Q 05'22	3°05'27		14765 Jun 30 16:18	30° R B	
minimum elong	14764 Jul 20 06:57	11° Q 02'12	3°04'31	inferior conj	14765 Jul 04 13:25	25° B 06'40	3°10'26
min. Earth dist.	14764 Jul 21 08:42	9° Q 35'56	0.67729 AU	minimum elong	14765 Jul 04 13:23	25° B 06'49	3°09'29
morning rise	14764 Jul 25 15:18	4° Q 40'35		min. Earth dist.	14765 Jul 05 02:26	24° B 21'38	0.68614 AU
direct	14764 Jul 31 10:28	2° Q 08'22		morning rise	14765 Jul 09 18:52	18° B 46'05	
desc. node	14764 Aug 03 10:12	2° Q 42'32		direct	14765 Jul 15 02:14	16° B 26'45	
morning max el	14764 Aug 12 09:23	9° Q 18'17	25°04'52	desc. node	14765 Jul 21 07:33	18° B 54'01	
	14764 Aug 28 17:48	0° P		morning max el	14765 Jul 25 20:00	22° B 51'25	23°36'30
	14764 Sep 16 11:03	0° A			14765 Aug 01 02:37	0° Q	
morning set	14764 Sep 17 05:33	1° A 21'58			14765 Aug 22 01:35	0° P	
max. Earth dist.	14764 Sep 20 18:51	7° A 48'43	1.36751 AU	morning set	14765 Aug 29 18:46	12° P 35'44	
				max. Earth dist.	14765 Sep 02 16:49	19° P 19'31	1.39112 AU
superior conj	14764 Sep 27 09:11	20° A 25'32	-0°02'34		14765 Sep 08 15:28	0° A	
minimum elong	14764 Sep 27 09:20	20° A 26'16	0°02'17	superior conj	14765 Sep 10 08:06	3° A 08'42	-0°37'10
behind sun begin	14764 Sep 27 02:54	19° A 54'36		minimum elong	14765 Sep 10 10:49	3° A 21'22	0°36'44
behind sun end	14764 Sep 27 15:45	20° A 58'00		asc. node	14765 Sep 14 12:26	11° A 05'22	
asc. node	14764 Sep 27 15:51	20° A 58'28		evening rise	14765 Sep 19 12:24	20° A 48'06	
	14764 Oct 02 03:48	0° M			14765 Sep 24 07:40	0° M	
evening rise	14764 Oct 05 13:47	6° M 56'29		evening max el	14765 Oct 05 16:30	17° M 08'20	18°47'06
	14764 Oct 18 09:24	0° J		retrograde	14765 Oct 14 02:39	21° M 22'56	
evening max el	14764 Oct 22 19:12	5° J 19'09	19°40'57	evening set	14765 Oct 16 00:13	21° M 10'48	
desc. node	14764 Oct 30 06:28	9° J 59'20		desc. node	14765 Oct 17 03:51	20° M 52'15	
retrograde	14764 Nov 01 18:06	10° J 17'24		inferior conj	14765 Oct 24 04:10	16° M 49'17	-2°14'07
evening set	14764 Nov 03 16:33	10° J 06'58		minimum elong	14765 Oct 23 22:38	16° M 59'20	2°11'16
inferior conj	14764 Nov 12 10:32	6° J 04'10	-4°00'27	min. Earth dist.	14765 Oct 27 05:26	14° M 36'54	0.56843 AU
minimum elong	14764 Nov 12 00:56	6° J 19'12	3°56'27	morning rise	14765 Oct 31 17:52	11° M 55'22	
min. Earth dist.	14764 Nov 14 15:55	4° J 40'31	0.55270 AU	direct	14765 Nov 06 15:28	10° M 31'11	
morning rise	14764 Nov 20 07:34	1° J 46'11		morning max el	14765 Nov 20 20:20	17° M 53'02	26°27'34
direct	14764 Nov 25 10:51	0° J 47'34			14765 Nov 30 22:18	0° J	
morning max el	14764 Dec 09 07:40	7° J 43'12	24°52'39	asc. node	14765 Dec 11 13:36	17° J 28'48	
asc. node	14764 Dec 24 16:32	28° J 31'54			14765 Dec 17 21:16	0° B	
	14764 Dec 25 12:37	0° B		morning set	14765 Dec 19 18:04	3° B 57'40	
morning set	14765 Jan 04 07:28	19° B 23'11					
	14765 Jan 09 03:49	0° \approx		superior conj	14765 Dec 26 12:38	18° B 54'51	1°37'44
superior conj	14765 Jan 11 01:50	4° \approx 13'45	1°36'28	minimum elong	14765 Dec 26 12:19	18° B 53'05	1°38'43
minimum elong	14765 Jan 11 02:35	4° \approx 17'56	1°37'20	max. Earth dist.	14765 Dec 27 06:30	20° B 34'26	1.31344 AU

	14765 Dec 31 13:21	0°≈		superior conj	14766 Dec 11 00:10	3°≈34'12	1°33'02
evening rise	14766 Jan 02 11:13	4°≈04'47		minimum elong	14766 Dec 10 22:53	3°≈26'59	1°33'57
desc. node	14766 Jan 13 02:31	24°≈39'22		evening rise	14766 Dec 17 17:46	18°≈26'48	
	14766 Jan 16 06:12	0°≈			14766 Dec 23 08:29	0°≈	
evening max el	14766 Feb 02 23:27	23°≈17'25	27°20'36	desc. node	14766 Dec 30 23:18	13°≈46'24	
	14766 Feb 13 04:34	0°≈			14767 Jan 11 09:48	0°≈	
retrograde	14766 Feb 16 23:10	0°≈36'26		evening max el	14767 Jan 16 00:09	4°≈53'08	26°31'14
	14766 Feb 20 15:11	30°≈		retrograde	14767 Jan 29 23:24	12°≈01'04	
evening set	14766 Feb 23 18:16	28°≈31'40		evening set	14767 Feb 05 10:05	10°≈19'50	
min. Earth dist.	14766 Feb 27 13:51	25°≈44'11	0.60810 AU	min. Earth dist.	14767 Feb 09 13:45	7°≈42'37	0.58611 AU
inferior conj	14766 Mar 02 17:32	22°≈59'55	-2°10'09	inferior conj	14767 Feb 12 17:21	5°≈20'18	-3°37'10
minimum elong	14766 Mar 02 22:16	22°≈49'36	2°08'02	minimum elong	14767 Feb 13 01:19	5°≈05'17	3°33'55
asc. node	14766 Mar 09 11:01	18°≈22'09		morning rise	14767 Feb 20 19:42	0°≈48'29	
morning rise	14766 Mar 10 05:30	18°≈06'46		direct	14767 Feb 22 19:44	0°≈34'34	
direct	14766 Mar 12 07:50	17°≈48'37		asc. node	14767 Feb 24 08:28	0°≈43'03	
morning max el	14766 Mar 19 10:25	21°≈22'35	17°55'02	morning max el	14767 Mar 02 20:53	4°≈33'07	18°23'37
	14766 Mar 25 23:55	0°≈		morning set	14767 Mar 18 16:02	29°≈46'08	
morning set	14766 Apr 04 00:41	15°≈45'52			14767 Mar 18 18:56	0°≈	
desc. node	14766 Apr 11 04:37	28°≈41'56					
	14766 Apr 11 22:15	0°≈		superior conj	14767 Mar 27 22:11	17°≈12'29	0°09'13
superior conj	14766 Apr 14 14:30	4°≈41'20	-0°27'13	minimum elong	14767 Mar 27 22:50	17°≈15'28	0°08'53
minimum elong	14766 Apr 14 12:05	4°≈30'48	0°27'19	behind sun begin	14767 Mar 27 16:45	16°≈47'37	
max. Earth dist.	14766 Apr 22 01:07	17°≈15'23	1.42858 AU	behind sun end	14767 Mar 28 04:55	17°≈43'16	
evening rise	14766 Apr 28 03:23	27°≈04'03		desc. node	14767 Mar 29 01:10	19°≈15'30	
	14766 Apr 30 00:15	0°≈			14767 Apr 04 03:08	0°≈	
	14766 May 20 13:25	0°≈		max. Earth dist.	14767 Apr 04 10:53	0°≈33'14	1.40776 AU
evening max el	14766 May 30 13:10	11°≈59'21	22°04'14	evening rise	14767 Apr 08 20:38	7°≈57'15	
asc. node	14766 Jun 05 08:09	16°≈31'53			14767 Apr 23 01:27	0°≈	
retrograde	14766 Jun 08 23:59	17°≈31'23		evening max el	14767 May 13 04:23	25°≈52'15	23°24'59
evening set	14766 Jun 13 16:40	15°≈34'19			14767 May 18 01:06	0°≈	
inferior conj	14766 Jun 18 22:55	9°≈15'46	3°04'21	asc. node	14767 May 23 05:15	2°≈05'39	
minimum elong	14766 Jun 18 21:57	9°≈19'09	3°03'15	retrograde	14767 May 23 19:28	2°≈07'12	
min. Earth dist.	14766 Jun 18 22:41	9°≈16'35	0.69019 AU	evening set	14767 May 28 23:43	29°≈55'36	
morning rise	14766 Jun 24 03:04	3°≈01'38			14767 May 28 21:40	30°≈	
direct	14766 Jun 28 21:58	0°≈59'50		inferior conj	14767 Jun 03 08:34	23°≈29'24	2°47'52
desc. node	14766 Jul 08 04:50	6°≈22'41		minimum elong	14767 Jun 03 06:52	23°≈35'16	2°46'35
morning max el	14766 Jul 08 08:41	6°≈32'17	22°08'03	min. Earth dist.	14767 Jun 02 19:25	24°≈14'44	0.68937 AU
	14766 Jul 26 11:15	0°≈		morning rise	14767 Jun 08 13:59	17°≈23'04	
morning set	14766 Aug 10 07:55	22°≈46'33		direct	14767 Jun 12 20:25	15°≈41'15	
	14766 Aug 14 18:08	0°≈		morning max el	14767 Jun 21 02:36	20°≈24'04	20°47'02
max. Earth dist.	14766 Aug 15 18:10	1°≈39'56	1.41446 AU	desc. node	14767 Jun 25 02:01	24°≈48'38	
					14767 Jun 29 03:34	0°≈	
superior conj	14766 Aug 23 13:17	15°≈03'51	-1°13'00		14767 Jul 19 15:17	0°≈	
minimum elong	14766 Aug 23 18:59	15°≈29'06	1°12'32	morning set	14767 Jul 20 22:12	1°≈59'43	
	14766 Aug 31 18:39	0°≈		max. Earth dist.	14767 Jul 29 02:05	14°≈54'29	1.43471 AU
asc. node	14766 Sep 01 09:00	1°≈06'33					
evening rise	14766 Sep 03 00:51	4°≈11'39		superior conj	14767 Aug 04 20:31	26°≈02'07	-1°45'30
evening max el	14766 Sep 18 23:40	29°≈39'37	18°14'40	minimum elong	14767 Aug 05 04:03	26°≈33'42	1°45'24
	14766 Sep 19 08:01	0°≈			14767 Aug 07 04:56	0°≈	
retrograde	14766 Sep 26 06:42	3°≈22'29		evening rise	14767 Aug 16 22:44	16°≈56'19	
evening set	14766 Sep 28 09:41	3°≈04'11		asc. node	14767 Aug 19 05:34	20°≈58'21	
	14766 Oct 03 19:36	30°≈			14767 Aug 24 10:50	0°≈	
desc. node	14766 Oct 04 01:18	29°≈48'45		evening max el	14767 Sep 02 12:26	12°≈43'15	18°02'13
inferior conj	14766 Oct 05 19:37	28°≈21'09	-0°33'32	retrograde	14767 Sep 09 03:19	16°≈08'17	
minimum elong	14766 Oct 05 18:25	28°≈23'44	0°32'39	evening set	14767 Sep 11 13:55	15°≈40'07	
min. Earth dist.	14766 Oct 09 02:18	25°≈35'10	0.58927 AU	inferior conj	14767 Sep 18 06:55	10°≈37'10	0°48'31
morning rise	14766 Oct 12 23:44	22°≈51'33		minimum elong	14767 Sep 18 08:20	10°≈33'42	0°48'05
direct	14766 Oct 19 09:34	21°≈00'44		desc. node	14767 Sep 20 22:47	8°≈00'57	
morning max el	14766 Nov 02 16:45	28°≈42'30	27°32'14	min. Earth dist.	14767 Sep 21 08:38	7°≈37'43	0.61212 AU
	14766 Nov 03 23:32	0°≈		morning rise	14767 Sep 24 23:56	4°≈39'41	
	14766 Nov 24 18:43	0°≈		direct	14767 Oct 01 15:30	2°≈25'14	
asc. node	14766 Nov 28 10:34	6°≈52'24		morning max el	14767 Oct 15 20:44	10°≈20'59	27°58'25
morning set	14766 Dec 04 01:31	18°≈19'13			14767 Oct 31 04:51	0°≈	
	14766 Dec 09 09:50	0°≈		asc. node	14767 Nov 15 07:25	26°≈35'20	
max. Earth dist.	14766 Dec 10 14:39	2°≈40'54	1.31095 AU		14767 Nov 17 00:00	0°≈	
				morning set	14767 Nov 18 03:53	2°≈23'31	
				max. Earth dist.	14767 Nov 23 21:01	14°≈39'10	1.31383 AU

superior conj	14767 Nov 25 10:37	18° ♄ 07'02	1°22'26	minimum elong	14768 Nov 08 15:43	2° ♄ 15'35	1°06'28
minimum elong	14767 Nov 25 08:36	17° ♄ 55'53	1°23'10	evening rise	14768 Nov 15 14:23	17° ♄ 24'59	
	14767 Nov 30 19:17	0° ♄			14768 Nov 21 16:55	0° ♄	
evening rise	14767 Dec 02 03:26	2° ♄ 55'04		desc. node	14768 Dec 03 17:13	19° ♄ 36'29	
	14767 Dec 16 10:21	0° ♄		evening max el	14768 Dec 09 02:18	25° ♄ 41'31	23°30'49
desc. node	14767 Dec 17 20:12	2° ♄ 10'39			14768 Dec 14 14:56	0° ♄	
evening max el	14767 Dec 28 16:13	15° ♄ 35'53	25°10'33	retrograde	14768 Dec 22 11:48	2° ♄ 20'31	
retrograde	14768 Jan 11 12:00	22° ♄ 32'06		evening set	14768 Dec 27 00:07	1° ♄ 36'18	
evening set	14768 Jan 17 04:38	21° ♄ 19'04			14768 Dec 30 19:23	30° ♄	
min. Earth dist.	14768 Jan 22 04:21	18° ♄ 36'37	0.56628 AU	min. Earth dist.	14769 Jan 02 12:59	28° ♄ 29'36	0.55157 AU
inferior conj	14768 Jan 24 20:39	16° ♄ 51'32	-4°58'18	inferior conj	14769 Jan 04 03:44	27° ♄ 32'55	-5°51'46
minimum elong	14768 Jan 25 05:38	16° ♄ 36'49	4°55'23	minimum elong	14769 Jan 04 08:12	27° ♄ 26'21	5°50'25
morning rise	14768 Feb 02 09:09	12° ♄ 41'40		morning rise	14769 Jan 12 17:55	23° ♄ 40'06	
direct	14768 Feb 04 12:54	12° ♄ 28'17		direct	14769 Jan 15 10:42	23° ♄ 22'21	
asc. node	14768 Feb 11 05:54	14° ♄ 47'47		morning max el	14769 Jan 26 09:22	28° ♄ 38'02	20°26'57
morning max el	14768 Feb 13 21:48	17° ♄ 01'32	19°13'46		14769 Jan 27 17:32	0° ♄	
	14768 Feb 23 05:30	0° ♄		asc. node	14769 Jan 28 03:17	0° ♄ 26'38	
morning set	14768 Mar 01 16:43	14° ♄ 09'49		morning set	14769 Feb 13 23:32	28° ♄ 47'47	
					14769 Feb 14 13:34	0° ♄	
superior conj	14768 Mar 09 23:09	0° ♄ 30'06	0°40'05	superior conj	14769 Feb 21 13:06	14° ♄ 22'19	1°04'23
minimum elong	14768 Mar 10 01:24	0° ♄ 40'59	0°39'49	minimum elong	14769 Feb 21 15:44	14° ♄ 35'42	1°04'23
	14768 Mar 09 16:55	0° ♄		max. Earth dist.	14769 Feb 27 00:29	25° ♄ 10'11	1.36289 AU
desc. node	14768 Mar 14 21:40	9° ♄ 49'07		desc. node	14769 Mar 01 18:11	0° ♄ 19'31	
max. Earth dist.	14768 Mar 16 17:16	13° ♄ 07'45	1.38501 AU		14769 Mar 01 13:58	0° ♄	
evening rise	14768 Mar 20 10:57	19° ♄ 44'23		evening rise	14769 Mar 02 20:13	2° ♄ 19'15	
	14768 Mar 26 13:41	0° ♄			14769 Mar 19 15:03	0° ♄	
	14768 Apr 16 04:52	0° ♄		evening max el	14769 Apr 07 07:22	23° ♄ 37'20	25°57'11
evening max el	14768 Apr 24 17:52	9° ♄ 45'34	24°45'01		14769 Apr 15 23:37	0° ♄	
retrograde	14768 May 06 11:24	16° ♄ 36'34		retrograde	14769 Apr 19 22:44	0° ♄ 52'47	
asc. node	14768 May 09 02:28	16° ♄ 06'52			14769 Apr 23 14:42	30° ♄	
evening set	14768 May 12 03:10	14° ♄ 13'29		asc. node	14769 Apr 25 23:47	28° ♄ 25'46	
min. Earth dist.	14768 May 16 14:30	9° ♄ 09'15	0.68379 AU	evening set	14769 Apr 26 01:19	28° ♄ 22'33	
inferior conj	14768 May 17 16:27	7° ♄ 43'00	2°21'00	min. Earth dist.	14769 Apr 30 05:59	23° ♄ 53'51	0.67372 AU
minimum elong	14768 May 17 14:20	7° ♄ 50'03	2°19'34	inferior conj	14769 May 01 20:37	21° ♄ 52'32	1°43'14
morning rise	14768 May 23 01:45	1° ♄ 45'32		minimum elong	14769 May 01 18:33	21° ♄ 59'03	1°41'49
direct	14768 May 26 20:14	0° ♄ 24'03		morning rise	14769 May 07 12:28	16° ♄ 05'09	
morning max el	14768 Jun 03 03:39	4° ♄ 26'44	19°38'28	direct	14769 May 10 19:55	15° ♄ 02'40	
desc. node	14768 Jun 10 23:04	13° ♄ 55'59		morning max el	14769 May 17 11:53	18° ♄ 37'32	18°45'16
greatest brilliancy	14768 Jun 15 20:48	20° ♄ 54'57	-0.6m		14769 May 26 10:21	0° ♄	
	14768 Jun 21 23:13	0° ♄		desc. node	14769 May 28 20:00	3° ♄ 33'42	
morning set	14768 Jun 29 00:55	10° ♄ 46'18		greatest brilliancy	14769 May 31 17:13	7° ♄ 56'44	-0.8m
max. Earth dist.	14768 Jul 10 15:55	28° ♄ 51'03	1.44965 AU	morning set	14769 Jun 08 12:38	20° ♄ 03'07	
	14768 Jul 11 09:22	0° ♄			14769 Jun 14 21:53	0° ♄	
superior conj	14768 Jul 15 04:05	6° ♄ 01'08	-2°07'59	max. Earth dist.	14769 Jun 23 09:52	13° ♄ 14'56	1.45788 AU
minimum elong	14768 Jul 15 09:24	6° ♄ 22'29	2°08'37	superior conj	14769 Jun 24 17:19	15° ♄ 17'50	-2°13'19
evening rise	14768 Jul 29 00:47	28° ♄ 48'27		minimum elong	14769 Jun 24 15:32	15° ♄ 10'51	2°14'19
	14768 Jul 29 17:50	0° ♄			14769 Jul 04 01:31	0° ♄	
asc. node	14768 Aug 05 02:09	10° ♄ 35'38		evening rise	14769 Jul 10 02:40	9° ♄ 38'42	
evening max el	14768 Aug 16 03:03	26° ♄ 09'21	18°08'32	asc. node	14769 Jul 22 22:49	29° ♄ 52'58	
retrograde	14768 Aug 22 11:47	29° ♄ 30'06			14769 Jul 23 00:43	0° ♄	
evening set	14768 Aug 25 06:51	28° ♄ 48'53		evening max el	14769 Jul 30 16:20	9° ♄ 50'07	18°32'43
inferior conj	14768 Aug 31 10:04	23° ♄ 28'37	1°49'32	retrograde	14769 Aug 06 04:02	13° ♄ 19'46	
minimum elong	14768 Aug 31 12:26	23° ♄ 22'04	1°48'35	evening set	14769 Aug 09 08:03	12° ♄ 23'05	
min. Earth dist.	14768 Sep 03 00:54	20° ♄ 36'00	0.63436 AU	inferior conj	14769 Aug 15 01:06	6° ♄ 47'26	2°31'23
morning rise	14768 Sep 06 16:03	17° ♄ 13'32		minimum elong	14769 Aug 15 03:20	6° ♄ 40'42	2°30'23
desc. node	14768 Sep 06 20:18	17° ♄ 05'34		min. Earth dist.	14769 Aug 17 02:19	4° ♄ 18'39	0.65412 AU
direct	14768 Sep 13 07:28	14° ♄ 42'23		morning rise	14769 Aug 20 21:26	0° ♄ 23'55	
morning max el	14768 Sep 27 05:41	22° ♄ 43'09	27°46'17		14769 Aug 21 09:23	30° ♄	
	14768 Oct 03 16:32	0° ♄		desc. node	14769 Aug 24 17:49	28° ♄ 09'52	
	14768 Oct 23 10:58	0° ♄		direct	14769 Aug 27 07:45	27° ♄ 45'16	
morning set	14768 Oct 31 22:55	16° ♄ 04'59			14769 Sep 02 22:45	0° ♄	
asc. node	14768 Nov 01 04:10	16° ♄ 31'24		morning max el	14769 Sep 09 16:39	5° ♄ 37'47	27°01'20
max. Earth dist.	14768 Nov 05 21:40	26° ♄ 19'57	1.32216 AU		14769 Sep 28 09:02	0° ♄	
	14768 Nov 07 14:42	0° ♄		morning set	14769 Oct 15 07:46	29° ♄ 16'24	
superior conj	14768 Nov 08 18:02	2° ♄ 28'10	1°05'57		14769 Oct 15 16:48	0° ♄	

asc. node	14769 Oct 19 00:50	6° \mathbb{M} 35'24		max. Earth dist.	14770 Oct 01 19:25	18° \mathbb{A} 44'17	1.35495 AU
max. Earth dist.	14769 Oct 19 13:19	7° \mathbb{M} 38'28	1.33604 AU	asc. node	14770 Oct 05 21:27	26° \mathbb{A} 43'37	
superior conj	14769 Oct 23 20:12	16° \mathbb{M} 31'17	0°43'38	superior conj	14770 Oct 07 14:31	0° \mathbb{M} 10'09	0°15'47
minimum elong	14769 Oct 23 18:11	16° \mathbb{M} 20'39	0°43'57	minimum elong	14770 Oct 07 13:36	0° \mathbb{M} 05'29	0°16'01
	14769 Oct 30 03:46	0° \mathbb{A}		behind sun begin	14770 Oct 07 12:57	0° \mathbb{M} 02'10	
evening rise	14769 Oct 31 00:45	1° \mathbb{A} 51'28		behind sun end	14770 Oct 07 14:15	0° \mathbb{M} 08'48	
	14769 Nov 15 16:28	0° \mathbb{B}			14770 Oct 07 12:31	0° \mathbb{M}	
evening max el	14769 Nov 20 14:32	5° \mathbb{B} 42'42	21°49'33	evening rise	14770 Oct 15 08:34	16° \mathbb{M} 09'52	
desc. node	14769 Nov 20 14:21	5° \mathbb{B} 42'15			14770 Oct 22 08:40	0° \mathbb{A}	
retrograde	14769 Dec 03 00:19	11° \mathbb{B} 51'10		evening max el	14770 Nov 02 13:52	16° \mathbb{A} 14'55	20°21'53
evening set	14769 Dec 06 04:23	11° \mathbb{B} 28'38		desc. node	14770 Nov 07 11:37	20° \mathbb{A} 02'46	
inferior conj	14769 Dec 14 21:00	7° \mathbb{B} 36'32	-5°52'56	retrograde	14770 Nov 13 11:15	21° \mathbb{A} 40'05	
minimum elong	14769 Dec 14 16:23	7° \mathbb{B} 42'58	5°51'30	evening set	14770 Nov 15 16:18	21° \mathbb{A} 27'44	
min. Earth dist.	14769 Dec 14 18:53	7° \mathbb{B} 39'28	0.54474 AU	inferior conj	14770 Nov 24 13:40	17° \mathbb{A} 32'09	-4°54'10
morning rise	14769 Dec 23 05:11	3° \mathbb{B} 48'51		minimum elong	14770 Nov 24 03:42	17° \mathbb{A} 46'46	4°50'41
direct	14769 Dec 26 20:10	3° \mathbb{B} 20'00		min. Earth dist.	14770 Nov 26 01:10	16° \mathbb{A} 40'04	0.54725 AU
morning max el	14770 Jan 08 06:10	9° \mathbb{B} 18'59	22°01'53	morning rise	14770 Dec 02 14:36	13° \mathbb{A} 31'03	
asc. node	14770 Jan 15 00:36	17° \mathbb{B} 21'10		direct	14770 Dec 07 05:38	12° \mathbb{A} 44'57	
	14770 Jan 22 16:10	0° \mathbb{A}		morning max el	14770 Dec 20 16:51	19° \mathbb{A} 21'08	23°50'21
morning set	14770 Jan 29 09:55	13° \mathbb{A} 31'52			14770 Dec 29 12:36	0° \mathbb{B}	
				asc. node	14771 Jan 01 21:50	5° \mathbb{B} 14'18	
superior conj	14770 Feb 05 12:18	28° \mathbb{A} 37'51	1°21'57	morning set	14771 Jan 13 21:49	28° \mathbb{B} 16'26	
minimum elong	14770 Feb 05 14:32	28° \mathbb{A} 49'35	1°22'20		14771 Jan 14 17:05	0° \mathbb{A}	
	14770 Feb 06 03:56	0° \mathbb{H}					
max. Earth dist.	14770 Feb 09 13:23	7° \mathbb{H} 00'26	1.34346 AU	superior conj	14771 Jan 20 17:51	13° \mathbb{A} 08'42	1°32'58
evening rise	14770 Feb 13 20:48	15° \mathbb{H} 31'22		minimum elong	14771 Jan 20 19:13	13° \mathbb{A} 16'05	1°33'42
desc. node	14770 Feb 16 14:43	20° \mathbb{H} 42'03		max. Earth dist.	14771 Jan 23 10:09	18° \mathbb{A} 54'50	1.32803 AU
	14770 Feb 21 19:53	0° \mathbb{Y}		evening rise	14771 Jan 28 09:20	29° \mathbb{A} 12'01	
	14770 Mar 14 04:50	0° \mathbb{B}			14771 Jan 28 18:55	0° \mathbb{H}	
evening max el	14770 Mar 20 21:14	7° \mathbb{B} 20'17	26°54'03	desc. node	14771 Feb 03 11:18	10° \mathbb{H} 52'15	
retrograde	14770 Apr 03 04:21	14° \mathbb{B} 47'34			14771 Feb 14 22:45	0° \mathbb{Y}	
evening set	14770 Apr 09 16:18	12° \mathbb{B} 15'36		evening max el	14771 Mar 03 10:19	20° \mathbb{Y} 43'24	27°28'09
asc. node	14770 Apr 12 21:11	9° \mathbb{B} 12'16		retrograde	14771 Mar 17 03:16	28° \mathbb{Y} 12'26	
min. Earth dist.	14770 Apr 13 15:40	8° \mathbb{B} 20'48	0.65944 AU	evening set	14771 Mar 23 21:52	25° \mathbb{Y} 44'59	
inferior conj	14770 Apr 15 18:48	5° \mathbb{B} 52'17	0°53'44	min. Earth dist.	14771 Mar 27 17:26	22° \mathbb{Y} 21'12	0.64152 AU
minimum elong	14770 Apr 15 17:27	5° \mathbb{B} 56'13	0°52'43	inferior conj	14771 Mar 30 08:21	19° \mathbb{Y} 35'44	-0°08'14
morning rise	14770 Apr 21 19:58	0° \mathbb{B} 16'47		minimum elong	14771 Mar 30 08:36	19° \mathbb{Y} 35'04	0°08'22
	14770 Apr 22 10:12	30° \mathbb{R} \mathbb{Y}		transit middle	14771 Mar 30 08:36	19° \mathbb{Y} 35'04	0°08'22
direct	14770 Apr 24 17:26	29° \mathbb{Y} 30'54		transit begin	14771 Mar 30 05:57	19° \mathbb{Y} 42'04	
	14770 Apr 27 01:26	0° \mathbb{B}		transit end	14771 Mar 30 11:15	19° \mathbb{Y} 28'04	
morning max el	14770 May 01 01:50	2° \mathbb{B} 50'29	18°08'45	asc. node	14771 Mar 30 18:40	19° \mathbb{Y} 08'36	
desc. node	14770 May 15 16:49	23° \mathbb{B} 33'13		morning rise	14771 Apr 05 21:30	14° \mathbb{Y} 14'35	
	14770 May 19 16:54	0° \mathbb{I}		direct	14771 Apr 08 10:14	13° \mathbb{Y} 42'12	
morning set	14770 May 20 01:15	0° \mathbb{I} 33'40		morning max el	14771 Apr 14 19:03	16° \mathbb{Y} 58'25	17°49'24
					14771 Apr 24 07:03	0° \mathbb{B}	
superior conj	14770 Jun 04 02:23	24° \mathbb{I} 29'54	-1°58'34	morning set	14771 May 01 17:28	12° \mathbb{B} 23'36	
minimum elong	14770 Jun 03 18:19	23° \mathbb{I} 58'19	1°59'01	desc. node	14771 May 02 13:33	13° \mathbb{B} 48'12	
max. Earth dist.	14770 Jun 06 06:06	27° \mathbb{I} 52'13	1.45866 AU		14771 May 12 07:42	0° \mathbb{I}	
	14770 Jun 07 14:51	0° \mathbb{B}					
evening rise	14770 Jun 20 04:51	19° \mathbb{B} 32'01		superior conj	14771 May 15 00:04	4° \mathbb{I} 20'35	-1°27'53
	14770 Jun 26 23:33	0° \mathbb{Q}		minimum elong	14771 May 14 15:46	3° \mathbb{I} 47'10	1°27'47
greatest brilliancy	14770 Jul 02 01:20	7° \mathbb{Q} 43'05	-0.7m	max. Earth dist.	14771 May 20 01:59	12° \mathbb{I} 26'29	1.45201 AU
asc. node	14770 Jul 09 19:36	18° \mathbb{Q} 43'15		evening rise	14771 May 30 16:52	28° \mathbb{I} 55'59	
evening max el	14770 Jul 14 01:48	23° \mathbb{Q} 38'59	19°13'49		14771 May 31 09:37	0° \mathbb{B}	
retrograde	14770 Jul 21 00:50	27° \mathbb{Q} 30'23			14771 Jun 20 21:44	0° \mathbb{Q}	
evening set	14770 Jul 24 14:21	26° \mathbb{Q} 16'44		asc. node	14771 Jun 26 16:29	6° \mathbb{Q} 56'24	
inferior conj	14770 Jul 30 00:40	20° \mathbb{Q} 27'11	2°57'00	evening max el	14771 Jun 27 05:39	7° \mathbb{Q} 29'58	20°10'27
minimum elong	14770 Jul 30 02:09	20° \mathbb{Q} 22'20	2°56'04	retrograde	14771 Jul 04 23:41	11° \mathbb{Q} 54'57	
min. Earth dist.	14770 Jul 31 11:30	18° \mathbb{Q} 34'03	0.67009 AU	evening set	14771 Jul 08 23:14	10° \mathbb{Q} 23'52	
morning rise	14770 Aug 04 13:20	14° \mathbb{Q} 01'45		inferior conj	14771 Jul 14 05:53	4° \mathbb{Q} 21'38	3°08'59
direct	14770 Aug 10 14:48	11° \mathbb{Q} 24'57		minimum elong	14771 Jul 14 06:25	4° \mathbb{Q} 19'50	3°08'03
desc. node	14770 Aug 11 15:18	11° \mathbb{Q} 28'56		min. Earth dist.	14771 Jul 15 02:37	3° \mathbb{Q} 11'03	0.68161 AU
morning max el	14770 Aug 23 03:46	18° \mathbb{Q} 54'06	25°52'06		14771 Jul 17 14:21	30° \mathbb{R} \mathbb{B}	
	14770 Sep 01 13:41	0° \mathbb{P}		morning rise	14771 Jul 19 13:15	27° \mathbb{B} 58'34	
	14770 Sep 21 10:07	0° \mathbb{A}		direct	14771 Jul 25 03:32	25° \mathbb{B} 31'22	
morning set	14770 Sep 28 03:01	11° \mathbb{A} 50'09		desc. node	14771 Jul 29 12:44	26° \mathbb{B} 44'43	

	14771 Aug 03 02:07	0°♎		direct	14772 Jul 07 20:59	9°♊56'53	
morning max el	14771 Aug 05 14:26	2°♎22'49	24°27'59	desc. node	14772 Jul 15 10:03	13°♊31'58	
	14771 Aug 26 15:22	0°♎		morning max el	14772 Jul 18 01:46	15°♊59'56	22°58'30
morning set	14771 Sep 10 04:26	23°♎35'46			14772 Jul 29 13:48	0°♎	
	14771 Sep 13 19:11	0°♎			14772 Aug 18 15:10	0°♎	
max. Earth dist.	14771 Sep 13 19:00	29°♎59'07	1.37744 AU	morning set	14772 Aug 21 07:44	4°♎23'39	
				max. Earth dist.	14772 Aug 25 17:48	11°♎49'23	1.40122 AU
superior conj	14771 Sep 20 21:35	13°♎15'48	-0°16'51				
minimum elong	14771 Sep 20 22:43	13°♎21'15	0°16'31	superior conj	14772 Sep 02 13:27	25°♎39'23	-0°52'25
asc. node	14771 Sep 22 18:01	16°♎51'49		minimum elong	14772 Sep 02 17:26	25°♎57'36	0°51'57
evening rise	14771 Sep 29 11:21	0°♎13'19			14772 Sep 04 21:59	0°♎	
	14771 Sep 29 08:41	0°♎		asc. node	14772 Sep 08 14:35	6°♎56'42	
evening max el	14771 Oct 16 03:31	27°♎35'04	19°15'14	evening rise	14772 Sep 12 06:07	13°♎54'20	
	14771 Oct 18 23:30	0°♎			14772 Sep 21 01:45	0°♎	
retrograde	14771 Oct 25 09:53	2°♎14'01		evening max el	14772 Sep 28 05:27	9°♎43'01	18°30'44
desc. node	14771 Oct 25 08:58	2°♎14'00		retrograde	14772 Oct 06 03:00	13°♎42'52	
evening set	14771 Oct 27 06:48	2°♎03'26		evening set	14772 Oct 08 02:13	13°♎28'44	
	14771 Nov 01 11:01	30°♎		desc. node	14772 Oct 11 06:23	12°♎12'16	
inferior conj	14771 Nov 04 19:42	27°♎52'53	-3°16'03	inferior conj	14772 Oct 15 22:39	8°♎58'06	-1°29'43
minimum elong	14771 Nov 04 11:32	28°♎06'28	3°12'17	minimum elong	14772 Oct 15 19:05	9°♎05'01	1°27'44
min. Earth dist.	14771 Nov 07 11:09	26°♎07'33	0.55861 AU	min. Earth dist.	14772 Oct 19 03:46	6°♎28'59	0.57682 AU
morning rise	14771 Nov 12 13:52	23°♎20'24		morning rise	14772 Oct 23 08:28	3°♎47'59	
direct	14771 Nov 18 01:25	22°♎11'40		direct	14772 Oct 29 11:50	2°♎12'24	
morning max el	14771 Dec 02 02:43	29°♎18'38	25°35'54	morning max el	14772 Nov 12 18:42	9°♎44'11	26°59'28
	14771 Dec 02 19:43	0°♎			14772 Nov 28 06:28	0°♎	
asc. node	14771 Dec 19 18:58	23°♎51'13		asc. node	14772 Dec 05 15:57	13°♎00'31	
	14771 Dec 23 02:04	0°♎		morning set	14772 Dec 12 18:52	27°♎26'11	
morning set	14771 Dec 29 09:24	12°♎56'17			14772 Dec 13 23:25	0°♎	
superior conj	14772 Jan 05 03:21	27°♎47'58	1°37'44	superior conj	14772 Dec 19 14:41	12°♎29'17	1°36'28
minimum elong	14772 Jan 05 03:39	27°♎49'38	1°38'40	minimum elong	14772 Dec 19 13:56	12°♎25'05	1°37'26
	14772 Jan 06 03:13	0°♎		max. Earth dist.	14772 Dec 19 20:56	13°♎04'13	1.31169 AU
max. Earth dist.	14772 Jan 06 13:38	0°♎57'26	1.31728 AU	evening rise	14772 Dec 26 10:37	27°♎30'11	
evening rise	14772 Jan 12 06:47	13°♎13'49			14772 Dec 27 15:00	0°♎	
	14772 Jan 20 22:02	0°♎		desc. node	14773 Jan 07 04:44	20°♎11'08	
desc. node	14772 Jan 21 07:59	0°♎44'35			14773 Jan 13 07:52	0°♎	
	14772 Feb 10 09:34	0°♎		evening max el	14773 Jan 26 01:17	15°♎39'20	27°03'47
evening max el	14772 Feb 13 20:30	3°♎33'55	27°32'57	retrograde	14773 Feb 09 01:22	22°♎54'44	
retrograde	14772 Feb 27 18:40	10°♎58'17		evening set	14773 Feb 15 17:53	20°♎58'56	
evening set	14772 Mar 05 15:30	8°♎42'41		min. Earth dist.	14773 Feb 19 15:35	18°♎17'33	0.59861 AU
min. Earth dist.	14772 Mar 09 09:41	5°♎44'36	0.62077 AU	inferior conj	14773 Feb 22 20:31	15°♎40'12	-2°46'48
inferior conj	14772 Mar 12 10:09	2°♎55'11	-1°22'32	minimum elong	14773 Feb 23 02:41	15°♎27'31	2°44'06
minimum elong	14772 Mar 12 13:01	2°♎48'28	1°21'18	morning rise	14773 Mar 02 14:53	10°♎56'15	
	14772 Mar 15 18:25	30°♎		asc. node	14773 Mar 03 13:37	10°♎45'00	
asc. node	14772 Mar 16 16:09	29°♎20'32		direct	14773 Mar 04 15:34	10°♎40'27	
morning rise	14772 Mar 19 13:29	27°♎51'19		morning max el	14773 Mar 12 02:46	14°♎23'37	18°04'41
direct	14772 Mar 21 18:59	27°♎29'01			14773 Mar 22 18:52	0°♎	
	14772 Mar 27 13:18	0°♎		morning set	14773 Mar 27 16:42	8°♎59'31	
morning max el	14772 Mar 28 12:33	0°♎53'10	17°47'42	desc. node	14773 Apr 05 06:44	24°♎45'47	
morning set	14772 Apr 13 08:39	25°♎18'35					
	14772 Apr 16 00:18	0°♎		superior conj	14773 Apr 06 16:05	27°♎14'36	-0°11'16
desc. node	14772 Apr 18 10:10	4°♎14'01		minimum elong	14773 Apr 06 15:08	27°♎10'23	0°11'28
				behind sun begin	14773 Apr 06 09:40	26°♎46'06	
superior conj	14772 Apr 24 20:22	15°♎15'37	-0°49'41	behind sun end	14773 Apr 06 20:36	27°♎34'37	
minimum elong	14772 Apr 24 15:39	14°♎55'45	0°49'37		14773 Apr 08 05:35	0°♎	
max. Earth dist.	14772 May 01 18:39	26°♎40'38	1.43867 AU	max. Earth dist.	14773 Apr 14 06:27	10°♎19'46	1.42006 AU
	14772 May 03 20:21	0°♎		evening rise	14773 Apr 19 12:20	18°♎54'46	
evening rise	14772 May 09 06:55	8°♎33'08			14773 Apr 26 14:28	0°♎	
	14772 May 23 14:31	0°♎			14773 May 18 03:19	0°♎	
evening max el	14772 Jun 09 03:31	21°♎21'15	21°19'57	evening max el	14773 May 22 20:31	5°♎12'52	22°38'14
asc. node	14772 Jun 12 13:29	24°♎20'24		asc. node	14773 May 30 10:34	10°♎39'08	
retrograde	14772 Jun 17 22:31	26°♎28'19		retrograde	14773 Jun 01 19:40	11°♎04'19	
evening set	14772 Jun 22 08:45	24°♎40'19		evening set	14773 Jun 06 17:08	9°♎00'53	
inferior conj	14772 Jun 27 14:26	18°♎26'59	3°09'10	inferior conj	14773 Jun 12 00:14	2°♎38'32	2°58'38
minimum elong	14772 Jun 27 13:59	18°♎28'34	3°08'09	minimum elong	14773 Jun 11 22:55	2°♎43'05	2°57'27
min. Earth dist.	14772 Jun 27 21:41	18°♎01'44	0.68840 AU	min. Earth dist.	14773 Jun 11 18:29	2°♎58'32	0.69038 AU
morning rise	14772 Jul 02 19:01	12°♎08'55			14773 Jun 13 22:48	30°♎	

morning rise	14773 Jun 17 04:34	26° Π 27'19		min. Earth dist.	14774 May 26 14:51	17° Π 55'43	0.68760 AU
direct	14773 Jun 21 18:03	24° Π 33'52		inferior conj	14774 May 27 09:22	16° Π 52'45	2°37'46
morning max el	14773 Jun 30 16:19	29° Π 45'04	21°32'16	minimum elong	14774 May 27 07:26	16° Π 59'18	2°36'24
	14773 Jun 30 22:15	0° \mathfrak{C}		morning rise	14774 Jun 01 16:05	10° Π 49'47	
desc. node	14773 Jul 02 07:15	1° \mathfrak{C} 26'56		direct	14774 Jun 05 17:23	9° Π 16'30	
	14773 Jul 23 06:25	0° Ω		morning max el	14774 Jun 13 12:58	13° Π 40'51	20°15'59
morning set	14773 Aug 01 10:29	14° Ω 08'01		desc. node	14774 Jun 19 04:22	20° Π 11'54	
max. Earth dist.	14773 Aug 07 21:08	24° Ω 30'47	1.42352 AU		14774 Jun 26 07:51	0° \mathfrak{C}	
	14773 Aug 11 04:26	0° \mathfrak{M}		morning set	14774 Jul 11 17:35	23° \mathfrak{C} 03'06	
					14774 Jul 16 05:00	0° Ω	
superior conj	14773 Aug 15 09:41	7° \mathfrak{M} 10'58	-1°27'34	max. Earth dist.	14774 Jul 21 07:27	8° Ω 03'48	1.44182 AU
minimum elong	14773 Aug 15 16:27	7° \mathfrak{M} 40'15	1°27'11				
asc. node	14773 Aug 26 11:09	26° \mathfrak{M} 54'28		superior conj	14774 Jul 27 06:44	17° Ω 43'30	-1°56'43
evening rise	14773 Aug 26 12:56	27° \mathfrak{M} 02'36		minimum elong	14774 Jul 27 14:00	18° Ω 13'17	1°56'55
	14773 Aug 28 03:57	0° \mathfrak{A}			14774 Aug 03 15:05	0° \mathfrak{M}	
evening max el	14773 Sep 11 15:31	22° \mathfrak{A} 29'44	18°07'07	evening rise	14774 Aug 09 02:57	9° \mathfrak{M} 25'50	
retrograde	14773 Sep 18 14:26	26° \mathfrak{A} 03'11		asc. node	14774 Aug 13 07:43	16° \mathfrak{M} 40'35	
evening set	14773 Sep 20 20:29	25° \mathfrak{A} 41'12			14774 Aug 21 13:48	0° \mathfrak{A}	
inferior conj	14773 Sep 27 22:57	20° \mathfrak{A} 49'49	0°03'49	evening max el	14774 Aug 26 05:33	5° \mathfrak{A} 44'12	18°02'47
minimum elong	14773 Sep 27 23:05	20° \mathfrak{A} 49'30	0°04'01	retrograde	14774 Sep 01 16:28	9° \mathfrak{A} 05'25	
transit middle	14773 Sep 27 23:05	20° \mathfrak{A} 49'30	0°04'01	evening set	14774 Sep 04 06:44	8° \mathfrak{A} 31'55	
transit begin	14773 Sep 27 19:50	20° \mathfrak{A} 56'51		inferior conj	14774 Sep 10 17:26	3° \mathfrak{A} 21'24	1°16'56
transit end	14773 Sep 28 02:20	20° \mathfrak{A} 42'09		minimum elong	14774 Sep 10 19:25	3° \mathfrak{A} 16'15	1°16'11
desc. node	14773 Sep 28 03:50	20° \mathfrak{A} 38'45		min. Earth dist.	14774 Sep 13 15:04	0° \mathfrak{A} 22'39	0.62178 AU
min. Earth dist.	14773 Oct 01 04:42	17° \mathfrak{A} 55'12	0.59886 AU		14774 Sep 14 00:20	30° \mathfrak{R} \mathfrak{M}	
morning rise	14773 Oct 04 22:24	15° \mathfrak{A} 07'09		desc. node	14774 Sep 15 01:21	29° \mathfrak{M} 01'30	
direct	14773 Oct 11 11:36	13° \mathfrak{A} 05'14		morning rise	14774 Sep 17 05:41	27° \mathfrak{M} 15'35	
morning max el	14773 Oct 25 18:27	20° \mathfrak{A} 54'34	27°48'11	direct	14774 Sep 23 22:03	24° \mathfrak{M} 52'56	
	14773 Nov 02 15:56	0° \mathfrak{M}			14774 Oct 04 22:03	0° \mathfrak{A}	
	14773 Nov 21 05:17	0° \mathfrak{J}		morning max el	14774 Oct 08 00:36	2° \mathfrak{A} 51'33	27°57'47
asc. node	14773 Nov 22 12:50	2° \mathfrak{J} 33'25			14774 Oct 28 03:26	0° \mathfrak{M}	
morning set	14773 Nov 27 00:26	11° \mathfrak{J} 41'39		asc. node	14774 Nov 09 09:38	22° \mathfrak{M} 22'29	
max. Earth dist.	14773 Dec 03 04:39	25° \mathfrak{J} 08'13	1.31146 AU	morning set	14774 Nov 10 23:57	25° \mathfrak{M} 36'44	
					14774 Nov 13 02:37	0° \mathfrak{J}	
superior conj	14773 Dec 04 02:01	27° \mathfrak{J} 07'23	1°29'16	max. Earth dist.	14774 Nov 16 08:58	6° \mathfrak{J} 59'46	1.31669 AU
minimum elong	14773 Dec 04 00:23	26° \mathfrak{J} 58'15	1°30'08				
	14773 Dec 05 08:55	0° \mathfrak{Z}		superior conj	14774 Nov 18 11:25	11° \mathfrak{J} 36'04	1°16'11
evening rise	14773 Dec 10 18:45	11° \mathfrak{Z} 56'08		minimum elong	14774 Nov 18 09:13	11° \mathfrak{J} 23'57	1°16'49
	14773 Dec 19 19:07	0° \mathfrak{A}		evening rise	14774 Nov 25 05:10	26° \mathfrak{J} 25'56	
desc. node	14773 Dec 25 01:35	9° \mathfrak{A} 02'14			14774 Nov 26 21:12	0° \mathfrak{Z}	
evening max el	14774 Jan 07 22:27	26° \mathfrak{A} 53'03	26°00'19	desc. node	14774 Dec 11 22:32	27° \mathfrak{Z} 04'00	
	14774 Jan 11 15:08	0° \mathfrak{H}			14774 Dec 14 01:48	0° \mathfrak{A}	
retrograde	14774 Jan 21 21:11	3° \mathfrak{H} 56'31		evening max el	14774 Dec 20 11:33	7° \mathfrak{A} 17'54	24°29'34
evening set	14774 Jan 28 01:09	2° \mathfrak{H} 27'07		retrograde	14775 Jan 03 03:56	14° \mathfrak{A} 06'58	
	14774 Feb 01 05:29	30° \mathfrak{R} \mathfrak{A}		evening set	14775 Jan 08 09:42	13° \mathfrak{A} 06'43	
min. Earth dist.	14774 Feb 01 11:38	29° \mathfrak{A} 49'30	0.57724 AU	min. Earth dist.	14775 Jan 13 23:19	10° \mathfrak{A} 16'23	0.55929 AU
inferior conj	14774 Feb 04 11:54	27° \mathfrak{A} 41'21	-4°13'20	inferior conj	14775 Jan 16 06:18	8° \mathfrak{A} 51'12	-5°25'52
minimum elong	14774 Feb 04 20:46	27° \mathfrak{A} 25'35	4°10'01	minimum elong	14775 Jan 16 14:10	8° \mathfrak{A} 38'57	5°23'35
morning rise	14774 Feb 12 19:22	23° \mathfrak{A} 18'47		morning rise	14775 Jan 24 20:38	4° \mathfrak{A} 49'11	
direct	14774 Feb 14 19:49	23° \mathfrak{A} 05'42		direct	14775 Jan 27 04:52	4° \mathfrak{A} 34'31	
asc. node	14774 Feb 18 11:02	23° \mathfrak{A} 50'33		asc. node	14775 Feb 05 08:25	8° \mathfrak{A} 36'57	
morning max el	14774 Feb 23 09:42	27° \mathfrak{A} 18'18	18°42'05	morning max el	14775 Feb 06 05:13	9° \mathfrak{A} 25'15	19°41'56
	14774 Feb 25 20:12	0° \mathfrak{H}			14775 Feb 19 18:47	0° \mathfrak{H}	
morning set	14774 Mar 11 12:30	23° \mathfrak{H} 11'26		morning set	14775 Feb 23 16:11	7° \mathfrak{H} 42'36	
	14774 Mar 15 00:34	0° \mathfrak{Y}					
superior conj	14774 Mar 20 07:41	10° \mathfrak{Y} 07'14	0°23'03	superior conj	14775 Mar 03 14:39	23° \mathfrak{H} 40'54	0°51'13
minimum elong	14774 Mar 20 09:11	10° \mathfrak{Y} 14'17	0°22'43	minimum elong	14775 Mar 03 17:12	23° \mathfrak{H} 53'27	0°51'02
desc. node	14774 Mar 23 03:16	15° \mathfrak{Y} 20'01			14775 Mar 06 20:42	0° \mathfrak{Y}	
max. Earth dist.	14774 Mar 27 14:08	23° \mathfrak{Y} 17'51	1.39824 AU	desc. node	14775 Mar 09 23:47	5° \mathfrak{Y} 52'54	
	14774 Mar 31 11:51	0° \mathfrak{B}		max. Earth dist.	14775 Mar 09 20:38	5° \mathfrak{Y} 38'16	1.37549 AU
evening rise	14774 Mar 31 14:45	0° \mathfrak{B} 12'10		evening rise	14775 Mar 13 13:33	12° \mathfrak{Y} 21'02	
	14774 Apr 19 23:36	0° Π			14775 Mar 24 03:10	0° \mathfrak{B}	
evening max el	14774 May 05 10:51	19° Π 06'30	23°59'33	evening max el	14775 Apr 18 00:27	3° Π 00'54	25°17'07
retrograde	14774 May 16 13:44	25° Π 37'49		retrograde	14775 Apr 30 03:41	10° Π 02'57	
asc. node	14774 May 17 07:44	25° Π 35'21		asc. node	14775 May 04 04:59	8° Π 54'00	
evening set	14774 May 21 22:49	23° Π 21'11		evening set	14775 May 06 00:15	7° Π 36'23	

min. Earth dist.	14775 May 10 08:39	2°II47'28	0.68011 AU	min. Earth dist.	14776 Apr 22 21:47	17°826'00	0.66817 AU
inferior conj	14775 May 11 15:57	1°II05'44	2°06'22	inferior conj	14776 Apr 24 17:52	15°811'53	1°23'43
minimum elong	14775 May 11 13:47	1°II12'47	2°04'55	minimum elong	14776 Apr 24 16:01	15°817'33	1°22'26
	14775 May 12 12:18	30°R8		morning rise	14776 Apr 30 13:23	9°829'36	
morning rise	14775 May 17 03:42	25°812'23		direct	14776 May 03 16:28	8°834'32	
direct	14775 May 20 17:29	23°859'02		morning max el	14776 May 10 04:11	12°801'06	18°27'42
morning max el	14775 May 27 17:10	27°847'53	19°13'51	desc. node	14776 May 22 22:16	29°821'37	
	14775 May 29 18:53	0°II			14776 May 23 08:09	0°II	
desc. node	14775 Jun 06 01:23	9°II33'41		morning set	14776 May 30 18:52	11°II42'07	
greatest brilliancy	14775 Jun 09 12:31	14°II37'36	-0.7m		14776 Jun 11 10:31	0°8	
	14775 Jun 19 15:24	0°8					
morning set	14775 Jun 20 21:40	1°856'27		superior conj	14776 Jun 15 14:41	6°830'49	-2°09'26
max. Earth dist.	14775 Jul 03 23:58	22°816'46	1.45409 AU	minimum elong	14776 Jun 15 09:40	6°811'14	2°10'16
				max. Earth dist.	14776 Jun 15 19:37	6°850'03	1.45915 AU
superior conj	14775 Jul 07 05:23	27°821'43	-2°12'39		14776 Jun 30 14:44	0°8	
minimum elong	14775 Jul 07 08:06	27°832'29	2°13'33	evening rise	14776 Jul 01 10:31	1°817'52	
	14775 Jul 08 21:20	0°8		greatest brilliancy	14776 Jul 10 08:03	15°815'47	-0.8m
evening rise	14775 Jul 21 19:09	20°853'01		asc. node	14776 Jul 17 01:07	25°817'39	
	14775 Jul 27 08:23	0°8			14776 Jul 20 14:23	0°8	
asc. node	14775 Jul 31 04:23	6°810'34		evening max el	14776 Jul 23 07:52	3°802'28	18°48'06
evening max el	14775 Aug 09 20:00	19°817'47	18°16'40	retrograde	14776 Jul 29 23:29	6°840'08	
retrograde	14775 Aug 16 04:48	22°840'38		evening set	14776 Aug 02 07:25	5°836'23	
evening set	14775 Aug 19 03:41	21°852'55		inferior conj	14776 Aug 07 21:11	29°854'23	2°44'01
inferior conj	14775 Aug 25 02:07	16°825'37	2°09'27	minimum elong	14776 Aug 07 23:09	29°848'15	2°43'04
minimum elong	14775 Aug 25 04:31	16°818'40	2°08'27		14776 Aug 07 19:24	30°R8	
min. Earth dist.	14775 Aug 27 11:13	13°841'43	0.64317 AU	min. Earth dist.	14776 Aug 09 16:13	27°839'44	0.66142 AU
morning rise	14775 Aug 31 03:47	10°806'08		morning rise	14776 Aug 13 13:58	23°829'09	
desc. node	14775 Sep 01 22:53	8°852'09		desc. node	14776 Aug 18 20:23	20°854'19	
direct	14775 Sep 06 17:30	7°830'58		direct	14776 Aug 19 20:42	20°850'28	
morning max el	14775 Sep 20 10:46	15°829'09	27°30'49	morning max el	14776 Sep 01 22:16	28°835'19	26°34'19
	14775 Oct 02 08:55	0°8			14776 Sep 03 06:52	0°8	
	14775 Oct 20 20:52	0°8			14776 Sep 25 03:50	0°8	
morning set	14775 Oct 25 15:00	9°805'57		morning set	14776 Oct 07 18:32	22°802'24	
asc. node	14775 Oct 27 06:22	12°822'26		max. Earth dist.	14776 Oct 11 17:57	29°843'42	1.34351 AU
max. Earth dist.	14775 Oct 30 06:19	18°831'58	1.32745 AU		14776 Oct 11 21:14	0°8	
				asc. node	14776 Oct 13 03:02	2°828'45	
superior conj	14775 Nov 02 16:52	25°849'56	0°57'12	superior conj	14776 Oct 16 16:02	9°843'13	0°32'28
minimum elong	14775 Nov 02 14:36	25°837'42	0°57'36	minimum elong	14776 Oct 16 14:22	9°834'36	0°32'43
	14775 Nov 04 15:09	0°8		evening rise	14776 Oct 24 01:39	25°818'31	
evening rise	14775 Nov 09 16:07	10°854'58			14776 Oct 26 07:51	0°8	
	14775 Nov 19 07:47	0°8		evening max el	14776 Nov 12 13:08	27°826'21	21°09'59
desc. node	14775 Nov 28 19:37	13°858'30		desc. node	14776 Nov 14 16:48	29°822'46	
evening max el	14775 Dec 01 21:13	17°816'09	22°46'49		14776 Nov 15 11:54	0°8	
retrograde	14775 Dec 14 22:04	23°843'59		retrograde	14776 Nov 24 08:54	3°818'22	
evening set	14775 Dec 18 20:46	23°810'03		evening set	14776 Nov 27 01:11	3°801'33	
min. Earth dist.	14775 Dec 26 05:54	19°847'36	0.54762 AU		14776 Dec 04 09:08	30°R8	
inferior conj	14775 Dec 27 06:09	19°813'13	-5°59'42	inferior conj	14776 Dec 05 21:19	29°809'17	-5°34'44
minimum elong	14775 Dec 27 06:57	19°812'05	5°58'42	minimum elong	14776 Dec 05 13:31	29°820'17	5°32'27
morning rise	14776 Jan 04 18:28	15°824'57		min. Earth dist.	14776 Dec 06 11:38	28°849'01	0.54454 AU
direct	14776 Jan 07 20:05	15°803'17		morning rise	14776 Dec 14 02:16	25°818'23	
morning max el	14776 Jan 19 10:18	20°837'02	21°05'01	direct	14776 Dec 18 03:18	24°843'10	
asc. node	14776 Jan 23 05:46	24°849'56			14776 Dec 30 00:05	0°8	
	14776 Jan 26 23:05	0°8		morning max el	14776 Dec 31 02:02	0°859'07	22°47'20
morning set	14776 Feb 08 00:47	22°824'12		asc. node	14777 Jan 09 03:03	12°811'34	
	14776 Feb 11 15:49	0°8			14777 Jan 19 01:28	0°8	
superior conj	14776 Feb 15 08:56	7°844'17	1°12'40	morning set	14777 Jan 22 12:05	7°809'48	
minimum elong	14776 Feb 15 11:28	7°857'23	1°12'48	superior conj	14777 Jan 29 11:13	22°808'10	1°27'25
max. Earth dist.	14776 Feb 20 06:05	17°834'28	1.35421 AU	minimum elong	14777 Jan 29 13:06	22°818'17	1°27'56
evening rise	14776 Feb 24 05:43	25°812'37		max. Earth dist.	14777 Feb 01 22:07	29°825'04	1.33626 AU
desc. node	14776 Feb 24 20:18	26°820'30			14777 Feb 02 04:52	0°8	
	14776 Feb 26 20:18	0°8		evening rise	14777 Feb 06 11:48	8°838'25	
evening max el	14776 Mar 16 15:31	0°8		desc. node	14777 Feb 10 16:53	16°838'56	
retrograde	14776 Mar 30 14:04	16°849'56	26°23'38		14777 Feb 18 08:50	0°8	
evening set	14776 Apr 12 12:37	24°811'38			14777 Mar 12 17:01	0°8	
evening set	14776 Apr 18 19:37	21°839'41		evening max el	14777 Mar 13 03:35	0°825'49	27°11'40
asc. node	14776 Apr 20 02:21	20°830'57					

retrograde	14777 Mar 26 15:43	7°♄55'47			14778 Feb 12 03:31	0°♄	
evening set	14777 Apr 02 06:56	5°♄24'34		evening max el	14778 Feb 23 15:43	13°♄36'43	27°34'11
min. Earth dist.	14777 Apr 06 04:19	1°♄43'36	0.65223 AU	retrograde	14778 Mar 09 11:48	21°♄05'00	
asc. node	14777 Apr 06 23:46	0°♄50'00		evening set	14778 Mar 16 07:46	18°♄41'48	
	14777 Apr 07 17:35	30°♄		min. Earth dist.	14778 Mar 20 02:21	15°♄29'32	0.63292 AU
inferior conj	14777 Apr 08 12:45	29°♄06'05	0°29'01	inferior conj	14778 Mar 22 21:42	12°♄40'29	-0°38'16
minimum elong	14777 Apr 08 11:58	29°♄08'17	0°28'19	minimum elong	14778 Mar 22 22:56	12°♄37'22	0°37'52
morning rise	14777 Apr 14 18:44	23°♄36'36		asc. node	14778 Mar 24 21:13	10°♄44'34	
direct	14777 Apr 17 12:14	22°♄57'01		morning rise	14778 Mar 29 16:39	7°♄26'12	
morning max el	14777 Apr 23 19:57	26°♄13'53	17°58'22	direct	14778 Apr 01 01:58	6°♄58'38	
	14777 Apr 27 03:18	0°♄		morning max el	14778 Apr 07 13:39	10°♄17'15	17°46'24
desc. node	14777 May 09 19:03	19°♄28'41			14778 Apr 20 22:38	0°♄	
morning set	14777 May 11 19:28	22°♄47'26		morning set	14778 Apr 23 22:12	5°♄07'25	
	14777 May 16 05:12	0°♄		desc. node	14778 Apr 26 15:43	9°♄48'50	
superior conj	14777 May 26 03:23	15°♄55'28	-1°47'02	superior conj	14778 May 06 10:04	26°♄12'13	-1°12'06
minimum elong	14777 May 25 18:30	15°♄20'20	1°47'12	minimum elong	14778 May 06 03:04	25°♄43'32	1°11'59
max. Earth dist.	14777 May 29 15:30	21°♄26'24	1.45672 AU		14778 May 08 18:00	0°♄	
	14777 Jun 04 03:23	0°♄		max. Earth dist.	14778 May 12 09:50	5°♄52'31	1.44712 AU
evening rise	14777 Jun 11 04:56	10°♄53'52		evening rise	14778 May 21 15:43	20°♄18'24	
	14777 Jun 23 19:12	0°♄			14778 May 28 01:03	0°♄	
greatest brilliancy	14777 Jun 24 22:06	1°♄39'03	-0.7m		14778 Jun 18 23:02	0°♄	
asc. node	14777 Jul 03 21:57	13°♄53'38		evening max el	14778 Jun 19 16:20	0°♄44'20	20°38'42
evening max el	14777 Jul 06 15:01	16°♄52'29	19°36'05	asc. node	14778 Jun 20 18:51	1°♄47'53	
retrograde	14777 Jul 13 21:29	20°♄57'16		retrograde	14778 Jun 27 20:27	5°♄26'17	
evening set	14777 Jul 17 15:05	19°♄36'24		evening set	14778 Jul 02 00:26	3°♄48'05	
inferior conj	14777 Jul 22 23:29	13°♄41'18	3°03'34		14778 Jul 05 13:16	30°♄	
minimum elong	14777 Jul 23 00:35	13°♄37'39	3°02'40	inferior conj	14778 Jul 07 06:24	27°♄41'10	3°10'24
min. Earth dist.	14777 Jul 24 04:20	12°♄05'24	0.67558 AU	minimum elong	14778 Jul 07 06:30	27°♄40'49	3°09'27
morning rise	14777 Jul 28 09:35	7°♄16'10		min. Earth dist.	14778 Jul 07 21:24	26°♄49'24	0.68513 AU
direct	14777 Aug 03 06:27	4°♄42'27		morning rise	14778 Jul 12 12:16	21°♄19'56	
desc. node	14777 Aug 05 17:51	5°♄05'52		direct	14778 Jul 17 21:29	18°♄58'20	
morning max el	14777 Aug 15 09:11	11°♄57'59	25°17'24	desc. node	14778 Jul 23 15:13	21°♄03'50	
	14777 Aug 29 20:55	0°♄		morning max el	14778 Jul 28 19:42	25°♄30'05	23°49'54
	14777 Sep 17 20:39	0°♄			14778 Aug 01 21:56	0°♄	
morning set	14777 Sep 20 06:44	4°♄17'07			14778 Aug 23 08:37	0°♄	
max. Earth dist.	14777 Sep 23 20:16	10°♄48'12	1.36415 AU	morning set	14778 Sep 01 23:14	15°♄39'40	
asc. node	14777 Sep 29 23:39	22°♄37'27		max. Earth dist.	14778 Sep 05 18:28	22°♄14'31	1.38758 AU
					14778 Sep 10 02:03	0°♄	
superior conj	14777 Sep 30 05:59	23°♄08'51	0°02'27	superior conj	14778 Sep 13 07:09	5°♄58'35	-0°31'44
minimum elong	14777 Sep 30 05:49	23°♄08'01	0°02'42	minimum elong	14778 Sep 13 09:25	6°♄09'17	0°31'20
behind sun begin	14777 Sep 29 23:30	22°♄36'43		asc. node	14778 Sep 16 20:13	12°♄45'10	
behind sun end	14777 Sep 30 12:07	23°♄39'23		evening rise	14778 Sep 22 07:26	23°♄26'20	
	14777 Oct 03 15:45	0°♄			14778 Sep 25 16:35	0°♄	
evening rise	14777 Oct 08 07:38	9°♄31'05		evening max el	14778 Oct 08 14:02	20°♄00'25	18°53'40
	14777 Oct 19 07:58	0°♄		retrograde	14778 Oct 17 05:02	24°♄20'50	
evening max el	14777 Oct 25 18:35	8°♄18'14	19°50'51	evening set	14778 Oct 19 02:15	24°♄09'13	
desc. node	14777 Nov 01 14:06	12°♄50'28		desc. node	14778 Oct 19 11:29	24°♄04'05	
retrograde	14777 Nov 04 23:15	13°♄23'16		inferior conj	14778 Oct 27 08:41	19°♄50'36	-2°30'20
evening set	14777 Nov 06 22:57	13°♄12'34		minimum elong	14778 Oct 27 02:26	20°♄01'41	2°27'11
inferior conj	14777 Nov 15 18:13	9°♄12'08	-4°15'29	min. Earth dist.	14778 Oct 30 07:52	17°♄44'53	0.56574 AU
minimum elong	14777 Nov 15 08:19	9°♄27'21	4°11'31	morning rise	14778 Nov 03 23:37	15°♄02'26	
min. Earth dist.	14777 Nov 17 19:29	7°♄56'25	0.55101 AU	direct	14778 Nov 09 18:55	13°♄42'19	
morning rise	14777 Nov 23 16:14	4°♄58'57		morning max el	14778 Nov 23 22:53	21°♄00'10	26°15'03
direct	14777 Nov 28 16:33	4°♄03'39			14778 Dec 01 18:21	0°♄	
morning max el	14777 Dec 12 11:12	10°♄54'41	24°36'51	asc. node	14778 Dec 13 21:19	19°♄16'46	
	14777 Dec 26 18:26	0°♄			14778 Dec 19 09:06	0°♄	
asc. node	14777 Dec 27 00:14	0°♄24'44		morning set	14778 Dec 22 10:53	6°♄28'18	
morning set	14778 Jan 07 00:01	21°♄52'35					
	14778 Jan 10 17:25	0°♄		superior conj	14778 Dec 29 05:10	21°♄23'45	1°37'55
superior conj	14778 Jan 13 18:41	6°♄43'19	1°35'44	minimum elong	14778 Dec 29 05:01	21°♄22'54	1°38'54
minimum elong	14778 Jan 13 19:37	6°♄48'22	1°36'34	max. Earth dist.	14778 Dec 30 03:13	23°♄26'27	1.31429 AU
max. Earth dist.	14778 Jan 15 21:42	11°♄21'30	1.32277 AU		14779 Jan 02 02:39	0°♄	
evening rise	14778 Jan 21 04:26	22°♄28'54		evening rise	14779 Jan 05 04:52	6°♄37'31	
	14778 Jan 24 23:27	0°♄		desc. node	14779 Jan 15 10:11	26°♄24'29	
desc. node	14778 Jan 28 13:30	6°♄42'18			14779 Jan 17 12:10	0°♄	

evening max el	14779 Feb 06 00:07	26° H 09'41	27°24'56	desc. node	14780 Jan 02 07:00	15° \approx 37'22	
	14779 Feb 10 15:05	0° Y			14780 Jan 12 00:34	0° H	
retrograde	14779 Feb 19 23:28	3° Y 29'54		evening max el	14780 Jan 19 01:56	7° H 53'24	26°40'45
evening set	14779 Feb 26 19:14	1° Y 22'12		retrograde	14780 Feb 02 01:23	15° H 03'21	
	14779 Feb 28 18:55	30° R H		evening set	14780 Feb 08 13:56	13° H 18'04	
min. Earth dist.	14779 Mar 02 14:20	28° H 32'16	0.61139 AU	min. Earth dist.	14780 Feb 12 15:40	10° H 40'21	0.58927 AU
inferior conj	14779 Mar 05 17:20	25° H 46'16	-1°57'21	inferior conj	14780 Feb 15 20:00	8° H 13'35	-3°23'59
minimum elong	14779 Mar 05 21:34	25° H 36'53	1°55'28	minimum elong	14780 Feb 16 03:32	7° H 59'03	3°20'51
asc. node	14779 Mar 11 18:41	21° H 21'02		morning rise	14780 Feb 23 20:24	3° H 38'41	
morning rise	14779 Mar 13 03:02	20° H 50'11		direct	14780 Feb 25 20:27	3° H 24'23	
direct	14779 Mar 15 06:09	20° H 31'01		asc. node	14780 Feb 26 16:07	3° H 26'52	
morning max el	14779 Mar 22 06:03	24° H 02'04	17°52'33	morning max el	14780 Mar 04 17:39	7° H 18'29	18°18'06
	14779 Mar 27 01:44	0° Y			14780 Mar 19 05:14	0° Y	
morning set	14779 Apr 06 21:15	18° Y 24'03		morning set	14780 Mar 20 10:52	2° Y 20'04	
	14779 Apr 13 08:20	0° B					
desc. node	14779 Apr 13 12:18	0° B 17'32		superior conj	14780 Mar 29 21:14	19° Y 58'19	0°03'59
				minimum elong	14780 Mar 29 21:31	19° Y 59'36	0°03'41
superior conj	14779 Apr 17 16:29	7° B 34'38	-0°33'04	behind sun begin	14780 Mar 29 14:17	19° Y 26'46	
minimum elong	14779 Apr 17 13:29	7° B 21'42	0°33'07	behind sun end	14780 Mar 30 04:44	20° Y 32'21	
max. Earth dist.	14779 Apr 25 00:51	19° B 54'20	1.43133 AU	desc. node	14780 Mar 30 08:52	20° Y 51'04	
evening rise	14779 May 01 11:06	0° II 12'00			14780 Apr 04 12:55	0° B	
	14779 May 01 08:02	0° II		max. Earth dist.	14780 Apr 06 11:14	3° B 18'36	1.41100 AU
	14779 May 21 14:49	0° B		evening rise	14780 Apr 11 01:13	10° B 57'12	
evening max el	14779 Jun 02 12:01	14° B 36'09	21°52'32		14780 Apr 23 06:47	0° II	
asc. node	14779 Jun 07 15:51	18° B 46'24		evening max el	14780 May 15 03:36	28° II 28'51	23°12'46
retrograde	14779 Jun 11 18:35	20° B 01'32			14780 May 16 17:49	0° B	
evening set	14779 Jun 16 09:38	18° B 06'41		asc. node	14780 May 24 12:58	4° B 32'57	
inferior conj	14779 Jun 21 15:40	11° B 49'27	3°05'59	retrograde	14780 May 25 14:35	4° B 38'00	
minimum elong	14779 Jun 21 14:50	11° B 52'22	3°04'53	evening set	14780 May 30 17:06	2° B 28'20	
min. Earth dist.	14779 Jun 21 17:21	11° B 43'36	0.68989 AU		14780 Jun 02 01:53	30° R II	
morning rise	14779 Jun 26 19:51	5° B 34'20		min. Earth dist.	14780 Jun 04 14:08	26° II 41'56	0.68980 AU
direct	14779 Jul 01 16:36	3° B 29'50		inferior conj	14780 Jun 05 01:25	26° II 02'57	2°51'04
desc. node	14779 Jul 10 12:29	8° B 22'26		minimum elong	14780 Jun 04 23:49	26° II 08'29	2°49'48
morning max el	14779 Jul 11 07:55	9° B 10'01	22°20'57	morning rise	14780 Jun 10 06:28	19° II 55'20	
	14779 Jul 27 15:33	0° Q		direct	14780 Jun 14 14:41	18° II 10'35	
morning set	14779 Aug 13 16:02	26° Q 00'04		morning max el	14780 Jun 23 00:56	23° II 00'31	20°58'23
	14779 Aug 16 02:49	0° P		desc. node	14780 Jun 26 09:38	26° II 40'58	
max. Earth dist.	14779 Aug 18 19:10	4° P 27'33	1.41113 AU		14780 Jun 29 02:22	0° B	
					14780 Jul 19 22:18	0° Q	
superior conj	14779 Aug 26 15:10	18° P 01'19	-1°07'40	morning set	14780 Jul 23 09:17	5° Q 20'49	
minimum elong	14779 Aug 26 20:27	18° P 24'51	1°07'10	max. Earth dist.	14780 Jul 31 01:53	17° Q 33'54	1.43199 AU
	14779 Sep 02 04:47	0° A					
asc. node	14779 Sep 03 16:45	2° A 47'34		superior conj	14780 Aug 07 01:50	29° Q 08'15	-1°41'03
evening rise	14779 Sep 05 21:36	6° A 54'47		minimum elong	14780 Aug 07 09:16	29° Q 39'42	1°40'52
	14779 Sep 19 15:55	0° M			14780 Aug 07 14:04	0° P	
evening max el	14779 Sep 21 19:55	2° M 25'51	18°18'10	evening rise	14780 Aug 18 21:57	19° P 46'00	
retrograde	14779 Sep 29 06:24	6° M 12'48		asc. node	14780 Aug 20 13:19	22° P 41'08	
evening set	14779 Oct 01 08:19	5° M 55'43			14780 Aug 24 17:07	0° A	
desc. node	14779 Oct 06 08:56	3° M 15'03		evening max el	14780 Sep 04 08:04	15° A 25'10	18°02'52
inferior conj	14779 Oct 08 20:56	1° M 15'42	-0°47'43	retrograde	14780 Sep 11 00:47	18° A 52'04	
minimum elong	14779 Oct 08 19:10	1° M 19'23	0°46'34	evening set	14780 Sep 13 10:07	18° A 25'40	
	14779 Oct 10 09:09	30° R A		inferior conj	14780 Sep 20 05:30	13° A 25'39	0°37'28
min. Earth dist.	14779 Oct 12 03:30	28° A 33'34	0.58598 AU	minimum elong	14780 Sep 20 06:38	13° A 22'54	0°37'10
morning rise	14779 Oct 16 02:35	25° A 50'56		desc. node	14780 Sep 22 06:25	11° A 27'39	
direct	14779 Oct 22 10:52	24° A 04'06		min. Earth dist.	14780 Sep 23 08:29	10° A 26'41	0.60869 AU
	14779 Nov 03 21:35	0° M		morning rise	14780 Sep 27 00:10	7° A 31'32	
morning max el	14779 Nov 05 18:10	1° M 43'16	27°24'57	direct	14780 Oct 03 15:15	5° A 20'07	
	14779 Nov 26 02:23	0° J		morning max el	14780 Oct 17 21:12	13° A 14'47	27°57'01
asc. node	14779 Nov 30 18:16	8° J 36'59			14780 Oct 31 06:49	0° M	
morning set	14779 Dec 06 18:54	20° J 52'22		asc. node	14780 Nov 16 15:07	28° M 17'31	
	14779 Dec 10 23:28	0° B			14780 Nov 17 11:37	0° J	
				morning set	14780 Nov 19 22:10	4° J 59'52	
superior conj	14779 Dec 13 16:42	6° B 03'51	1°34'07	max. Earth dist.	14780 Nov 25 18:09	17° J 33'50	1.31301 AU
minimum elong	14779 Dec 13 15:32	5° B 57'23	1°35'04				
max. Earth dist.	14779 Dec 13 11:19	5° B 33'44	1.31098 AU	superior conj	14780 Nov 27 03:25	20° J 38'19	1°24'26
evening rise	14779 Dec 20 10:46	20° B 58'20		minimum elong	14780 Nov 27 01:30	20° J 27'37	1°25'13
	14779 Dec 24 19:08	0° \approx			14780 Dec 01 08:28	0° B	

evening rise	14780 Dec 03 20:06	5° Z 26'09			14781 Nov 23 02:41	0° Z	
	14780 Dec 16 13:26	0° \approx		desc. node	14781 Dec 06 00:56	21° Z 45'34	
desc. node	14780 Dec 19 03:54	4° \approx 09'23		evening max el	14781 Dec 12 05:56	28° Z 53'50	23°46'16
evening max el	14780 Dec 30 19:14	18° \approx 43'49	25°24'13		14781 Dec 13 10:37	0° \approx	
retrograde	14781 Jan 13 16:04	25° \approx 42'20		retrograde	14781 Dec 25 17:42	5° \approx 35'45	
evening set	14781 Jan 19 11:55	24° \approx 24'57		evening set	14781 Dec 30 10:41	4° \approx 47'37	
min. Earth dist.	14781 Jan 24 07:37	21° \approx 44'20	0.56894 AU	min. Earth dist.	14782 Jan 05 17:06	1° \approx 45'42	0.55334 AU
inferior conj	14781 Jan 27 02:28	19° \approx 52'47	-4°47'16	inferior conj	14782 Jan 07 12:22	0° \approx 41'31	-5°46'32
minimum elong	14781 Jan 27 11:35	19° \approx 37'32	4°44'09	minimum elong	14782 Jan 07 17:56	0° \approx 33'15	5°44'58
morning rise	14781 Feb 04 13:57	15° \approx 39'49			14782 Jan 08 16:32	30° R Z	
direct	14781 Feb 06 16:28	15° \approx 26'42		morning rise	14782 Jan 16 02:53	26° Z 46'29	
asc. node	14781 Feb 12 13:33	17° \approx 16'22		direct	14782 Jan 18 17:05	26° Z 29'45	
morning max el	14781 Feb 15 20:18	19° \approx 54'24	19°04'51		14782 Jan 27 13:04	0° \approx	
	14781 Feb 23 10:29	0° H		morning max el	14782 Jan 29 10:02	1° \approx 39'05	20°14'31
morning set	14781 Mar 04 10:24	16° H 41'01		asc. node	14782 Jan 30 10:56	2° \approx 41'57	
	14781 Mar 11 04:32	0° Y			14782 Feb 16 01:20	0° H	
				morning set	14782 Feb 16 16:30	1° H 17'21	
superior conj	14781 Mar 12 19:56	3° Y 10'01	0°35'47				
minimum elong	14781 Mar 12 22:02	3° Y 20'05	0°35'30	superior conj	14782 Feb 24 08:11	16° H 57'34	1°01'08
desc. node	14781 Mar 17 05:23	11° Y 25'01		minimum elong	14782 Feb 24 10:50	17° H 10'52	1°01'04
max. Earth dist.	14781 Mar 19 17:41	15° Y 58'25	1.38841 AU	max. Earth dist.	14782 Mar 02 00:25	28° H 04'10	1.36611 AU
evening rise	14781 Mar 23 12:32	22° Y 36'55			14782 Mar 03 00:59	0° Y	
	14781 Mar 27 21:58	0° B		desc. node	14782 Mar 04 01:55	1° Y 56'11	
	14781 Apr 17 03:53	0° II		evening rise	14782 Mar 05 19:12	5° Y 05'17	
evening max el	14781 Apr 27 17:13	12° II 22'12	24°33'24		14782 Mar 20 20:04	0° B	
retrograde	14781 May 09 07:11	19° II 08'43		evening max el	14782 Apr 10 06:46	26° B 14'47	25°47'16
asc. node	14781 May 11 10:12	18° II 49'10			14782 Apr 14 13:51	0° II	
evening set	14781 May 14 21:12	16° II 47'11		retrograde	14782 Apr 22 19:15	3° II 27'08	
min. Earth dist.	14781 May 19 09:41	11° II 37'23	0.68492 AU	asc. node	14782 Apr 28 07:31	1° II 23'23	
inferior conj	14781 May 20 09:43	10° II 17'00	2°25'47	evening set	14782 Apr 28 20:16	0° II 57'49	
minimum elong	14781 May 20 07:38	10° II 23'58	2°24'22		14782 Apr 29 21:43	30° R B	
morning rise	14781 May 25 18:14	4° II 17'59		min. Earth dist.	14782 May 03 01:53	26° B 23'49	0.67550 AU
direct	14781 May 29 14:26	2° II 53'30		inferior conj	14782 May 04 14:35	24° B 27'26	1°49'41
morning max el	14781 Jun 06 00:51	7° II 01'37	19°47'43	minimum elong	14782 May 04 12:29	24° B 34'09	1°48'17
desc. node	14781 Jun 13 06:42	15° II 42'50		morning rise	14782 May 10 05:17	18° B 38'21	
	14781 Jun 23 04:54	0° E		direct	14782 May 13 14:20	17° B 33'05	
morning set	14781 Jul 02 12:33	14° E 08'10		morning max el	14782 May 20 08:03	21° B 11'12	18°52'08
	14781 Jul 12 17:20	0° O			14782 May 27 12:17	0° II	
max. Earth dist.	14781 Jul 13 14:40	1° O 24'16	1.44782 AU	desc. node	14782 May 31 03:39	5° II 16'25	
				greatest brilliancy	14782 Jun 02 22:10	9° II 26'32	-0.8m
superior conj	14781 Jul 18 12:53	9° O 16'08	-2°05'31	morning set	14782 Jun 11 21:41	23° II 17'02	
minimum elong	14781 Jul 18 18:54	9° O 40'23	2°06'04		14782 Jun 16 05:27	0° E	
	14781 Jul 31 02:00	0° np		max. Earth dist.	14782 Jun 26 08:18	15° E 45'39	1.45712 AU
evening rise	14781 Aug 01 03:19	1° np 46'59					
asc. node	14781 Aug 07 09:57	12° np 21'22		superior conj	14782 Jun 28 04:11	18° E 37'22	-2°13'50
evening max el	14781 Aug 18 22:41	28° np 49'02	18°06'29	minimum elong	14782 Jun 28 03:37	18° E 35'09	2°14'49
	14781 Aug 20 06:05	0° E			14782 Jul 05 09:21	0° O	
retrograde	14781 Aug 25 07:43	2° E 09'28		evening rise	14782 Jul 13 08:58	12° O 46'45	
evening set	14781 Aug 28 01:29	1° E 30'23			14782 Jul 24 03:49	0° np	
	14781 Aug 30 09:38	30° R np		asc. node	14782 Jul 25 06:39	1° np 42'25	
inferior conj	14781 Sep 03 06:33	26° np 12'40	1°41'32	evening max el	14782 Aug 02 12:25	12° np 28'31	18°28'01
minimum elong	14781 Sep 03 08:52	26° np 06'24	1°40'39	retrograde	14782 Aug 08 23:02	15° np 55'50	
min. Earth dist.	14781 Sep 05 23:18	23° np 17'48	0.63117 AU	evening set	14782 Aug 12 01:45	15° np 01'30	
desc. node	14781 Sep 09 03:55	20° np 19'23		inferior conj	14782 Aug 17 20:05	9° np 28'01	2°26'05
morning rise	14781 Sep 09 14:08	19° np 59'42		minimum elong	14782 Aug 17 22:22	9° np 21'10	2°25'06
direct	14781 Sep 16 06:01	17° np 30'19		min. Earth dist.	14782 Aug 19 23:23	6° np 54'55	0.65140 AU
morning max el	14781 Sep 30 05:31	25° np 31'06	27°50'21	morning rise	14782 Aug 23 17:45	3° np 05'26	
	14781 Oct 04 08:38	0° E		desc. node	14782 Aug 27 01:27	1° np 03'48	
	14781 Oct 24 19:14	0° ml		direct	14782 Aug 30 05:07	0° np 27'22	
asc. node	14781 Nov 03 11:54	18° ml 12'13		morning max el	14782 Sep 12 16:16	8° np 21'33	27°09'49
morning set	14781 Nov 03 18:30	18° ml 45'30			14782 Sep 29 13:06	0° E	
max. Earth dist.	14781 Nov 08 19:48	29° ml 17'33	1.32055 AU		14782 Oct 17 03:47	0° ml	
	14781 Nov 09 03:43	0° x		morning set	14782 Oct 18 05:04	2° ml 01'47	
				asc. node	14782 Oct 21 08:36	8° ml 15'25	
superior conj	14781 Nov 11 11:28	5° x 02'04	1°08'52	max. Earth dist.	14782 Oct 22 13:00	10° ml 39'35	1.33366 AU
minimum elong	14781 Nov 11 09:10	4° x 49'30	1°09'23				
evening rise	14781 Nov 18 07:00	19° x 56'32		superior conj	14782 Oct 26 14:35	19° ml 08'20	0°47'26

minimum elong	14782 Oct 26 12:29	18° \mathbb{M} 57'09	0°47'44	superior conj	14783 Oct 10 10:14	2° \mathbb{M} 51'01	0°20'21
	14782 Oct 31 16:13	0° \mathbb{A}		minimum elong	14783 Oct 10 09:06	2° \mathbb{M} 45'11	0°20'35
evening rise	14782 Nov 02 17:35	4° \mathbb{A} 23'57		evening rise	14783 Oct 18 01:55	18° \mathbb{M} 43'49	
	14782 Nov 16 12:16	0° \mathbb{B}			14783 Oct 23 16:36	0° \mathbb{A}	
desc. node	14782 Nov 22 22:04	8° \mathbb{B} 04'55		evening max el	14783 Nov 05 14:25	19° \mathbb{A} 18'31	20°33'37
evening max el	14782 Nov 23 17:14	8° \mathbb{B} 53'10	22°04'01	desc. node	14783 Nov 09 19:17	22° \mathbb{A} 42'42	
retrograde	14782 Dec 06 07:14	15° \mathbb{B} 06'51		retrograde	14783 Nov 16 17:43	24° \mathbb{A} 50'51	
evening set	14782 Dec 09 16:02	14° \mathbb{B} 41'44		evening set	14783 Nov 19 01:13	24° \mathbb{A} 37'36	
inferior conj	14782 Dec 18 06:57	10° \mathbb{B} 48'59	-5°56'41	inferior conj	14783 Nov 27 22:41	20° \mathbb{A} 43'08	-5°06'19
minimum elong	14782 Dec 18 03:42	10° \mathbb{B} 53'32	5°55'29	minimum elong	14783 Nov 27 13:01	20° \mathbb{A} 57'08	5°03'06
min. Earth dist.	14782 Dec 17 23:02	11° \mathbb{B} 00'05	0.54522 AU	min. Earth dist.	14783 Nov 29 04:53	19° \mathbb{A} 59'22	0.54627 AU
morning rise	14782 Dec 26 16:18	7° \mathbb{B} 01'44		morning rise	14783 Dec 06 00:37	16° \mathbb{A} 45'26	
direct	14782 Dec 30 03:49	6° \mathbb{B} 34'54		direct	14783 Dec 10 12:09	16° \mathbb{A} 02'21	
morning max el	14783 Jan 11 08:50	12° \mathbb{B} 27'26	21°46'35	morning max el	14783 Dec 23 20:29	22° \mathbb{A} 33'18	23°34'02
asc. node	14783 Jan 17 08:16	19° \mathbb{B} 25'59			14783 Dec 30 08:33	0° \mathbb{B}	
	14783 Jan 23 23:39	0° \approx		asc. node	14784 Jan 04 05:29	7° \mathbb{B} 11'02	
morning set	14783 Feb 01 02:30	16° \approx 01'03			14784 Jan 16 05:40	0° \approx	
	14783 Feb 07 16:51	0° \mathbb{H}		morning set	14784 Jan 16 14:17	0° \approx 45'59	
superior conj	14783 Feb 08 06:13	1° \mathbb{H} 10'10	1°19'43	superior conj	14784 Jan 23 10:58	15° \approx 39'15	1°31'42
minimum elong	14783 Feb 08 08:33	1° \mathbb{H} 22'21	1°20'01	minimum elong	14784 Jan 23 12:29	15° \approx 47'25	1°32'23
max. Earth dist.	14783 Feb 12 12:28	9° \mathbb{H} 56'00	1.34614 AU	max. Earth dist.	14784 Jan 26 08:05	21° \approx 49'21	1.32999 AU
evening rise	14783 Feb 16 17:44	18° \mathbb{H} 12'24			14784 Jan 30 06:53	0° \mathbb{H}	
desc. node	14783 Feb 18 22:29	22° \mathbb{H} 20'19		evening rise	14784 Jan 31 04:39	1° \mathbb{H} 49'14	
	14783 Feb 23 04:46	0° \mathbb{Y}		desc. node	14784 Feb 05 19:05	12° \mathbb{H} 32'49	
	14783 Mar 15 00:57	0° \mathbb{B}			14784 Feb 16 02:54	0° \mathbb{Y}	
evening max el	14783 Mar 23 20:42	10° \mathbb{B} 00'07	26°46'53	evening max el	14784 Mar 05 09:54	23° \mathbb{Y} 26'41	27°24'47
retrograde	14783 Apr 06 01:42	17° \mathbb{B} 26'00			14784 Mar 14 15:10	0° \mathbb{B}	
evening set	14783 Apr 12 12:28	14° \mathbb{B} 53'53		retrograde	14784 Mar 19 01:40	0° \mathbb{B} 56'12	
asc. node	14783 Apr 15 04:54	12° \mathbb{B} 22'19			14784 Mar 23 05:48	30° \mathbb{R} \mathbb{Y}	
min. Earth dist.	14783 Apr 16 12:32	10° \mathbb{B} 54'18	0.66183 AU	evening set	14784 Mar 25 19:36	28° \mathbb{Y} 27'28	
inferior conj	14783 Apr 18 13:51	8° \mathbb{B} 29'18	1°02'03	min. Earth dist.	14784 Mar 29 15:32	24° \mathbb{Y} 59'30	0.64439 AU
minimum elong	14783 Apr 18 12:21	8° \mathbb{B} 33'45	1°00'57	inferior conj	14784 Apr 01 04:52	22° \mathbb{Y} 15'38	0°02'01
morning rise	14783 Apr 24 13:27	2° \mathbb{B} 51'56		minimum elong	14784 Apr 01 04:49	22° \mathbb{Y} 15'47	0°01'43
direct	14783 Apr 27 12:23	2° \mathbb{B} 03'41		transit middle	14784 Apr 01 04:49	22° \mathbb{Y} 15'47	0°01'43
morning max el	14783 May 03 21:19	5° \mathbb{B} 24'36	18°13'07	transit begin	14784 Apr 01 01:45	22° \mathbb{Y} 24'01	
desc. node	14783 May 18 00:30	25° \mathbb{B} 13'13		transit end	14784 Apr 01 07:53	22° \mathbb{Y} 07'33	
	14783 May 21 00:17	0° \mathbb{I}		asc. node	14784 Apr 01 02:19	22° \mathbb{Y} 22'28	
morning set	14783 May 23 06:10	3° \mathbb{I} 35'50		morning rise	14784 Apr 07 16:05	16° \mathbb{Y} 52'22	
				direct	14784 Apr 10 06:02	16° \mathbb{Y} 18'12	
superior conj	14783 Jun 07 12:43	27° \mathbb{I} 47'11	-2°02'00	morning max el	14784 Apr 16 14:15	19° \mathbb{Y} 34'05	17°51'11
minimum elong	14783 Jun 07 05:16	27° \mathbb{I} 18'01	2°02'34		14784 Apr 24 11:49	0° \mathbb{B}	
	14783 Jun 08 22:43	0° \mathbb{E}		morning set	14784 May 03 18:26	15° \mathbb{B} 14'31	
max. Earth dist.	14783 Jun 09 04:43	0° \mathbb{E} 23'28	1.45903 AU	desc. node	14784 May 03 21:14	15° \mathbb{B} 26'12	
evening rise	14783 Jun 23 14:22	22° \mathbb{E} 47'47			14784 May 12 16:16	0° \mathbb{I}	
	14783 Jun 28 05:44	0° \mathbb{O}					
greatest brilliancy	14783 Jul 04 17:22	9° \mathbb{O} 57'22	-0.7m	superior conj	14784 May 17 07:40	7° \mathbb{I} 30'05	-1°33'13
asc. node	14783 Jul 12 03:26	20° \mathbb{O} 37'31		minimum elong	14784 May 16 23:04	6° \mathbb{I} 55'36	1°33'11
evening max el	14783 Jul 16 22:36	26° \mathbb{O} 16'37	19°06'38	max. Earth dist.	14784 May 22 00:44	14° \mathbb{I} 58'56	1.45345 AU
	14783 Jul 22 23:07	0° \mathbb{P}			14784 May 31 16:42	0° \mathbb{E}	
retrograde	14783 Jul 23 19:24	0° \mathbb{P} 04'00		evening rise	14784 Jun 02 03:31	2° \mathbb{E} 13'26	
	14783 Jul 24 15:27	30° \mathbb{R} \mathbb{O}		greatest brilliancy	14784 Jun 17 01:00	24° \mathbb{E} 32'42	-0.6m
evening set	14783 Jul 27 07:29	28° \mathbb{O} 52'51			14784 Jun 20 21:27	0° \mathbb{O}	
inferior conj	14783 Aug 01 18:35	23° \mathbb{O} 05'09	2°53'59	asc. node	14784 Jun 28 00:17	8° \mathbb{O} 56'50	
minimum elong	14783 Aug 01 20:12	22° \mathbb{O} 59'55	2°53'03	evening max el	14784 Jun 29 03:16	10° \mathbb{O} 07'05	20°01'04
min. Earth dist.	14783 Aug 03 07:30	21° \mathbb{O} 06'19	0.66799 AU	retrograde	14784 Jul 06 18:07	14° \mathbb{O} 26'39	
morning rise	14783 Aug 07 08:16	16° \mathbb{O} 39'41		evening set	14784 Jul 10 16:06	12° \mathbb{O} 58'11	
direct	14783 Aug 13 11:09	14° \mathbb{O} 02'15		inferior conj	14784 Jul 15 23:06	6° \mathbb{O} 57'39	3°07'56
desc. node	14783 Aug 13 22:54	14° \mathbb{O} 03'10		minimum elong	14784 Jul 15 23:47	6° \mathbb{O} 55'21	3°07'00
morning max el	14783 Aug 26 03:33	21° \mathbb{O} 35'41	26°03'35	min. Earth dist.	14784 Jul 16 21:54	5° \mathbb{O} 40'26	0.68019 AU
	14783 Sep 02 11:23	0° \mathbb{P}		morning rise	14784 Jul 21 07:07	0° \mathbb{O} 33'53	
	14783 Sep 22 18:17	0° \mathbb{L}			14784 Jul 21 23:15	30° \mathbb{R} \mathbb{E}	
morning set	14783 Oct 01 02:33	14° \mathbb{L} 41'30		direct	14784 Jul 26 23:04	28° \mathbb{E} 04'54	
max. Earth dist.	14783 Oct 04 20:34	21° \mathbb{L} 46'41	1.35190 AU	desc. node	14784 Jul 30 20:18	29° \mathbb{E} 02'34	
asc. node	14783 Oct 08 05:15	28° \mathbb{L} 23'18			14784 Aug 01 13:58	0° \mathbb{O}	
	14783 Oct 09 00:31	0° \mathbb{M}		morning max el	14784 Aug 07 14:20	5° \mathbb{O} 03'07	24°41'02
					14784 Aug 26 20:24	0° \mathbb{P}	

morning set	14784 Sep 12 06:55	26° \mathbb{M} 35'01			14785 Jul 30 14:27	0° \mathcal{O}	
	14784 Sep 14 05:13	0° \mathcal{O}			14785 Aug 19 23:01	0° \mathbb{M}	
max. Earth dist.	14784 Sep 15 20:41	2° \mathcal{O} 58'02	1.37393 AU	morning set	14785 Aug 24 13:41	7° \mathbb{M} 31'42	
				max. Earth dist.	14785 Aug 28 18:56	14° \mathbb{M} 40'15	1.39768 AU
superior conj	14784 Sep 22 19:12	16° \mathcal{O} 02'02	-0°11'40				
minimum elong	14784 Sep 22 19:57	16° \mathcal{O} 05'43	0°11'21	superior conj	14785 Sep 05 13:34	28° \mathbb{M} 32'10	-0°46'59
behind sun begin	14784 Sep 22 15:10	15° \mathcal{O} 42'26		minimum elong	14785 Sep 05 17:05	28° \mathbb{M} 48'25	0°46'30
behind sun end	14784 Sep 23 00:45	16° \mathcal{O} 29'02			14785 Sep 06 08:34	0° \mathcal{O}	
asc. node	14784 Sep 24 01:51	18° \mathcal{O} 31'50		asc. node	14785 Sep 10 22:24	8° \mathcal{O} 37'16	
	14784 Sep 29 19:47	0° \mathbb{M}		evening rise	14785 Sep 15 01:45	16° \mathcal{O} 34'22	
evening rise	14784 Oct 01 05:37	2° \mathbb{M} 49'55			14785 Sep 22 06:41	0° \mathbb{M}	
	14784 Oct 17 13:45	0° \mathcal{O}		evening max el	14785 Oct 01 02:20	12° \mathbb{M} 32'43	18°36'04
evening max el	14784 Oct 18 01:57	0° \mathcal{O} 31'22	19°23'45	retrograde	14785 Oct 09 04:07	16° \mathbb{M} 37'29	
desc. node	14784 Oct 26 16:35	5° \mathcal{O} 14'39		evening set	14785 Oct 11 02:38	16° \mathbb{M} 24'10	
retrograde	14784 Oct 27 14:04	5° \mathcal{O} 17'05		desc. node	14785 Oct 13 13:58	15° \mathbb{M} 31'37	
evening set	14784 Oct 29 11:15	5° \mathcal{O} 06'41		inferior conj	14785 Oct 19 01:45	11° \mathbb{M} 56'51	-1°45'19
inferior conj	14784 Nov 07 02:06	0° \mathcal{O} 58'57	-3°32'09	minimum elong	14785 Oct 18 21:30	12° \mathbb{M} 04'54	1°43'01
minimum elong	14784 Nov 06 17:21	1° \mathcal{O} 13'11	3°28'15	min. Earth dist.	14785 Oct 22 05:50	9° \mathbb{M} 33'11	0.57377 AU
	14784 Nov 08 14:07	30° \mathcal{R} \mathbb{M}		morning rise	14785 Oct 26 12:57	6° \mathbb{M} 52'18	
min. Earth dist.	14784 Nov 09 14:19	29° \mathbb{M} 21'01	0.55638 AU	direct	14785 Nov 01 14:27	5° \mathbb{M} 20'38	
morning rise	14784 Nov 14 21:16	26° \mathbb{M} 31'39		morning max el	14785 Nov 15 20:45	12° \mathbb{M} 49'17	26°49'00
direct	14784 Nov 20 05:57	25° \mathbb{M} 26'35			14785 Nov 29 09:09	0° \mathcal{O}	
	14784 Dec 01 09:05	0° \mathcal{O}		asc. node	14785 Dec 07 23:38	14° \mathcal{O} 47'14	
morning max el	14784 Dec 04 05:59	2° \mathcal{O} 29'48	25°21'11	morning set	14785 Dec 15 11:53	29° \mathcal{O} 58'23	
asc. node	14784 Dec 21 02:37	25° \mathcal{O} 42'18			14785 Dec 15 12:11	0° \mathcal{O}	
	14784 Dec 23 11:04	0° \mathcal{O}					
morning set	14784 Dec 31 02:01	15° \mathcal{O} 27'01		superior conj	14785 Dec 22 07:11	14° \mathcal{O} 59'08	1°37'02
				minimum elong	14785 Dec 22 06:35	14° \mathcal{O} 55'48	1°38'02
superior conj	14785 Jan 06 20:01	0° \approx 17'59	1°37'24	max. Earth dist.	14785 Dec 22 17:28	15° \mathcal{O} 56'34	1.31218 AU
minimum elong	14785 Jan 06 20:29	0° \approx 20'33	1°38'19	evening rise	14785 Dec 29 03:57	0° \approx 02'52	
	14785 Jan 06 16:46	0° \approx			14785 Dec 29 03:25	0° \approx	
max. Earth dist.	14785 Jan 08 10:35	3° \approx 50'28	1.31852 AU	desc. node	14786 Jan 09 12:27	21° \approx 59'04	
evening rise	14785 Jan 14 00:56	15° \approx 48'28			14786 Jan 14 09:47	0° \mathcal{H}	
	14785 Jan 21 07:05	0° \mathcal{H}		evening max el	14786 Jan 29 02:21	18° \mathcal{H} 35'17	27°10'23
desc. node	14785 Jan 22 15:43	2° \mathcal{H} 28'20		retrograde	14786 Feb 12 02:27	25° \mathcal{H} 52'07	
	14785 Feb 09 23:06	0° \mathcal{Y}		evening set	14786 Feb 18 19:58	23° \mathcal{H} 53'05	
evening max el	14785 Feb 15 20:34	6° \mathcal{Y} 22'36	27°34'17	min. Earth dist.	14786 Feb 22 16:49	21° \mathcal{H} 09'43	0.60192 AU
retrograde	14785 Mar 01 18:23	13° \mathcal{Y} 48'27		inferior conj	14786 Feb 25 21:26	18° \mathcal{H} 29'35	-2°33'38
evening set	14785 Mar 08 15:09	11° \mathcal{Y} 30'32		minimum elong	14786 Feb 26 03:06	18° \mathcal{H} 17'42	2°31'08
min. Earth dist.	14785 Mar 12 09:15	8° \mathcal{Y} 29'04	0.62398 AU	morning rise	14786 Mar 05 13:36	13° \mathcal{H} 42'21	
inferior conj	14785 Mar 15 08:35	5° \mathcal{Y} 39'07	-1°10'29	asc. node	14786 Mar 05 21:11	13° \mathcal{H} 37'42	
minimum elong	14785 Mar 15 10:59	5° \mathcal{Y} 33'22	1°09'30	direct	14786 Mar 07 14:44	13° \mathcal{H} 25'50	
asc. node	14785 Mar 18 23:45	2° \mathcal{Y} 27'33		morning max el	14786 Mar 14 22:47	17° \mathcal{H} 05'39	18°00'54
morning rise	14785 Mar 22 09:43	0° \mathcal{Y} 32'33			14786 Mar 24 02:09	0° \mathcal{Y}	
direct	14785 Mar 24 16:06	0° \mathcal{Y} 09'03		morning set	14786 Mar 30 12:27	11° \mathcal{Y} 35'37	
morning max el	14785 Mar 31 07:55	3° \mathcal{Y} 31'26	17°46'47	desc. node	14786 Apr 07 14:29	26° \mathcal{Y} 21'31	
morning set	14785 Apr 16 06:34	28° \mathcal{Y} 00'44					
	14785 Apr 17 09:43	0° \mathcal{B}		superior conj	14786 Apr 09 16:44	0° \mathcal{B} 04'27	-0°16'53
desc. node	14785 Apr 20 17:54	5° \mathcal{B} 50'35		minimum elong	14786 Apr 09 15:17	29° \mathcal{Y} 58'04	0°17'03
					14786 Apr 09 15:43	0° \mathcal{B}	
superior conj	14785 Apr 28 00:22	18° \mathcal{B} 14'56	-0°55'38	max. Earth dist.	14786 Apr 17 06:10	13° \mathcal{B} 00'14	1.42312 AU
minimum elong	14785 Apr 27 19:02	17° \mathcal{B} 52'37	0°55'32	evening rise	14786 Apr 22 18:46	21° \mathcal{B} 59'24	
max. Earth dist.	14785 May 04 17:42	29° \mathcal{B} 15'42	1.44105 AU		14786 Apr 27 21:29	0° \mathbb{I}	
	14785 May 05 04:44	0° \mathbb{I}			14786 May 18 23:39	0° \mathcal{O}	
evening rise	14785 May 12 16:10	11° \mathbb{I} 45'36		evening max el	14786 May 25 19:35	7° \mathcal{O} 49'37	22°26'17
	14785 May 24 19:11	0° \mathcal{O}		asc. node	14786 Jun 01 18:15	12° \mathcal{O} 58'26	
evening max el	14785 Jun 12 01:56	23° \mathcal{O} 57'53	21°08'55	retrograde	14786 Jun 04 14:28	13° \mathcal{O} 34'20	
asc. node	14785 Jun 14 21:13	26° \mathcal{O} 28'43		evening set	14786 Jun 09 10:14	11° \mathcal{O} 33'09	
retrograde	14785 Jun 20 17:01	28° \mathcal{O} 58'26		inferior conj	14786 Jun 14 17:00	5° \mathcal{O} 12'06	3°00'56
evening set	14785 Jun 25 01:35	27° \mathcal{O} 13'00		minimum elong	14786 Jun 14 15:48	5° \mathcal{O} 16'16	2°59'46
inferior conj	14785 Jun 30 07:16	21° \mathcal{O} 01'14	3°09'51	min. Earth dist.	14786 Jun 14 13:12	5° \mathcal{O} 25'20	0.69041 AU
minimum elong	14785 Jun 30 06:57	21° \mathcal{O} 02'18	3°08'51		14786 Jun 18 19:34	30° \mathcal{R} \mathbb{I}	
min. Earth dist.	14785 Jun 30 16:32	20° \mathcal{O} 29'01	0.68771 AU	morning rise	14786 Jun 19 21:12	28° \mathbb{I} 59'47	
morning rise	14785 Jul 05 12:05	14° \mathcal{O} 42'10		direct	14786 Jun 24 12:36	27° \mathbb{I} 03'19	
direct	14785 Jul 10 15:56	12° \mathcal{O} 27'30			14786 Jul 01 00:52	0° \mathcal{O}	
desc. node	14785 Jul 17 17:38	15° \mathcal{O} 37'03		morning max el	14786 Jul 03 15:08	2° \mathcal{O} 21'54	21°44'35
morning max el	14785 Jul 21 01:20	18° \mathcal{O} 38'25	23°11'43	desc. node	14786 Jul 04 14:53	3° \mathcal{O} 23'02	

	14786 Jul 24 12:14	0°♎		morning max el	14787 Jun 16 10:47	16°♊16'08	20°26'34
morning set	14786 Aug 04 20:02	17°♎25'07		desc. node	14787 Jun 21 12:02	22°♊01'21	
max. Earth dist.	14786 Aug 10 21:26	27°♎13'56	1.42043 AU		14787 Jun 27 10:50	0°♊	
	14786 Aug 12 13:26	0°♏		morning set	14787 Jul 15 05:21	26°♊25'34	
					14787 Jul 17 12:40	0°♎	
superior conj	14786 Aug 18 13:00	10°♏12'11	-1°22'28	max. Earth dist.	14787 Jul 24 07:06	10°♎41'15	1.43949 AU
minimum elong	14786 Aug 18 19:26	10°♏40'13	1°22'03				
asc. node	14786 Aug 28 18:57	28°♏36'14		superior conj	14787 Jul 30 13:39	20°♎53'37	-1°52'58
evening rise	14786 Aug 29 10:38	29°♏48'07		minimum elong	14787 Jul 30 21:07	21°♎24'27	1°53'04
	14786 Aug 29 13:13	0°♏			14787 Aug 05 00:04	0°♏	
evening max el	14786 Sep 14 11:30	25°♏14'16	18°09'24	evening rise	14787 Aug 12 03:31	12°♏18'57	
retrograde	14786 Sep 21 13:01	28°♏50'39		asc. node	14787 Aug 15 15:32	18°♏24'19	
evening set	14786 Sep 23 17:59	28°♏30'00			14787 Aug 22 14:41	0°♏	
desc. node	14786 Sep 30 11:27	24°♏07'03		evening max el	14787 Aug 29 01:11	8°♏24'48	18°02'11
inferior conj	14786 Sep 30 23:02	23°♏41'32	-0°09'06	retrograde	14787 Sep 04 13:14	11°♏47'04	
minimum elong	14786 Sep 30 22:43	23°♏42'13	0°08'40	evening set	14787 Sep 07 02:14	11°♏15'27	
transit middle	14786 Sep 30 22:43	23°♏42'13	0°08'40	inferior conj	14787 Sep 13 15:04	6°♏07'27	1°07'11
transit begin	14786 Sep 30 19:52	23°♏48'32		minimum elong	14787 Sep 13 16:53	6°♏02'50	1°06'33
transit end	14786 Oct 01 01:35	23°♏35'52		min. Earth dist.	14787 Sep 16 14:12	3°♏08'07	0.61845 AU
min. Earth dist.	14786 Oct 04 05:19	20°♏49'33	0.59548 AU	desc. node	14787 Sep 17 08:58	2°♏23'39	
morning rise	14786 Oct 08 00:08	18°♏03'22		morning rise	14787 Sep 20 04:58	0°♏04'23	
direct	14786 Oct 14 12:22	16°♏05'11			14787 Sep 20 07:31	30°♏	
morning max el	14786 Oct 28 19:18	23°♏51'52	27°43'24	direct	14787 Sep 26 21:10	27°♏44'31	
	14786 Nov 03 08:40	0°♏			14787 Oct 03 23:36	0°♏	
	14786 Nov 22 15:05	0°♏		morning max el	14787 Oct 11 00:44	5°♏42'05	27°58'47
asc. node	14786 Nov 24 20:35	4°♏16'55			14787 Oct 29 08:53	0°♏	
morning set	14786 Nov 29 18:08	14°♏15'50		asc. node	14787 Nov 11 17:25	24°♏03'40	
max. Earth dist.	14786 Dec 06 01:23	28°♏01'22	1.31118 AU	morning set	14787 Nov 13 18:44	28°♏13'57	
					14787 Nov 14 15:13	0°♏	
superior conj	14786 Dec 06 18:37	29°♏37'38	1°30'44	max. Earth dist.	14787 Nov 19 06:34	9°♏55'20	1.31556 AU
minimum elong	14786 Dec 06 17:06	29°♏29'10	1°31'38				
	14786 Dec 06 22:38	0°♏		superior conj	14787 Nov 21 04:27	14°♏07'35	1°18'34
evening rise	14786 Dec 13 11:34	14°♏27'26		minimum elong	14787 Nov 21 02:18	13°♏55'45	1°19'13
	14786 Dec 21 03:36	0°♏		evening rise	14787 Nov 27 21:47	28°♏56'36	
desc. node	14786 Dec 27 09:17	10°♏55'54			14787 Nov 28 09:33	0°♏	
evening max el	14787 Jan 11 00:51	29°♏56'46	26°11'45	desc. node	14787 Dec 14 06:15	29°♏05'59	
	14787 Jan 11 02:14	0°♏			14787 Dec 14 21:13	0°♏	
retrograde	14787 Jan 24 23:51	7°♏01'37		evening max el	14787 Dec 23 15:01	10°♏27'42	24°44'18
evening set	14787 Jan 31 06:20	5°♏28'06		retrograde	14788 Jan 06 08:39	17°♏19'19	
min. Earth dist.	14787 Feb 04 14:13	2°♏50'53	0.58029 AU	evening set	14788 Jan 11 18:30	16°♏14'34	
inferior conj	14787 Feb 07 15:52	0°♏37'32	-4°00'43	min. Earth dist.	14788 Jan 17 02:50	13°♏27'30	0.56160 AU
minimum elong	14787 Feb 08 00:27	0°♏21'55	3°57'22	inferior conj	14788 Jan 19 13:25	11°♏55'09	-5°16'48
	14787 Feb 08 12:38	30°♏		minimum elong	14788 Jan 19 21:49	11°♏41'52	5°14'16
morning rise	14787 Feb 15 21:38	26°♏11'37		morning rise	14788 Jan 28 03:19	7°♏50'32	
direct	14787 Feb 17 21:49	25°♏58'19		direct	14788 Jan 30 09:47	7°♏36'25	
asc. node	14787 Feb 20 18:39	26°♏26'55		asc. node	14788 Feb 07 16:04	10°♏58'57	
	14787 Feb 26 04:38	0°♏		morning max el	14788 Feb 09 04:34	12°♏20'48	19°31'36
morning max el	14787 Feb 26 07:03	0°♏05'52	18°35'08		14788 Feb 21 04:02	0°♏	
morning set	14787 Mar 14 06:46	25°♏43'32		morning set	14788 Feb 26 09:31	10°♏12'43	
	14787 Mar 16 11:51	0°♏					
superior conj	14787 Mar 23 05:37	12°♏49'30	0°18'13	superior conj	14788 Mar 05 10:39	26°♏18'14	0°47'22
minimum elong	14787 Mar 23 06:51	12°♏55'13	0°17'53	minimum elong	14788 Mar 05 13:06	26°♏30'17	0°47'08
desc. node	14787 Mar 25 11:01	16°♏55'21			14788 Mar 07 08:21	0°♏	
max. Earth dist.	14787 Mar 30 14:35	26°♏05'10	1.40160 AU	desc. node	14788 Mar 11 07:33	7°♏28'44	
	14787 Apr 01 21:16	0°♏		max. Earth dist.	14788 Mar 11 21:11	8°♏31'26	1.37881 AU
evening rise	14787 Apr 03 17:58	3°♏08'15		evening rise	14788 Mar 15 13:57	15°♏10'04	
	14787 Apr 21 03:13	0°♏			14788 Mar 24 10:28	0°♏	
evening max el	14787 May 08 10:15	21°♏43'07	23°47'32		14788 Apr 14 19:40	0°♏	
retrograde	14787 May 19 09:01	28°♏08'43		evening max el	14788 Apr 19 23:50	5°♏37'21	25°06'02
asc. node	14787 May 19 15:24	28°♏08'24		retrograde	14788 May 01 23:42	12°♏35'39	
evening set	14787 May 24 16:27	25°♏53'47		asc. node	14788 May 05 12:40	11°♏42'35	
min. Earth dist.	14787 May 29 09:44	20°♏22'59	0.68832 AU	evening set	14788 May 07 18:38	10°♏10'08	
inferior conj	14787 May 30 02:22	19°♏26'09	2°41'37	min. Earth dist.	14788 May 12 04:01	5°♏15'57	0.68153 AU
minimum elong	14787 May 30 00:31	19°♏32'29	2°40'17	inferior conj	14788 May 13 09:28	3°♏39'28	2°11'49
morning rise	14787 Jun 04 08:34	13°♏21'59		minimum elong	14788 May 13 07:19	3°♏46'33	2°10'23
direct	14787 Jun 08 11:41	11°♏45'40			14788 May 16 08:42	30°♏	
				morning rise	14788 May 18 20:19	27°♏44'43	

direct	14788 May 22 11:44	26°♄28'33		morning max el	14789 May 13 00:03	14°♄34'25	18°33'27
	14788 May 29 04:50	0°♄			14789 May 24 13:38	0°♄	
morning max el	14788 May 29 13:56	0°♄21'53	19°22'08	desc. node	14789 May 25 05:56	1°♄02'19	
desc. node	14788 Jun 07 09:03	11°♄18'03		morning set	14789 Jun 03 02:09	14°♄50'06	
greatest brilliancy	14788 Jun 11 06:01	16°♄54'35	-0.7m		14789 Jun 12 18:32	0°♄	
	14788 Jun 19 22:16	0°♄		max. Earth dist.	14789 Jun 18 17:48	9°♄18'50	1.45886 AU
morning set	14788 Jun 23 08:33	5°♄15'26					
max. Earth dist.	14788 Jul 05 22:52	24°♄49'15	1.45272 AU	superior conj	14789 Jun 19 01:37	9°♄49'20	-2°11'15
	14788 Jul 09 05:34	0°♄		minimum elong	14789 Jun 18 21:41	9°♄34'00	2°12'09
					14789 Jul 01 22:23	0°♄	
superior conj	14788 Jul 09 15:18	0°♄38'36	-2°11'23	evening rise	14789 Jul 04 18:17	4°♄28'36	
minimum elong	14788 Jul 09 19:03	0°♄53'29	2°12'12	greatest brilliancy	14789 Jul 12 19:25	17°♄11'31	-0.8m
evening rise	14788 Jul 23 23:19	23°♄55'08		asc. node	14789 Jul 19 08:55	27°♄08'04	
	14788 Jul 27 15:27	0°♄			14789 Jul 21 10:13	0°♄	
asc. node	14788 Aug 01 12:12	7°♄57'02		evening max el	14789 Jul 26 04:09	5°♄39'14	18°42'23
evening max el	14788 Aug 11 15:45	21°♄55'43	18°13'24	retrograde	14789 Aug 01 18:17	9°♄13'57	
retrograde	14788 Aug 18 00:21	25°♄17'36		evening set	14789 Aug 05 00:48	8°♄12'45	
evening set	14788 Aug 20 21:52	24°♄32'14		inferior conj	14789 Aug 10 15:39	2°♄32'57	2°39'47
inferior conj	14788 Aug 26 21:54	19°♄07'14	2°02'40	minimum elong	14789 Aug 10 17:43	2°♄26'34	2°38'48
minimum elong	14788 Aug 27 00:18	19°♄00'23	2°01'41	min. Earth dist.	14789 Aug 12 12:52	0°♄13'03	0.65893 AU
min. Earth dist.	14788 Aug 29 09:01	16°♄20'00	0.64018 AU		14789 Aug 12 17:12	30°♄	
morning rise	14788 Sep 02 01:03	12°♄49'03		morning rise	14789 Aug 16 09:37	26°♄08'07	
desc. node	14788 Sep 03 06:29	11°♄56'40		desc. node	14789 Aug 21 03:57	23°♄38'27	
direct	14788 Sep 08 15:25	10°♄15'09		direct	14789 Aug 22 17:39	23°♄29'13	
morning max el	14788 Sep 22 10:36	18°♄14'32	27°36'52		14789 Sep 03 14:28	0°♄	
	14788 Oct 02 08:24	0°♄		morning max el	14789 Sep 04 21:59	1°♄17'18	26°44'14
	14788 Oct 21 06:44	0°♄			14789 Sep 26 10:15	0°♄	
morning set	14788 Oct 27 11:15	11°♄47'18		morning set	14789 Oct 10 16:45	24°♄49'36	
asc. node	14788 Oct 28 14:11	14°♄02'07			14789 Oct 13 08:58	0°♄	
max. Earth dist.	14788 Nov 01 05:08	21°♄30'15	1.32547 AU	max. Earth dist.	14789 Oct 14 18:12	2°♄44'32	1.34078 AU
				asc. node	14789 Oct 15 10:52	4°♄08'00	
superior conj	14788 Nov 04 10:39	28°♄23'47	1°00'28				
minimum elong	14788 Nov 04 08:21	28°♄11'21	1°00'54	superior conj	14789 Oct 19 10:56	12°♄20'58	0°36'36
	14788 Nov 05 04:26	0°♄		minimum elong	14789 Oct 19 09:08	12°♄11'32	0°36'51
evening rise	14788 Nov 11 08:47	13°♄25'43		evening rise	14789 Oct 26 18:41	27°♄50'39	
	14788 Nov 19 14:24	0°♄			14789 Oct 27 19:21	0°♄	
desc. node	14788 Nov 30 03:19	16°♄11'48			14789 Nov 15 01:41	0°♄	
evening max el	14788 Dec 04 00:32	20°♄27'05	23°02'10	evening max el	14789 Nov 15 14:59	0°♄33'30	21°23'27
retrograde	14788 Dec 17 04:44	26°♄59'20		desc. node	14789 Nov 17 00:29	1°♄51'27	
evening set	14788 Dec 21 08:15	26°♄21'56		retrograde	14789 Nov 27 15:58	6°♄31'34	
min. Earth dist.	14788 Dec 28 10:02	23°♄05'24	0.54877 AU	evening set	14789 Nov 30 12:04	6°♄13'01	
inferior conj	14788 Dec 29 15:34	22°♄23'07	-5°58'08	inferior conj	14789 Dec 09 07:10	2°♄21'07	-5°42'27
minimum elong	14788 Dec 29 17:45	22°♄20'00	5°57'04	minimum elong	14789 Dec 09 00:22	2°♄30'40	5°40'30
morning rise	14789 Jan 07 04:42	18°♄33'39		min. Earth dist.	14789 Dec 09 15:50	2°♄08'55	0.54440 AU
direct	14789 Jan 10 03:00	18°♄13'33			14789 Dec 13 16:52	30°♄	
morning max el	14789 Jan 21 11:56	23°♄41'02	20°51'20	morning rise	14789 Dec 17 13:14	28°♄31'42	
asc. node	14789 Jan 24 13:27	26°♄59'50		direct	14789 Dec 21 10:43	27°♄58'51	
	14789 Jan 26 21:12	0°♄			14789 Dec 28 17:11	0°♄	
morning set	14789 Feb 09 17:35	24°♄53'08		morning max el	14790 Jan 03 05:20	4°♄09'13	22°31'14
	14789 Feb 12 04:29	0°♄		asc. node	14790 Jan 11 10:44	14°♄11'56	
					14790 Jan 20 12:08	0°♄	
superior conj	14789 Feb 17 03:30	10°♄17'55	1°09'49	morning set	14790 Jan 25 04:34	9°♄37'59	
minimum elong	14789 Feb 17 06:05	10°♄31'12	1°09'55				
max. Earth dist.	14789 Feb 22 05:44	20°♄29'09	1.35716 AU	superior conj	14790 Feb 01 04:44	24°♄38'47	1°25'34
evening rise	14789 Feb 26 03:46	27°♄55'54		minimum elong	14790 Feb 01 06:46	24°♄49'32	1°26'03
desc. node	14789 Feb 26 04:05	27°♄57'20			14790 Feb 03 17:45	0°♄	
	14789 Feb 27 06:44	0°♄		max. Earth dist.	14790 Feb 04 20:30	2°♄18'30	1.33867 AU
	14789 Mar 17 18:04	0°♄		evening rise	14790 Feb 09 07:59	11°♄16'49	
evening max el	14789 Apr 02 13:21	19°♄27'14	26°14'41	desc. node	14790 Feb 13 00:39	18°♄17'14	
retrograde	14789 Apr 15 09:31	26°♄47'10			14790 Feb 19 16:27	0°♄	
evening set	14789 Apr 21 15:02	24°♄15'37			14790 Mar 13 02:52	0°♄	
asc. node	14789 Apr 22 10:01	23°♄34'12		evening max el	14790 Mar 16 03:00	3°♄05'39	27°06'01
min. Earth dist.	14789 Apr 25 18:01	19°♄56'46	0.67023 AU	retrograde	14790 Mar 29 13:36	10°♄35'03	
inferior conj	14789 Apr 27 12:14	17°♄46'51	1°30'57	evening set	14790 Apr 05 03:41	8°♄03'27	
minimum elong	14789 Apr 27 10:17	17°♄52'51	1°29'38	min. Earth dist.	14790 Apr 09 01:42	4°♄17'40	0.65483 AU
morning rise	14789 May 03 06:25	12°♄02'46		asc. node	14790 Apr 09 07:24	4°♄01'53	
direct	14789 May 06 10:59	11°♄05'13		inferior conj	14790 Apr 11 08:19	1°♄43'00	0°38'10

minimum elong	14790 Apr 11 07:19	1°♄45'52	0°37'20	inferior conj	14791 Mar 25 18:57	15°♄20'53	-0°27'12
	14790 Apr 12 21:25	30°♄		minimum elong	14791 Mar 25 19:48	15°♄18'40	0°27'02
morning rise	14790 Apr 17 12:34	26°♄11'21		asc. node	14791 Mar 27 04:49	13°♄55'44	
direct	14790 Apr 20 07:24	25°♄29'39		morning rise	14791 Apr 01 11:48	10°♄04'04	
morning max el	14790 Apr 26 15:13	28°♄47'18	18°01'35	direct	14791 Apr 03 22:17	9°♄34'52	
	14790 Apr 27 19:19	0°♄		morning max el	14791 Apr 10 08:47	12°♄52'27	17°47'06
desc. node	14790 May 12 02:43	21°♄06'42			14791 Apr 22 06:28	0°♄	
morning set	14790 May 14 22:31	25°♄43'08		morning set	14791 Apr 26 21:46	7°♄53'27	
	14790 May 17 13:37	0°♄		desc. node	14791 Apr 28 23:27	11°♄25'25	
superior conj	14790 May 29 12:40	19°♄08'37	-1°51'26	superior conj	14791 May 09 16:08	29°♄16'20	-1°17'51
minimum elong	14790 May 29 03:57	18°♄34'14	1°51'42	minimum elong	14791 May 09 08:37	28°♄45'44	1°17'43
max. Earth dist.	14790 Jun 01 13:45	23°♄55'26	1.45756 AU		14791 May 10 02:52	0°♄	
	14790 Jun 05 11:17	0°♄		max. Earth dist.	14791 May 15 08:47	8°♄25'22	1.44898 AU
evening rise	14790 Jun 14 15:06	14°♄09'36		evening rise	14791 May 25 02:03	23°♄33'40	
	14790 Jun 25 00:01	0°♄			14791 May 29 07:36	0°♄	
greatest brilliancy	14790 Jun 27 17:49	4°♄05'25	-0.7m		14791 Jun 19 13:11	0°♄	
asc. node	14790 Jul 06 05:42	15°♄49'12		evening max el	14791 Jun 22 14:22	3°♄20'46	20°28'31
evening max el	14790 Jul 09 12:07	19°♄28'48	19°28'02	asc. node	14791 Jun 23 02:34	3°♄50'41	
retrograde	14790 Jul 16 15:51	23°♄28'37		retrograde	14791 Jun 30 14:46	7°♄56'28	
evening set	14790 Jul 20 08:00	22°♄10'20		evening set	14791 Jul 04 17:13	6°♄20'42	
inferior conj	14790 Jul 25 17:02	16°♄17'13	3°01'28	inferior conj	14791 Jul 09 23:22	0°♄15'28	3°10'06
minimum elong	14790 Jul 25 18:16	16°♄13'07	3°00'33	minimum elong	14791 Jul 09 23:38	0°♄14'34	3°09'09
min. Earth dist.	14790 Jul 26 23:59	14°♄35'06	0.67375 AU		14791 Jul 10 03:52	30°♄	
morning rise	14790 Jul 31 03:58	9°♄51'53		min. Earth dist.	14791 Jul 10 16:23	29°♄17'03	0.68405 AU
direct	14790 Aug 06 02:31	7°♄16'53		morning rise	14791 Jul 15 05:44	23°♄53'34	
desc. node	14790 Aug 08 01:23	7°♄31'28		direct	14791 Jul 20 16:46	21°♄29'53	
morning max el	14790 Aug 18 08:55	14°♄37'33	25°29'46	desc. node	14791 Jul 25 22:45	23°♄15'02	
	14790 Aug 30 22:57	0°♄		morning max el	14791 Jul 31 19:24	28°♄08'29	24°03'14
	14790 Sep 19 05:57	0°♄			14791 Aug 02 13:49	0°♄	
morning set	14790 Sep 23 07:26	7°♄10'52			14791 Aug 24 15:18	0°♄	
max. Earth dist.	14790 Sep 26 21:38	13°♄48'23	1.36086 AU	morning set	14791 Sep 05 03:04	18°♄41'25	
asc. node	14790 Oct 02 07:27	24°♄16'34		max. Earth dist.	14791 Sep 08 20:09	25°♄09'58	1.38406 AU
					14791 Sep 11 12:38	0°♄	
superior conj	14790 Oct 03 02:26	25°♄51'12	0°07'18	superior conj	14791 Sep 16 05:43	8°♄46'33	-0°26'23
minimum elong	14790 Oct 03 01:59	25°♄48'54	0°07'34	minimum elong	14791 Sep 16 07:34	8°♄55'20	0°25'59
behind sun begin	14790 Oct 02 20:23	25°♄20'56		asc. node	14791 Sep 19 04:01	14°♄24'33	
behind sun end	14790 Oct 03 07:34	26°♄16'55		evening rise	14791 Sep 25 02:10	26°♄03'13	
	14790 Oct 05 03:48	0°♄			14791 Sep 27 02:27	0°♄	
evening rise	14790 Oct 11 01:18	12°♄05'06		evening max el	14791 Oct 11 11:44	22°♄52'39	19°00'45
	14790 Oct 20 10:28	0°♄		retrograde	14791 Oct 20 07:52	27°♄19'18	
evening max el	14790 Oct 28 18:16	11°♄18'16	20°01'16	desc. node	14791 Oct 21 19:04	27°♄12'25	
desc. node	14790 Nov 03 21:44	15°♄38'20		evening set	14791 Oct 22 04:52	27°♄08'07	
retrograde	14790 Nov 08 04:43	16°♄30'11		inferior conj	14791 Oct 30 13:40	22°♄52'19	-2°46'34
evening set	14790 Nov 10 06:01	16°♄19'02		minimum elong	14791 Oct 30 06:42	23°♄04'23	2°43'11
inferior conj	14790 Nov 19 02:17	12°♄20'35	-4°29'53	min. Earth dist.	14791 Nov 02 10:26	20°♄53'33	0.56314 AU
minimum elong	14790 Nov 18 16:13	12°♄35'47	4°26'02	morning rise	14791 Nov 07 05:46	18°♄09'47	
min. Earth dist.	14790 Nov 20 23:02	11°♄13'02	0.54954 AU	direct	14791 Nov 12 22:30	16°♄53'43	
morning rise	14790 Nov 27 01:18	8°♄11'58		morning max el	14791 Nov 27 01:36	24°♄07'38	26°01'56
direct	14790 Dec 01 22:33	7°♄19'53			14791 Dec 02 10:24	0°♄	
morning max el	14790 Dec 15 14:45	14°♄05'54	24°20'44	asc. node	14791 Dec 16 05:01	21°♄04'55	
	14790 Dec 27 22:28	0°♄			14791 Dec 20 20:25	0°♄	
asc. node	14790 Dec 29 07:55	2°♄18'03		morning set	14791 Dec 25 03:37	8°♄58'18	
morning set	14791 Jan 09 16:29	24°♄21'09					
	14791 Jan 12 06:56	0°♄		superior conj	14791 Dec 31 21:42	23°♄52'12	1°37'58
superior conj	14791 Jan 16 11:33	9°♄12'14	1°34'52	minimum elong	14791 Dec 31 21:43	23°♄52'15	1°38'57
minimum elong	14791 Jan 16 12:38	9°♄18'08	1°35'40	max. Earth dist.	14792 Jan 02 00:00	26°♄18'15	1.31523 AU
max. Earth dist.	14791 Jan 18 19:07	14°♄13'53	1.32450 AU		14792 Jan 03 16:12	0°♄	
evening rise	14791 Jan 23 23:12	25°♄03'48		evening rise	14792 Jan 07 22:38	9°♄10'04	
	14791 Jan 26 10:41	0°♄		desc. node	14792 Jan 17 17:57	28°♄09'00	
desc. node	14791 Jan 30 21:17	8°♄23'07			14792 Jan 18 19:17	0°♄	
	14791 Feb 13 04:16	0°♄		evening max el	14792 Feb 09 00:39	29°♄00'29	27°28'29
evening max el	14791 Feb 26 15:33	16°♄21'14	27°32'47		14792 Feb 10 02:22	0°♄	
retrograde	14791 Mar 12 10:40	23°♄49'52		retrograde	14792 Feb 22 23:35	6°♄22'04	
evening set	14791 Mar 19 06:13	21°♄25'08		evening set	14792 Feb 29 19:52	4°♄11'31	
min. Earth dist.	14791 Mar 23 01:07	18°♄08'55	0.63595 AU	min. Earth dist.	14792 Mar 04 14:32	1°♄18'57	0.61467 AU

	14792 Mar 06 01:58	30° RH		min. Earth dist.	14793 Feb 14 17:27	13° $\text{H}36'12$	0.59252 AU
inferior conj	14792 Mar 07 16:47	28° $\text{H}31'28$	-1°44'43	inferior conj	14793 Feb 17 22:14	11° $\text{H}05'20$	-3°10'44
minimum elong	14792 Mar 07 20:31	28° $\text{H}23'01$	1°43'05	minimum elong	14793 Feb 18 05:19	10° $\text{H}51'23$	3°07'44
asc. node	14792 Mar 13 02:17	24° $\text{H}21'57$		morning rise	14793 Feb 25 20:36	6° $\text{H}27'18$	
morning rise	14792 Mar 15 00:14	23° $\text{H}32'36$		direct	14793 Feb 27 20:46	6° $\text{H}12'33$	
direct	14792 Mar 17 04:11	23° $\text{H}12'22$		asc. node	14793 Feb 27 23:45	6° $\text{H}12'37$	
morning max el	14792 Mar 24 01:37	26° $\text{H}40'44$	17°50'31	morning max el	14793 Mar 07 14:15	10° $\text{H}02'32$	18°13'00
	14792 Mar 26 23:22	0° Y			14793 Mar 20 15:09	0° Y	
morning set	14792 Apr 08 18:12	21° $\text{Y}02'50$		morning set	14793 Mar 23 05:57	4° $\text{Y}53'47$	
	14792 Apr 13 18:26	0° B					
desc. node	14792 Apr 14 20:05	1° $\text{B}53'13$		superior conj	14793 Apr 01 20:43	22° $\text{Y}44'32$	-0°01'23
				minimum elong	14793 Apr 01 20:36	22° $\text{Y}43'57$	0°01'40
superior conj	14792 Apr 19 19:02	10° $\text{B}29'13$	-0°38'59	behind sun begin	14793 Apr 01 13:06	22° $\text{Y}10'11$	
minimum elong	14792 Apr 19 15:26	10° $\text{B}13'49$	0°39'00	behind sun end	14793 Apr 02 04:05	23° $\text{Y}17'39$	
max. Earth dist.	14792 Apr 27 00:33	22° $\text{B}32'13$	1.43400 AU	desc. node	14793 Apr 01 16:40	22° $\text{Y}26'15$	
	14792 May 01 16:12	0° II			14793 Apr 05 23:02	0° B	
evening rise	14792 May 03 19:20	3° $\text{II}20'58$		max. Earth dist.	14793 Apr 09 11:23	6° $\text{B}01'42$	1.41423 AU
	14792 May 21 17:31	0° E		evening rise	14793 Apr 14 06:20	13° $\text{B}57'38$	
evening max el	14792 Jun 04 10:48	17° $\text{E}12'28$	21°40'54		14793 Apr 24 12:56	0° II	
asc. node	14792 Jun 08 23:33	20° $\text{E}58'43$			14793 May 17 01:36	0° E	
retrograde	14792 Jun 13 13:12	22° $\text{E}31'19$		evening max el	14793 May 18 02:48	1° $\text{E}04'31$	23°00'36
evening set	14792 Jun 18 02:35	20° $\text{E}38'46$		asc. node	14793 May 26 20:39	6° $\text{E}57'08$	
inferior conj	14792 Jun 23 08:27	14° $\text{E}22'49$	3°07'19	retrograde	14793 May 28 09:41	7° $\text{E}07'43$	
minimum elong	14792 Jun 23 07:45	14° $\text{E}25'16$	3°06'16	evening set	14793 Jun 02 10:26	5° $\text{E}00'08$	
min. Earth dist.	14792 Jun 23 12:03	14° $\text{E}10'16$	0.68951 AU		14793 Jun 06 17:52	30° RII	
morning rise	14792 Jun 28 12:44	8° $\text{E}06'42$		inferior conj	14793 Jun 07 18:16	28° $\text{II}35'41$	2°53'59
direct	14792 Jul 03 11:18	5° $\text{E}59'34$		minimum elong	14793 Jun 07 16:46	28° $\text{II}40'54$	2°52'45
desc. node	14792 Jul 11 20:04	10° $\text{E}22'58$		min. Earth dist.	14793 Jun 07 08:55	29° $\text{II}08'09$	0.69011 AU
morning max el	14792 Jul 13 07:18	11° $\text{E}47'38$	22°33'58	morning rise	14793 Jun 12 23:02	22° $\text{II}26'46$	
	14792 Jul 27 19:16	0° O		direct	14793 Jun 17 09:03	20° $\text{II}39'01$	
morning set	14792 Aug 15 23:37	29° $\text{O}11'37$		morning max el	14793 Jun 25 23:28	25° $\text{II}36'21$	21°10'00
	14792 Aug 16 11:28	0° P		desc. node	14793 Jun 28 17:18	28° $\text{II}33'28$	
max. Earth dist.	14792 Aug 20 20:15	7° $\text{P}15'26$	1.40774 AU		14793 Jun 29 22:47	0° E	
					14793 Jul 21 05:18	0° O	
superior conj	14792 Aug 28 16:36	20° $\text{P}56'48$	-1°02'16	morning set	14793 Jul 26 20:06	8° $\text{O}40'26$	
minimum elong	14792 Aug 28 21:25	21° $\text{P}18'31$	1°01'46	max. Earth dist.	14793 Aug 03 01:46	20° $\text{O}13'10$	1.42914 AU
	14792 Sep 02 15:16	0° A			14793 Aug 08 23:25	0° P	
asc. node	14792 Sep 05 00:35	4° $\text{A}28'00$		superior conj	14793 Aug 10 06:41	2° $\text{P}12'31$	-1°36'24
evening rise	14792 Sep 07 18:03	9° $\text{A}36'23$		minimum elong	14793 Aug 10 13:58	2° $\text{P}43'29$	1°36'09
	14792 Sep 19 10:42	0° M		evening rise	14793 Aug 21 20:49	22° $\text{P}33'59$	
evening max el	14792 Sep 23 16:18	5° $\text{M}12'05$	18°22'08	asc. node	14793 Aug 22 21:08	24° $\text{P}23'06$	
retrograde	14792 Oct 01 06:29	9° $\text{M}03'25$			14793 Aug 26 00:41	0° A	
evening set	14792 Oct 03 07:21	8° $\text{M}47'28$		evening max el	14793 Sep 07 03:50	18° $\text{A}07'12$	18°03'57
desc. node	14792 Oct 07 16:28	6° $\text{M}39'28$		retrograde	14793 Sep 13 22:32	21° $\text{A}36'10$	
inferior conj	14792 Oct 10 22:42	4° $\text{M}10'39$	-1°02'22	evening set	14793 Sep 16 06:40	21° $\text{A}11'25$	
minimum elong	14792 Oct 10 20:20	4° $\text{M}15'29$	1°00'55	inferior conj	14793 Sep 23 04:29	16° $\text{A}14'26$	0°25'51
min. Earth dist.	14792 Oct 14 04:59	1° $\text{M}32'40$	0.58268 AU	minimum elong	14793 Sep 23 05:18	16° $\text{A}12'31$	0°25'44
	14792 Oct 16 08:05	30° RA		desc. node	14793 Sep 24 13:58	14° $\text{A}55'07$	
morning rise	14792 Oct 18 05:50	28° $\text{A}50'50$		min. Earth dist.	14793 Sep 26 08:36	13° $\text{A}16'29$	0.60523 AU
direct	14792 Oct 24 12:28	27° $\text{A}07'58$		morning rise	14793 Sep 30 00:49	10° $\text{A}24'03$	
	14792 Nov 01 23:53	0° M		direct	14793 Oct 06 15:22	8° $\text{A}15'46$	
morning max el	14792 Nov 07 19:48	4° $\text{M}44'45$	27°16'53	morning max el	14793 Oct 20 21:48	16° $\text{A}09'00$	27°54'47
	14792 Nov 26 09:06	0° X			14793 Nov 01 07:09	0° M	
asc. node	14792 Dec 02 02:01	10° $\text{X}21'50$		asc. node	14793 Nov 18 22:55	29° $\text{M}59'51$	
morning set	14792 Dec 08 12:14	23° $\text{X}24'58$			14793 Nov 18 22:57	0° X	
	14792 Dec 11 13:02	0° Z		morning set	14793 Nov 22 16:21	7° $\text{X}35'17$	
superior conj	14792 Dec 15 09:14	8° $\text{Z}33'12$	1°35'05	max. Earth dist.	14793 Nov 28 15:09	20° $\text{X}27'28$	1.31231 AU
minimum elong	14792 Dec 15 08:13	8° $\text{Z}27'32$	1°36'03	superior conj	14793 Nov 29 20:13	23° $\text{X}08'58$	1°26'18
max. Earth dist.	14792 Dec 15 08:00	8° $\text{Z}26'16$	1.31109 AU	minimum elong	14793 Nov 29 18:24	22° $\text{X}58'48$	1°27'06
evening rise	14792 Dec 22 03:53	23° $\text{Z}29'46$			14793 Dec 02 21:59	0° Z	
	14792 Dec 25 06:30	0° \approx		evening rise	14793 Dec 06 12:49	7° $\text{Z}56'48$	
desc. node	14793 Jan 03 14:43	17° $\approx27'07$			14793 Dec 17 18:35	0° \approx	
	14793 Jan 11 19:45	0° H		desc. node	14793 Dec 21 11:36	6° $\approx06'06$	
evening max el	14793 Jan 21 03:32	10° $\text{H}52'05$	26°49'30	evening max el	14794 Jan 02 22:09	21° $\approx50'18$	25°37'25
retrograde	14793 Feb 04 03:13	18° $\text{H}04'02$		retrograde	14794 Jan 16 19:50	28° $\approx50'51$	
evening set	14793 Feb 10 17:22	16° $\text{H}14'51$					

































































































































evening set	14794 Jan 22 18:43	27° \approx 29'13		evening set	14795 Jan 02 20:48	7° \approx 57'10	
min. Earth dist.	14794 Jan 27 10:51	24° \approx 49'59	0.57174 AU	min. Earth dist.	14795 Jan 08 21:03	4° \approx 59'40	0.55526 AU
inferior conj	14794 Jan 30 07:53	22° \approx 52'17	-4°35'36	inferior conj	14795 Jan 10 20:38	3° \approx 48'05	-5°40'10
minimum elong	14794 Jan 30 17:00	22° \approx 36'42	4°32'23	minimum elong	14795 Jan 11 03:10	3° \approx 38'14	5°38'22
morning rise	14794 Feb 07 18:08	18° \approx 36'03			14795 Jan 18 19:24	30° \approx 3	
direct	14794 Feb 09 19:41	18° \approx 23'04		morning rise	14795 Jan 19 11:18	29° \approx 50'42	
asc. node	14794 Feb 14 21:13	19° \approx 46'24		direct	14795 Jan 21 23:11	29° \approx 34'48	
morning max el	14794 Feb 18 18:33	22° \approx 45'22	18°56'24		14795 Jan 25 00:25	0° \approx	
	14794 Feb 24 12:53	0° \approx		morning max el	14795 Feb 01 10:19	4° \approx 37'44	20°02'38
morning set	14794 Mar 07 04:15	19° \approx 11'39		asc. node	14795 Feb 01 18:38	4° \approx 58'09	
	14794 Mar 12 16:20	0° \approx			14795 Feb 17 12:46	0° \approx	
				morning set	14795 Feb 19 09:32	3° \approx 46'13	
superior conj	14794 Mar 15 17:01	5° \approx 49'42	0°31'22	superior conj	14795 Feb 27 03:29	19° \approx 32'26	0°57'42
minimum elong	14794 Mar 15 18:56	5° \approx 58'47	0°31'02	minimum elong	14795 Feb 27 06:06	19° \approx 45'34	0°57'36
desc. node	14794 Mar 19 13:12	13° \approx 00'22			14795 Mar 04 12:23	0° \approx	
max. Earth dist.	14794 Mar 22 18:01	18° \approx 46'57	1.39185 AU	max. Earth dist.	14795 Mar 05 00:35	0° \approx 57'30	1.36934 AU
evening rise	14794 Mar 26 14:33	25° \approx 29'32		desc. node	14795 Mar 06 09:43	3° \approx 32'04	
	14794 Mar 29 06:49	0° \approx		evening rise	14795 Mar 08 18:31	7° \approx 51'16	
	14794 Apr 18 04:48	0° \approx			14795 Mar 22 02:00	0° \approx	
evening max el	14794 Apr 30 16:38	14° \approx 58'03	24°21'42	evening max el	14795 Apr 13 06:14	28° \approx 51'32	25°37'03
retrograde	14794 May 12 02:54	21° \approx 39'39			14795 Apr 14 10:56	0° \approx	
asc. node	14794 May 13 17:52	21° \approx 28'11		retrograde	14795 Apr 25 15:36	6° \approx 00'26	
evening set	14794 May 17 15:09	19° \approx 19'48		asc. node	14795 Apr 30 15:10	4° \approx 18'12	
min. Earth dist.	14794 May 22 04:51	14° \approx 04'27	0.68592 AU	evening set	14795 May 01 15:04	3° \approx 32'02	
inferior conj	14794 May 23 02:56	12° \approx 50'06	2°30'19		14795 May 05 00:01	30° \approx 8	
minimum elong	14794 May 23 00:54	12° \approx 56'57	2°28'55	min. Earth dist.	14795 May 05 21:39	28° \approx 52'49	0.67719 AU
morning rise	14794 May 28 10:46	6° \approx 49'37		inferior conj	14795 May 07 08:27	27° \approx 01'29	1°55'56
direct	14794 Jun 01 08:43	5° \approx 22'04		minimum elong	14795 May 07 06:18	27° \approx 08'21	1°54'30
morning max el	14794 Jun 08 22:14	9° \approx 35'45	19°57'18	morning rise	14795 May 12 22:02	21° \approx 8'49	
desc. node	14794 Jun 15 14:24	17° \approx 29'45		direct	14795 May 16 08:45	20° \approx 02'43	
	14794 Jun 24 10:13	0° \approx		morning max el	14795 May 23 04:21	23° \approx 44'18	18°59'22
morning set	14794 Jul 06 00:22	17° \approx 29'52			14795 May 28 12:15	0° \approx	
	14794 Jul 14 01:27	0° \approx		desc. node	14795 Jun 02 11:23	6° \approx 59'13	
max. Earth dist.	14794 Jul 16 13:38	3° \approx 57'45	1.44585 AU	greatest brilliancy	14795 Jun 05 09:47	11° \approx 21'18	-0.7m
superior conj	14794 Jul 21 21:17	12° \approx 29'30	-2°02'42	morning set	14795 Jun 15 07:17	26° \approx 31'56	
minimum elong	14794 Jul 22 03:52	12° \approx 56'11	2°03'07		14795 Jun 17 13:02	0° \approx	
	14794 Aug 01 10:38	0° \approx		max. Earth dist.	14795 Jun 29 06:58	18° \approx 16'41	1.45622 AU
evening rise	14794 Aug 04 05:23	4° \approx 43'33		superior conj	14795 Jul 01 14:53	21° \approx 55'53	-2°13'50
asc. node	14794 Aug 09 17:45	14° \approx 05'49		minimum elong	14795 Jul 01 15:32	21° \approx 58'26	2°14'49
	14794 Aug 20 09:11	0° \approx			14795 Jul 06 17:29	0° \approx	
evening max el	14794 Aug 21 18:22	1° \approx 28'32	18°04'47	evening rise	14795 Jul 16 14:44	15° \approx 52'50	
retrograde	14794 Aug 28 03:52	4° \approx 48'54			14795 Jul 25 08:36	0° \approx	
evening set	14794 Aug 30 20:23	4° \approx 11'51		asc. node	14795 Jul 27 14:25	3° \approx 30'11	
	14794 Sep 05 03:19	30° \approx 8		evening max el	14795 Aug 05 08:26	15° \approx 06'14	18°23'40
inferior conj	14794 Sep 06 03:22	28° \approx 56'40	1°33'05	retrograde	14795 Aug 11 18:10	18° \approx 31'36	
minimum elong	14794 Sep 06 05:35	28° \approx 50'44	1°32'15	evening set	14795 Aug 14 19:33	17° \approx 39'35	
min. Earth dist.	14794 Sep 08 21:56	26° \approx 00'02	0.62796 AU	inferior conj	14795 Aug 20 15:15	12° \approx 08'15	2°20'27
desc. node	14794 Sep 11 11:29	23° \approx 35'26		minimum elong	14795 Aug 20 17:36	12° \approx 01'18	2°19'26
morning rise	14794 Sep 12 12:34	22° \approx 46'03		min. Earth dist.	14795 Aug 22 20:35	9° \approx 31'11	0.64863 AU
direct	14794 Sep 19 04:47	20° \approx 18'45		morning rise	14795 Aug 26 14:18	5° \approx 46'39	
morning max el	14794 Oct 03 05:23	28° \approx 18'56	27°53'36	desc. node	14795 Aug 29 09:00	4° \approx 00'02	
	14794 Oct 04 20:29	0° \approx		direct	14795 Sep 02 02:34	3° \approx 09'28	
	14794 Oct 26 03:02	0° \approx		morning max el	14795 Sep 15 15:56	11° \approx 05'06	27°17'41
asc. node	14794 Nov 05 19:43	19° \approx 52'44			14795 Sep 30 16:18	0° \approx	
morning set	14794 Nov 06 13:51	21° \approx 24'18			14795 Oct 18 14:39	0° \approx	
	14794 Nov 10 16:49	0° \approx		morning set	14795 Oct 21 02:02	4° \approx 45'15	
max. Earth dist.	14794 Nov 11 17:46	2° \approx 13'42	1.31909 AU	asc. node	14795 Oct 23 16:25	9° \approx 54'53	
superior conj	14794 Nov 14 04:48	7° \approx 34'34	1°11'37	max. Earth dist.	14795 Oct 25 12:27	13° \approx 39'21	1.33142 AU
minimum elong	14794 Nov 14 02:31	7° \approx 22'06	1°12'11	superior conj	14795 Oct 29 08:47	21° \approx 43'46	0°51'03
evening rise	14794 Nov 20 23:36	22° \approx 27'02		minimum elong	14795 Oct 29 06:36	21° \approx 32'08	0°51'24
	14794 Nov 24 13:31	0° \approx			14795 Nov 02 05:05	0° \approx	
desc. node	14794 Dec 08 08:35	23° \approx 51'32		evening rise	14795 Nov 05 10:21	6° \approx 55'15	
	14794 Dec 13 08:39	0° \approx			14795 Nov 17 12:33	0° \approx	
evening max el	14794 Dec 15 09:35	2° \approx 04'51	24°01'35	desc. node	14795 Nov 25 05:40	10° \approx 23'52	
retrograde	14794 Dec 28 23:15	8° \approx 49'22					

evening max el	14795 Nov 26 20:05	12° ♁ 03'03	22°18'44	desc. node	14796 Nov 11 02:52	25° ♁ 18'55	
retrograde	14795 Dec 09 14:05	18° ♁ 21'51		retrograde	14796 Nov 19 00:26	28° ♁ 02'01	
evening set	14795 Dec 13 03:43	17° ♁ 53'50		evening set	14796 Nov 21 10:43	27° ♁ 47'42	
min. Earth dist.	14795 Dec 21 03:04	14° ♁ 19'18	0.54586 AU	inferior conj	14796 Nov 30 07:58	23° ♁ 54'12	-5°17'27
inferior conj	14795 Dec 21 16:46	14° ♁ 00'05	-5°59'07	minimum elong	14796 Nov 29 22:48	24° ♁ 07'21	5°14'33
minimum elong	14795 Dec 21 14:56	14° ♁ 02'39	5°58'02	min. Earth dist.	14796 Dec 01 08:44	23° ♁ 18'40	0.54548 AU
morning rise	14795 Dec 30 03:14	10° ♁ 12'54		morning rise	14796 Dec 08 10:56	19° ♁ 59'20	
direct	14796 Jan 02 11:14	9° ♁ 47'59		direct	14796 Dec 12 18:49	19° ♁ 19'11	
morning max el	14796 Jan 14 11:12	15° ♁ 34'00	21°31'44	morning max el	14796 Dec 26 00:06	25° ♁ 44'59	23°17'41
asc. node	14796 Jan 19 15:57	21° ♁ 31'35			14796 Dec 29 23:15	0° ♁	
	14796 Jan 25 05:32	0° ♁		asc. node	14797 Jan 05 13:12	9° ♁ 08'37	
morning set	14796 Feb 03 19:07	18° ♁ 29'44			14797 Jan 16 17:52	0° ♁	
	14796 Feb 09 05:50	0° ♁		morning set	14797 Jan 18 06:44	3° ♁ 14'59	
superior conj	14796 Feb 11 00:16	3° ♁ 42'18	1°17'18	superior conj	14797 Jan 25 04:10	18° ♁ 09'39	1°30'17
minimum elong	14796 Feb 11 02:40	3° ♁ 54'53	1°17'34	minimum elong	14797 Jan 25 05:50	18° ♁ 18'33	1°30'55
max. Earth dist.	14796 Feb 15 11:47	12° ♁ 51'25	1.34887 AU	max. Earth dist.	14797 Jan 28 06:06	24° ♁ 43'24	1.33206 AU
evening rise	14796 Feb 19 14:55	20° ♁ 53'32			14797 Jan 30 19:12	0° ♁	
desc. node	14796 Feb 21 06:14	23° ♁ 57'44		evening rise	14797 Feb 02 00:10	4° ♁ 26'28	
	14796 Feb 24 14:13	0° ♁		desc. node	14797 Feb 07 02:47	14° ♁ 12'20	
	14796 Mar 14 23:31	0° ♁			14797 Feb 16 08:12	0° ♁	
evening max el	14796 Mar 25 20:04	12° ♁ 38'46	26°39'10	evening max el	14797 Mar 08 09:20	26° ♁ 08'36	27°20'45
retrograde	14796 Apr 07 22:52	20° ♁ 03'15			14797 Mar 12 21:46	0° ♁	
evening set	14796 Apr 14 08:23	17° ♁ 31'03		retrograde	14797 Mar 21 23:54	3° ♁ 38'34	
asc. node	14796 Apr 16 12:31	15° ♁ 30'23		evening set	14797 Mar 28 17:00	1° ♁ 08'44	
min. Earth dist.	14796 Apr 18 09:11	13° ♁ 26'38	0.66415 AU		14797 Mar 30 02:38	30° ♁	
inferior conj	14796 Apr 20 08:41	11° ♁ 05'16	1°10'07	min. Earth dist.	14797 Apr 01 13:21	27° ♁ 36'26	0.64720 AU
minimum elong	14796 Apr 20 07:01	11° ♁ 10'12	1°08'56	asc. node	14797 Apr 03 09:56	25° ♁ 35'48	
morning rise	14796 Apr 26 06:47	5° ♁ 26'09		inferior conj	14797 Apr 04 01:04	24° ♁ 54'25	0°11'59
direct	14796 Apr 29 07:11	4° ♁ 35'32		minimum elong	14797 Apr 04 00:43	24° ♁ 55'20	0°11'31
morning max el	14796 May 05 16:52	7° ♁ 58'03	18°17'52	transit middle	14797 Apr 04 00:43	24° ♁ 55'20	0°11'31
desc. node	14796 May 19 08:14	26° ♁ 53'10		transit begin	14797 Apr 03 22:36	25° ♁ 01'08	
	14796 May 21 07:26	0° ♁		transit end	14797 Apr 04 02:51	24° ♁ 49'33	
morning set	14796 May 25 11:40	6° ♁ 39'00		morning rise	14797 Apr 10 10:24	19° ♁ 29'01	
	14796 Jun 09 06:47	0° ♁		direct	14797 Apr 13 01:34	18° ♁ 53'02	
				morning max el	14797 Apr 19 09:27	22° ♁ 08'58	17°53'21
superior conj	14796 Jun 09 23:16	1° ♁ 04'22	-2°05'02		14797 Apr 25 14:49	0° ♁	
minimum elong	14796 Jun 09 16:33	0° ♁ 38'09	2°05'42	desc. node	14797 May 06 04:58	17° ♁ 04'10	
max. Earth dist.	14796 Jun 11 03:15	2° ♁ 53'36	1.45925 AU	morning set	14797 May 06 19:54	18° ♁ 06'16	
evening rise	14796 Jun 25 23:27	26° ♁ 01'46			14797 May 14 00:55	0° ♁	
	14796 Jun 28 12:31	0° ♁					
greatest brilliancy	14796 Jul 06 08:19	12° ♁ 06'58	-0.8m	superior conj	14797 May 20 15:45	10° ♁ 40'19	-1°38'22
asc. node	14796 Jul 13 11:09	22° ♁ 29'40		minimum elong	14797 May 20 06:56	10° ♁ 05'11	1°38'23
evening max el	14796 Jul 18 19:12	28° ♁ 53'05	18°59'47	max. Earth dist.	14797 May 24 23:15	17° ♁ 29'43	1.45475 AU
	14796 Jul 19 23:58	0° ♁			14797 Jun 02 00:09	0° ♁	
retrograde	14796 Jul 25 14:00	2° ♁ 36'49		evening rise	14797 Jun 05 14:05	5° ♁ 30'07	
evening set	14796 Jul 29 00:38	1° ♁ 28'15		greatest brilliancy	14797 Jun 20 05:07	27° ♁ 28'47	-0.6m
	14796 Jul 30 19:51	30° ♁			14797 Jun 21 23:11	0° ♁	
inferior conj	14796 Aug 03 12:35	25° ♁ 42'26	2°50'42	asc. node	14797 Jun 30 07:58	10° ♁ 55'12	
minimum elong	14796 Aug 03 14:20	25° ♁ 36'50	2°49'44	evening max el	14797 Jul 02 00:42	12° ♁ 43'23	19°52'03
min. Earth dist.	14796 Aug 05 03:37	23° ♁ 37'58	0.66579 AU	retrograde	14797 Jul 09 12:31	16° ♁ 57'41	
morning rise	14796 Aug 09 03:19	19° ♁ 16'57		evening set	14797 Jul 13 08:57	15° ♁ 31'53	
direct	14796 Aug 15 07:34	16° ♁ 39'00		inferior conj	14797 Jul 18 16:23	9° ♁ 33'11	3°06'36
desc. node	14796 Aug 15 06:29	16° ♁ 39'01		minimum elong	14797 Jul 18 17:12	9° ♁ 30'23	3°05'42
morning max el	14796 Aug 28 03:19	24° ♁ 16'38	26°14'43	min. Earth dist.	14797 Jul 19 17:16	8° ♁ 09'19	0.67864 AU
	14796 Sep 02 06:56	0° ♁		morning rise	14797 Jul 24 01:04	3° ♁ 08'47	
	14796 Sep 23 02:08	0° ♁		direct	14797 Jul 29 18:43	0° ♁ 38'05	
morning set	14796 Oct 03 01:42	17° ♁ 31'04		desc. node	14797 Aug 02 03:54	1° ♁ 21'52	
max. Earth dist.	14796 Oct 06 21:29	24° ♁ 48'14	1.34889 AU	morning max el	14797 Aug 10 14:11	7° ♁ 42'49	24°53'57
asc. node	14796 Oct 09 13:02	0° ♁			14797 Aug 28 00:52	0° ♁	
	14796 Oct 09 12:35	0° ♁		morning set	14797 Sep 15 08:55	29° ♁ 32'36	
					14797 Sep 15 15:06	0° ♁	
superior conj	14796 Oct 12 05:42	5° ♁ 30'21	0°24'47	max. Earth dist.	14797 Sep 18 22:19	5° ♁ 57'06	1.37042 AU
minimum elong	14796 Oct 12 04:21	5° ♁ 23'25	0°25'02				
evening rise	14796 Oct 19 19:09	21° ♁ 16'43		superior conj	14797 Sep 25 16:29	18° ♁ 46'56	-0°06'34
	14796 Oct 24 01:54	0° ♁		minimum elong	14797 Sep 25 16:53	18° ♁ 48'55	0°06'15
evening max el	14796 Nov 07 15:15	22° ♁ 22'32	20°45'52	behind sun begin	14797 Sep 25 10:47	18° ♁ 19'04	

behind sun end	14797 Sep 25 22:59	19°♄18'50		superior conj	14798 Sep 08 13:18	1°♄23'55	-0°41'31
asc. node	14797 Sep 26 09:37	20°♄11'10		minimum elong	14798 Sep 08 16:22	1°♄38'10	0°41'05
	14797 Oct 01 07:18	0°♄		asc. node	14798 Sep 13 06:10	10°♄17'21	
evening rise	14797 Oct 03 23:42	5°♄25'32		evening rise	14798 Sep 17 21:10	19°♄13'43	
	14797 Oct 18 00:00	0°♄			14798 Sep 23 13:32	0°♄	
evening max el	14797 Oct 21 00:44	3°♄28'36	19°32'49	evening max el	14798 Oct 03 23:29	15°♄23'21	18°41'51
desc. node	14797 Oct 29 00:10	8°♄11'45		retrograde	14798 Oct 12 05:41	19°♄33'18	
retrograde	14797 Oct 30 18:38	8°♄21'04		evening set	14798 Oct 14 03:38	19°♄20'40	
evening set	14797 Nov 01 16:23	8°♄10'42		desc. node	14798 Oct 15 21:35	18°♄48'28	
inferior conj	14797 Nov 10 09:00	4°♄05'42	-3°47'56	inferior conj	14798 Oct 22 05:23	14°♄56'31	-2°01'12
minimum elong	14797 Nov 09 23:45	4°♄20'27	3°43'58	minimum elong	14798 Oct 22 00:26	15°♄05'42	1°58'35
min. Earth dist.	14797 Nov 12 17:40	2°♄35'24	0.55434 AU	min. Earth dist.	14798 Oct 25 08:04	12°♄38'48	0.57085 AU
	14797 Nov 17 12:44	30°♄		morning rise	14798 Oct 29 17:55	9°♄57'43	
morning rise	14797 Nov 18 05:09	29°♄43'30		direct	14798 Nov 04 17:25	8°♄30'01	
direct	14797 Nov 23 11:00	28°♄41'55		morning max el	14798 Nov 18 22:58	15°♄55'05	26°37'45
	14797 Nov 29 07:35	0°♄			14798 Nov 30 09:47	0°♄	
morning max el	14797 Dec 07 09:25	5°♄41'11	25°05'56	asc. node	14798 Dec 10 07:24	16°♄34'32	
asc. node	14797 Dec 23 10:20	27°♄33'57			14798 Dec 17 00:41	0°♄	
	14797 Dec 24 19:05	0°♄		morning set	14798 Dec 18 04:51	2°♄29'59	
morning set	14798 Jan 02 18:34	17°♄56'53					
	14798 Jan 08 06:24	0°♄		superior conj	14798 Dec 24 23:43	17°♄28'42	1°37'29
				minimum elong	14798 Dec 24 23:17	17°♄26'15	1°38'28
superior conj	14798 Jan 09 12:43	2°♄47'29	1°36'56	max. Earth dist.	14798 Dec 25 14:03	18°♄48'41	1.31283 AU
minimum elong	14798 Jan 09 13:21	2°♄50'57	1°37'49		14798 Dec 30 16:13	0°♄	
max. Earth dist.	14798 Jan 11 07:36	6°♄42'51	1.31992 AU	evening rise	14798 Dec 31 21:26	2°♄35'39	
evening rise	14798 Jan 16 19:14	18°♄22'55		desc. node	14799 Jan 11 20:10	23°♄45'54	
	14798 Jan 22 16:54	0°♄			14799 Jan 15 13:31	0°♄	
desc. node	14798 Jan 24 23:26	4°♄10'48		evening max el	14799 Feb 01 03:20	21°♄30'05	27°16'12
	14798 Feb 10 16:59	0°♄		retrograde	14799 Feb 15 03:19	28°♄48'11	
evening max el	14798 Feb 18 20:31	9°♄09'45	27°34'54	evening set	14799 Feb 21 21:43	26°♄46'05	
retrograde	14798 Mar 04 17:54	16°♄36'47		min. Earth dist.	14799 Feb 25 17:51	24°♄00'33	0.60522 AU
evening set	14798 Mar 11 14:27	14°♄16'50		inferior conj	14799 Feb 28 22:01	21°♄18'03	-2°20'35
min. Earth dist.	14798 Mar 15 08:38	11°♄11'44	0.62714 AU	minimum elong	14799 Mar 01 03:10	21°♄07'01	2°18'18
inferior conj	14798 Mar 18 06:40	8°♄21'43	-0°58'45	morning rise	14799 Mar 08 11:55	16°♄27'37	
minimum elong	14798 Mar 18 08:38	8°♄16'55	0°57'59	asc. node	14799 Mar 08 04:51	16°♄32'48	
asc. node	14798 Mar 21 07:23	5°♄35'22		direct	14799 Mar 10 13:39	16°♄10'15	
morning rise	14798 Mar 25 05:36	3°♄12'27		morning max el	14799 Mar 17 18:42	19°♄46'53	17°57'35
direct	14798 Mar 27 12:56	2°♄47'38			14799 Mar 25 07:51	0°♄	
morning max el	14798 Apr 03 03:11	6°♄08'33	17°46'17	morning set	14799 Apr 02 08:31	14°♄12'43	
	14798 Apr 18 18:53	0°♄		desc. node	14799 Apr 09 22:16	27°♄57'33	
morning set	14798 Apr 19 04:51	0°♄43'32			14799 Apr 11 01:52	0°♄	
desc. node	14798 Apr 23 01:38	7°♄27'05					
				superior conj	14799 Apr 12 17:52	2°♄55'46	-0°22'36
superior conj	14798 May 01 04:53	21°♄15'16	-1°01'33	minimum elong	14799 Apr 12 15:53	2°♄47'07	0°22'44
minimum elong	14798 Apr 30 22:56	20°♄50'35	1°01'26	max. Earth dist.	14799 Apr 20 05:58	15°♄40'36	1.42606 AU
	14798 May 06 13:18	0°♄		evening rise	14799 Apr 26 01:44	25°♄05'43	
max. Earth dist.	14798 May 07 16:35	1°♄49'36	1.44328 AU		14799 Apr 29 04:45	0°♄	
evening rise	14798 May 16 01:44	14°♄58'47			14799 Apr 29 22:17	0°♄	
	14798 May 26 00:31	0°♄		evening max el	14799 May 28 18:42	10°♄27'02	22°14'21
evening max el	14798 Jun 15 00:16	26°♄34'36	20°58'10	asc. node	14799 Jun 04 01:56	15°♄16'27	
asc. node	14798 Jun 17 04:54	28°♄35'30		retrograde	14799 Jun 07 09:12	16°♄04'53	
	14798 Jun 19 02:54	0°♄		evening set	14799 Jun 12 03:19	14°♄05'55	
retrograde	14798 Jun 23 11:30	1°♄28'38		inferior conj	14799 Jun 17 09:47	7°♄46'15	3°02'55
	14798 Jun 27 11:06	30°♄		minimum elong	14799 Jun 17 08:43	7°♄49'58	3°01'48
evening set	14798 Jun 27 18:25	29°♄45'46		min. Earth dist.	14799 Jun 17 07:56	7°♄52'44	0.69035 AU
inferior conj	14798 Jul 03 00:08	23°♄35'40	3°10'14	morning rise	14799 Jun 22 13:57	1°♄32'54	
minimum elong	14798 Jul 02 23:59	23°♄36'13	3°09'17		14799 Jun 25 01:05	30°♄	
min. Earth dist.	14798 Jul 03 11:26	22°♄56'30	0.68690 AU	direct	14799 Jun 27 07:14	29°♄33'31	
morning rise	14798 Jul 08 05:17	17°♄15'43			14799 Jun 29 16:26	0°♄	
direct	14798 Jul 13 11:02	14°♄58'29		morning max el	14799 Jul 06 14:08	4°♄59'29	21°57'09
desc. node	14798 Jul 20 01:17	17°♄43'49		desc. node	14799 Jul 06 22:34	5°♄20'49	
morning max el	14798 Jul 24 00:57	21°♄16'59	23°25'01		14799 Jul 25 17:26	0°♄	
	14798 Jul 31 13:27	0°♄		morning set	14799 Aug 08 05:09	20°♄41'22	
	14798 Aug 21 06:35	0°♄			14799 Aug 13 22:17	0°♄	
morning set	14798 Aug 27 19:07	10°♄38'18		max. Earth dist.	14799 Aug 13 22:04	29°♄59'07	1.41729 AU
max. Earth dist.	14798 Aug 31 20:12	17°♄32'21	1.39414 AU				
	14798 Sep 07 19:10	0°♄		superior conj	14799 Aug 21 15:53	13°♄12'26	-1°17'16

minimum elong	14799 Aug 21 21:56	13° \mathbb{M} 38'59	1°16'49	morning set	14800 Jul 17 17:01	29° \mathfrak{G} 48'25	
	14799 Aug 30 22:54	0° \mathfrak{L}			14800 Jul 17 20:01	0° \mathcal{Q}	
asc. node	14799 Aug 31 02:45	0° \mathfrak{L} 17'46		max. Earth dist.	14800 Jul 26 06:56	13° \mathcal{Q} 20'14	1.43702 AU
evening rise	14799 Sep 01 08:02	2° \mathfrak{L} 32'58					
evening max el	14799 Sep 17 07:36	27° \mathfrak{L} 59'22	18°12'02	superior conj	14800 Aug 01 20:05	24° \mathcal{Q} 02'59	-1°48'57
	14799 Sep 19 16:50	0° \mathbb{M}		minimum elong	14800 Aug 02 03:38	24° \mathcal{Q} 34'25	1°48'55
retrograde	14799 Sep 24 11:57	1° \mathbb{M} 39'04			14800 Aug 05 09:03	0° \mathbb{M}	
evening set	14799 Sep 26 15:51	1° \mathbb{M} 19'43		evening rise	14800 Aug 14 03:40	15° \mathbb{M} 11'29	
	14799 Sep 29 12:42	30° \mathfrak{R} \mathfrak{L}		asc. node	14800 Aug 16 23:20	20° \mathbb{M} 08'05	
desc. node	14799 Oct 02 19:03	27° \mathfrak{L} 34'50			14800 Aug 22 18:10	0° \mathfrak{L}	
inferior conj	14799 Oct 03 23:31	26° \mathfrak{L} 34'08	-0°22'29	evening max el	14800 Aug 30 20:49	11° \mathfrak{L} 06'17	18°01'59
minimum elong	14799 Oct 03 22:44	26° \mathfrak{L} 35'51	0°21'48	retrograde	14800 Sep 06 10:17	14° \mathfrak{L} 29'54	
min. Earth dist.	14799 Oct 07 06:07	23° \mathfrak{L} 45'11	0.59215 AU	evening set	14800 Sep 08 21:59	14° \mathfrak{L} 00'10	
morning rise	14799 Oct 11 02:14	21° \mathfrak{L} 00'33		inferior conj	14800 Sep 15 13:02	8° \mathfrak{L} 54'49	0°56'59
direct	14799 Oct 17 13:17	19° \mathfrak{L} 06'15		minimum elong	14800 Sep 15 14:38	8° \mathfrak{L} 50'48	0°56'27
morning max el	14799 Oct 31 20:19	26° \mathfrak{L} 50'14	27°37'48	min. Earth dist.	14800 Sep 18 13:35	5° \mathfrak{L} 55'15	0.61506 AU
	14799 Nov 03 20:45	0° \mathbb{M}		desc. node	14800 Sep 18 16:33	5° \mathfrak{L} 48'14	
	14799 Nov 24 00:10	0° \mathfrak{J}		morning rise	14800 Sep 22 04:35	2° \mathfrak{L} 54'39	
asc. node	14799 Nov 27 04:22	6° \mathfrak{J} 00'56		direct	14800 Sep 28 20:30	0° \mathfrak{L} 37'39	
morning set	14799 Dec 02 11:47	16° \mathfrak{J} 49'43		morning max el	14800 Oct 13 01:03	8° \mathfrak{L} 34'19	27°59'02
	14799 Dec 08 12:22	0° \mathfrak{Z}			14800 Oct 29 13:06	0° \mathbb{M}	
				asc. node	14800 Nov 13 01:13	25° \mathbb{M} 45'48	
superior conj	14799 Dec 09 11:14	2° \mathfrak{Z} 07'46	1°32'05		14800 Nov 15 03:24	0° \mathfrak{J}	
minimum elong	14799 Dec 09 09:51	1° \mathfrak{Z} 59'59	1°32'59	morning set	14800 Nov 15 13:23	0° \mathfrak{J} 51'27	
max. Earth dist.	14799 Dec 08 22:09	0° \mathfrak{Z} 54'35	1.31098 AU	max. Earth dist.	14800 Nov 21 04:03	12° \mathfrak{J} 51'16	1.31452 AU
evening rise	14799 Dec 16 04:29	16° \mathfrak{Z} 58'59					
	14799 Dec 22 13:01	0° \approx		superior conj	14800 Nov 22 21:26	16° \mathfrak{J} 39'33	1°20'47
desc. node	14799 Dec 29 16:59	12° \approx 48'38		minimum elong	14800 Nov 22 19:21	16° \mathfrak{J} 28'04	1°21'30
	14800 Jan 11 04:49	0° \mathfrak{H}			14800 Nov 28 22:14	0° \mathfrak{Z}	
evening max el	14800 Jan 14 03:08	2° \mathfrak{H} 59'46	26°22'35	evening rise	14800 Nov 29 14:26	1° \mathfrak{Z} 27'57	
retrograde	14800 Jan 28 02:18	10° \mathfrak{H} 06'14			14800 Dec 14 20:07	0° \approx	
evening set	14800 Feb 03 11:05	8° \mathfrak{H} 28'35		desc. node	14800 Dec 15 13:54	1° \approx 06'59	
min. Earth dist.	14800 Feb 07 16:36	5° \mathfrak{H} 51'31	0.58338 AU	evening max el	14800 Dec 25 18:19	13° \approx 37'22	24°58'42
inferior conj	14800 Feb 10 19:25	3° \mathfrak{H} 33'13	-3°47'46	retrograde	14801 Jan 08 13:09	20° \approx 31'33	
minimum elong	14800 Feb 11 03:41	3° \mathfrak{H} 17'52	3°44'28	evening set	14801 Jan 14 02:47	19° \approx 22'18	
	14800 Feb 16 08:08	30° \mathfrak{R} \approx		min. Earth dist.	14801 Jan 19 06:17	16° \approx 37'59	0.56404 AU
morning rise	14800 Feb 18 23:24	29° \approx 04'05		inferior conj	14801 Jan 21 20:06	14° \approx 58'40	-5°06'54
direct	14800 Feb 20 23:26	28° \approx 50'29		minimum elong	14801 Jan 22 04:54	14° \approx 44'30	5°04'09
asc. node	14800 Feb 23 02:21	29° \approx 06'29		morning rise	14801 Jan 30 09:23	10° \approx 51'18	
	14800 Feb 25 08:55	0° \mathfrak{H}		direct	14801 Feb 01 14:15	10° \approx 37'39	
morning max el	14800 Feb 29 04:13	2° \mathfrak{H} 53'07	18°28'43	asc. node	14801 Feb 08 23:47	13° \approx 23'51	
morning set	14800 Mar 16 01:17	28° \mathfrak{H} 16'52		morning max el	14801 Feb 11 03:39	15° \approx 15'55	19°21'44
	14800 Mar 16 22:47	0° \mathfrak{Y}			14801 Feb 21 11:55	0° \mathfrak{H}	
				morning set	14801 Feb 28 02:59	12° \mathfrak{H} 43'36	
superior conj	14800 Mar 25 04:00	15° \mathfrak{Y} 33'36	0°13'14				
minimum elong	14800 Mar 25 04:55	15° \mathfrak{Y} 37'50	0°12'55	superior conj	14801 Mar 08 06:54	28° \mathfrak{H} 56'52	0°43'20
behind sun begin	14800 Mar 25 00:42	15° \mathfrak{Y} 18'20		minimum elong	14801 Mar 08 09:16	29° \mathfrak{H} 08'18	0°43'05
behind sun end	14800 Mar 25 09:09	15° \mathfrak{Y} 57'18			14801 Mar 08 19:56	0° \mathfrak{Y}	
desc. node	14800 Mar 26 18:48	18° \mathfrak{Y} 31'16		desc. node	14801 Mar 13 15:19	9° \mathfrak{Y} 05'01	
max. Earth dist.	14800 Apr 01 15:11	28° \mathfrak{Y} 52'56	1.40493 AU	max. Earth dist.	14801 Mar 14 21:42	11° \mathfrak{Y} 24'06	1.38218 AU
	14800 Apr 02 06:47	0° \mathfrak{B}		evening rise	14801 Mar 18 14:44	18° \mathfrak{Y} 00'36	
evening rise	14800 Apr 05 21:44	6° \mathfrak{B} 06'14			14801 Mar 25 18:07	0° \mathfrak{B}	
	14800 Apr 21 07:29	0° \mathbb{I}			14801 Apr 15 15:13	0° \mathbb{I}	
evening max el	14800 May 10 09:40	24° \mathbb{I} 20'16	23°35'23	evening max el	14801 Apr 22 23:09	8° \mathbb{I} 13'57	24°54'44
	14800 May 18 01:01	0° \mathfrak{G}		retrograde	14801 May 04 19:38	15° \mathbb{I} 08'25	
asc. node	14800 May 20 23:06	0° \mathfrak{G} 39'55		asc. node	14801 May 07 20:21	14° \mathbb{I} 29'13	
retrograde	14800 May 21 04:17	0° \mathfrak{G} 40'07		evening set	14801 May 10 12:54	12° \mathbb{I} 44'07	
	14800 May 24 02:18	30° \mathfrak{R} \mathbb{I}		min. Earth dist.	14801 May 14 23:19	7° \mathbb{I} 44'32	0.68285 AU
evening set	14800 May 26 10:01	28° \mathbb{I} 26'55		inferior conj	14801 May 16 02:53	6° \mathbb{I} 13'29	2°17'05
min. Earth dist.	14800 May 31 04:34	22° \mathbb{I} 50'45	0.68896 AU	minimum elong	14801 May 16 00:45	6° \mathbb{I} 20'34	2°15'38
inferior conj	14800 May 31 19:20	22° \mathbb{I} 00'03	2°45'13	morning rise	14801 May 21 12:52	0° \mathbb{I} 17'16	
minimum elong	14800 May 31 17:34	22° \mathbb{I} 06'08	2°43'54		14801 May 21 23:11	30° \mathfrak{R} \mathfrak{B}	
morning rise	14800 Jun 06 01:05	15° \mathbb{I} 54'45		direct	14801 May 25 05:55	28° \mathfrak{B} 58'17	
direct	14800 Jun 10 06:00	14° \mathbb{I} 15'27			14801 May 28 17:19	0° \mathbb{I}	
morning max el	14800 Jun 18 08:50	18° \mathbb{I} 52'26	20°37'27	morning max el	14801 Jun 01 10:51	2° \mathbb{I} 56'28	19°30'42
desc. node	14800 Jun 22 19:43	23° \mathbb{I} 52'19		desc. node	14801 Jun 09 16:45	13° \mathbb{I} 03'47	
	14800 Jun 27 12:28	0° \mathfrak{G}		greatest brilliancy	14801 Jun 14 01:56	19° \mathbb{I} 20'55	-0.7m

	14801 Jun 21 04:39	0°☿		morning set	14802 Jun 06 10:01	18°☿00'37	
morning set	14801 Jun 26 19:42	8°☿35'44			14802 Jun 14 02:14	0°☿	
max. Earth dist.	14801 Jul 08 21:35	27°☿21'53	1.45115 AU	max. Earth dist.	14802 Jun 21 16:00	11°☿48'37	1.45840 AU
	14801 Jul 10 13:38	0°♌					
superior conj	14801 Jul 13 00:48	3°♌55'07	-2°09'41	superior conj	14802 Jun 22 12:33	13°☿08'53	-2°12'35
minimum elong	14801 Jul 13 05:28	4°♌13'45	2°10'24	minimum elong	14802 Jun 22 09:47	12°☿58'04	2°13'33
evening rise	14801 Jul 27 02:51	26°♌56'20		evening rise	14802 Jul 03 05:59	0°♌	
	14801 Jul 28 22:53	0°♍		greatest brilliancy	14802 Jul 08 01:32	7°♌38'57	
asc. node	14801 Aug 03 19:57	9°♍43'31		asc. node	14802 Jul 15 03:23	18°♌54'37	-0.9m
evening max el	14801 Aug 14 11:25	24°♍34'45	18°10'36		14802 Jul 21 16:38	28°♌58'22	
retrograde	14801 Aug 20 20:02	27°♍55'58		evening max el	14802 Jul 22 09:37	0°♍	
evening set	14801 Aug 23 16:12	27°♍12'53		retrograde	14802 Jul 29 00:21	8°♍17'05	18°37'01
inferior conj	14801 Aug 29 17:55	21°♍50'22	1°55'29	evening set	14802 Aug 04 13:05	11°♍48'58	
minimum elong	14801 Aug 29 20:19	21°♍43'40	1°54'31	inferior conj	14802 Aug 07 18:15	10°♍50'14	
min. Earth dist.	14801 Sep 01 07:03	19°♍00'06	0.63707 AU	minimum elong	14802 Aug 13 10:15	5°♍12'42	2°35'10
morning rise	14801 Sep 04 22:35	15°♍33'44		min. Earth dist.	14802 Aug 13 12:24	5°♍06'06	2°34'11
desc. node	14801 Sep 05 14:03	15°♍05'16			14802 Aug 15 09:38	2°♍47'52	0.65637 AU
direct	14801 Sep 11 13:31	13°♍01'14			14802 Aug 17 22:18	30°♌	
morning max el	14801 Sep 25 10:26	21°♍01'32	27°42'16	morning rise	14802 Aug 19 05:28	28°♌48'29	
	14801 Oct 03 05:26	0°♎		desc. node	14802 Aug 23 11:33	26°♌26'33	
	14801 Oct 22 15:52	0°♏		direct	14802 Aug 25 14:44	26°♌09'37	
morning set	14801 Oct 30 07:14	14°♏29'06			14802 Sep 03 11:00	0°♏	
asc. node	14801 Oct 30 21:57	15°♏42'55		morning max el	14802 Sep 07 21:37	4°♏00'18	26°53'38
max. Earth dist.	14801 Nov 04 03:43	24°♏29'10	1.32362 AU		14802 Sep 27 15:43	0°♎	
	14801 Nov 06 17:31	0°♏		morning set	14802 Oct 13 14:33	27°♎36'26	
					14802 Oct 14 20:18	0°♏	
superior conj	14801 Nov 07 04:17	0°♏58'17	1°03'35	asc. node	14802 Oct 17 18:36	5°♏47'54	
minimum elong	14801 Nov 07 01:58	0°♏45'44	1°04'04	max. Earth dist.	14802 Oct 17 18:10	5°♏45'42	1.33820 AU
evening rise	14801 Nov 14 01:24	15°♏57'22					
	14801 Nov 20 22:18	0°♐		superior conj	14802 Oct 22 05:35	14°♏58'46	0°40'35
desc. node	14801 Dec 02 10:56	18°♐23'53		minimum elong	14802 Oct 22 03:39	14°♏48'37	0°40'52
evening max el	14801 Dec 07 03:57	23°♐39'08	23°17'35	evening rise	14802 Oct 29 11:34	0°♏23'08	
	14801 Dec 17 21:07	0°♑			14802 Oct 29 07:11	0°♏	
retrograde	14801 Dec 20 11:10	0°♑15'15		evening max el	14802 Nov 15 08:56	0°♐	
	14801 Dec 23 02:08	30°♑		desc. node	14802 Nov 18 17:06	3°♐42'13	21°37'18
evening set	14801 Dec 24 19:28	29°♐34'15		retrograde	14802 Nov 19 08:04	4°♐18'06	
min. Earth dist.	14801 Dec 31 14:10	26°♐23'11	0.55017 AU	evening set	14802 Nov 30 22:56	9°♐45'52	
inferior conj	14802 Jan 02 00:45	25°♐33'07	-5°55'14	inferior conj	14802 Dec 03 23:12	9°♐25'19	
minimum elong	14802 Jan 02 04:14	25°♐28'04	5°54'01	minimum elong	14802 Dec 12 17:01	5°♐33'26	-5°48'48
morning rise	14802 Jan 10 14:33	21°♐42'00		min. Earth dist.	14802 Dec 12 11:23	5°♐41'21	5°47'09
direct	14802 Jan 13 09:45	21°♐23'16		morning rise	14802 Dec 12 19:58	5°♐29'19	0.54451 AU
morning max el	14802 Jan 24 13:15	26°♐44'29	20°38'01	direct	14802 Dec 21 00:13	1°♐45'05	
asc. node	14802 Jan 26 21:09	29°♐12'12		morning max el	14802 Dec 24 18:15	1°♐14'24	
	14802 Jan 27 13:22	0°♑		asc. node	14803 Jan 06 08:22	7°♐18'52	22°15'23
morning set	14802 Feb 12 10:22	27°♑22'27			14803 Jan 13 18:26	16°♐14'20	
	14802 Feb 13 16:49	0°♒		morning set	14803 Jan 21 21:42	0°♑	
					14803 Jan 27 21:01	12°♑06'34	
superior conj	14802 Feb 19 22:12	12°♒52'20	1°06'50	superior conj	14803 Feb 03 22:21	27°♑10'05	1°23'36
minimum elong	14802 Feb 20 00:50	13°♒05'42	1°06'52	minimum elong	14803 Feb 04 00:29	27°♑21'24	1°24'01
max. Earth dist.	14802 Feb 25 05:22	23°♒23'30	1.36022 AU		14803 Feb 05 06:37	0°♒	
desc. node	14802 Feb 28 11:49	29°♒34'24		max. Earth dist.	14803 Feb 07 19:04	5°♒12'45	1.34118 AU
	14802 Feb 28 17:21	0°♓		evening rise	14803 Feb 12 04:22	13°♒56'19	
evening rise	14802 Mar 01 02:06	0°♓40'19		desc. node	14803 Feb 15 08:21	19°♒55'34	
	14802 Mar 18 21:37	0°♔			14803 Feb 21 00:32	0°♓	
evening max el	14802 Apr 05 12:37	22°♔04'50	26°05'25		14803 Mar 13 17:40	0°♔	
retrograde	14802 Apr 18 06:19	29°♔22'34		evening max el	14803 Mar 19 02:24	5°♔45'46	26°59'52
evening set	14802 Apr 24 10:16	26°♔51'39		retrograde	14803 Mar 19 02:24	5°♔45'46	26°59'52
asc. node	14802 Apr 24 17:40	26°♔35'55		evening set	14803 Apr 01 11:13	13°♔14'12	
min. Earth dist.	14802 Apr 28 14:07	22°♔27'32	0.67216 AU	asc. node	14803 Apr 08 00:10	10°♔42'22	
inferior conj	14802 Apr 30 06:26	20°♔22'06	1°37'58	min. Earth dist.	14803 Apr 11 15:04	7°♔13'33	
minimum elong	14802 Apr 30 04:24	20°♔28'24	1°36'35	inferior conj	14803 Apr 11 22:54	6°♔51'46	0.65732 AU
morning rise	14802 May 05 23:19	14°♔36'15		minimum elong	14803 Apr 14 03:39	4°♔20'17	0°47'00
direct	14802 May 09 05:25	13°♔36'05			14803 Apr 14 02:27	4°♔23'45	0°46'03
morning max el	14802 May 15 19:59	17°♔08'13	18°39'36		14803 Apr 18 09:40	30°♒	
	14802 May 25 17:54	0°♕		morning rise	14803 Apr 20 06:12	28°♒46'31	
desc. node	14802 May 27 13:40	2°♕44'30		direct	14803 Apr 23 02:27	28°♒02'35	
					14803 Apr 27 21:29	0°♔	

morning max el	14803 Apr 29 10:30	1°  21'11	18°05'16	morning max el	14804 Apr 12 03:56	15°  28'15	17°48'12
desc. node	14803 May 14 10:28	22°  46'13		desc. node	14804 Apr 22 13:16	0°  8	
morning set	14803 May 18 02:15	28°  41'39		morning set	14804 Apr 28 21:50	10°  41'42	
	14803 May 18 21:35	0°  II		desc. node	14804 Apr 30 07:11	13°  03'04	
					14804 May 10 11:34	0°  II	
superior conj	14803 Jun 01 22:23	22°  II23'55	-1°55'31	superior conj	14804 May 11 22:46	2°  II22'50	-1°23'28
minimum elong	14803 Jun 01 13:58	21°  II50'51	1°55'52	minimum elong	14804 May 11 14:48	1°  II50'34	1°23'22
max. Earth dist.	14803 Jun 04 12:09	26°  II25'48	1.45824 AU	max. Earth dist.	14804 May 17 07:44	10°  II58'42	1.45071 AU
	14803 Jun 06 19:03	0°  ☿		evening rise	14804 May 27 12:34	26°  II50'17	
evening rise	14803 Jun 18 01:07	17°  ☿26'07			14804 May 29 14:18	0°  ☿	
	14803 Jun 26 05:20	0°  ♊			14804 Jun 19 08:19	0°  ♊	
greatest brilliancy	14803 Jun 30 11:56	6°  ♊27'03	-0.7m		14804 Jun 24 10:18	5°  ♊52'53	
asc. node	14803 Jul 08 13:24	17°  ♊44'36		asc. node	14804 Jun 24 12:16	5°  ♊57'51	20°18'37
evening max el	14803 Jul 12 09:07	22°  ♊06'08	19°20'14	evening max el	14804 Jul 02 09:08	10°  ♊27'35	
retrograde	14803 Jul 19 10:15	26°  ♊01'15		retrograde	14804 Jul 06 10:03	8°  ♊54'18	
evening set	14803 Jul 23 00:58	24°  ♊45'29		evening set	14804 Jul 11 16:27	2°  ♊50'40	3°09'31
inferior conj	14803 Jul 28 10:40	18°  ♊54'17	2°59'01	inferior conj	14804 Jul 11 16:52	2°  ♊49'16	3°08'36
minimum elong	14803 Jul 28 12:03	18°  ♊49'46	2°58'06	minimum elong	14804 Jul 12 11:28	1°  ♊45'41	0.68284 AU
min. Earth dist.	14803 Jul 29 19:43	17°  ♊06'10	0.67186 AU	min. Earth dist.	14804 Jul 13 19:12	30°  ♊☿	
morning rise	14803 Aug 02 22:32	12°  ♊28'52		morning rise	14804 Jul 16 23:22	26°  ♊☿28'07	
direct	14803 Aug 08 22:40	9°  ♊52'50		direct	14804 Jul 22 12:08	24°  ♊☿02'32	
desc. node	14803 Aug 10 09:02	10°  ♊00'39		desc. node	14804 Jul 27 06:27	25°  ♊☿29'10	
morning max el	14803 Aug 21 08:37	17°  ♊18'09	25°41'50		14804 Aug 01 23:52	0°  ♊	
	14803 Aug 31 23:27	0°  ♊☿		morning max el	14804 Aug 02 19:12	0°  ♊47'56	24°16'30
	14803 Sep 20 14:45	0°  ♊			14804 Aug 24 21:20	0°  ♊☿	
morning set	14803 Sep 26 07:41	10°  ♊04'04		morning set	14804 Sep 07 06:28	21°  ♊☿42'39	
max. Earth dist.	14803 Sep 29 22:53	16°  ♊49'40	1.35767 AU	max. Earth dist.	14804 Sep 10 21:57	28°  ♊☿07'23	1.38052 AU
asc. node	14803 Oct 04 15:12	25°  ♊56'06			14804 Sep 11 22:59	0°  ♊	
superior conj	14803 Oct 05 22:36	28°  ♊33'23	0°12'04	superior conj	14804 Sep 18 03:58	11°  ♊34'16	-0°21'04
minimum elong	14803 Oct 05 21:53	28°  ♊29'45	0°12'19	minimum elong	14804 Sep 18 05:24	11°  ♊41'10	0°20'43
behind sun begin	14803 Oct 05 17:50	28°  ♊09'27		asc. node	14804 Sep 20 11:46	16°  ♊04'09	
behind sun end	14803 Oct 06 01:55	28°  ♊50'05		evening rise	14804 Sep 26 20:45	28°  ♊40'24	
	14803 Oct 06 15:45	0°  ♊☿			14804 Sep 27 12:50	0°  ♊☿	
evening rise	14803 Oct 13 18:49	14°  ♊39'26		evening max el	14804 Oct 13 09:40	25°  ♊46'39	19°08'20
	14803 Oct 21 15:30	0°  ♊☿			14804 Oct 19 23:54	0°  ♊☿	
evening max el	14803 Oct 31 18:14	14°  ♊19'58	20°12'08	retrograde	14804 Oct 22 11:14	0°  ♊19'53	
desc. node	14803 Nov 06 05:19	18°  ♊23'44		desc. node	14804 Oct 23 02:42	0°  ♊18'35	
retrograde	14803 Nov 11 10:32	19°  ♊38'55		evening set	14804 Oct 24 08:08	0°  ♊09'03	
evening set	14803 Nov 13 13:44	19°  ♊27'11			14804 Oct 25 00:24	30°  ♊☿	
inferior conj	14803 Nov 22 10:42	15°  ♊30'23	-4°43'34	inferior conj	14804 Nov 01 19:11	25°  ♊56'05	-3°02'53
minimum elong	14803 Nov 22 00:37	15°  ♊45'21	4°39'54	minimum elong	14804 Nov 01 11:32	26°  ♊09'02	2°59'16
min. Earth dist.	14803 Nov 24 02:37	14°  ♊31'04	0.54822 AU	min. Earth dist.	14804 Nov 04 13:13	24°  ♊04'27	0.56063 AU
morning rise	14803 Nov 30 10:42	11°  ♊26'00		morning rise	14804 Nov 09 12:22	21°  ♊19'02	
direct	14803 Dec 05 04:42	10°  ♊37'07		direct	14804 Nov 15 02:23	20°  ♊06'58	
morning max el	14803 Dec 18 18:18	17°  ♊17'55	24°04'33	morning max el	14804 Nov 29 04:35	27°  ♊17'08	25°48'14
	14803 Dec 28 23:56	0°  ♊☿			14804 Dec 01 20:07	0°  ♊☿	
asc. node	14803 Dec 31 15:37	4°  ♊13'19		asc. node	14804 Dec 17 12:44	22°  ♊54'48	
morning set	14804 Jan 12 08:58	26°  ♊50'41			14804 Dec 21 06:50	0°  ♊☿	
	14804 Jan 13 20:03	0°  ♊☿		morning set	14804 Dec 26 20:21	11°  ♊☿29'16	
superior conj	14804 Jan 19 04:30	11°  ♊42'18	1°33'52	superior conj	14805 Jan 02 14:19	26°  ♊32'148	1°37'54
minimum elong	14804 Jan 19 05:45	11°  ♊49'03	1°34'37	minimum elong	14805 Jan 02 14:29	26°  ♊32'246	1°38'51
max. Earth dist.	14804 Jan 21 16:44	17°  ♊07'50	1.32631 AU	max. Earth dist.	14805 Jan 03 20:56	29°  ♊31'126	1.31626 AU
evening rise	14804 Jan 26 18:11	27°  ♊40'11			14805 Jan 04 05:44	0°  ♊☿	
	14804 Jan 27 22:08	0°  ♊☿		evening rise	14805 Jan 09 16:33	11°  ♊43'57	
desc. node	14804 Feb 02 04:58	10°  ♊04'03		desc. node	14805 Jan 19 01:38	29°  ♊53'25	
	14804 Feb 14 06:23	0°  ♊☿			14805 Jan 19 03:07	0°  ♊☿	
evening max el	14804 Feb 29 15:19	19°  ♊05'57	27°30'39		14805 Feb 09 04:25	0°  ♊☿	
retrograde	14804 Mar 14 09:19	26°  ♊34'53		evening max el	14805 Feb 11 01:02	1°  ♊51'07	27°31'15
evening set	14804 Mar 21 04:23	24°  ♊08'41		retrograde	14805 Feb 24 23:33	9°  ♊14'12	
min. Earth dist.	14804 Mar 24 23:38	20°  ♊48'27	0.63895 AU	evening set	14805 Mar 03 20:11	7°  ♊00'52	
inferior conj	14804 Mar 27 15:55	18°  ♊01'39	-0°16'29	min. Earth dist.	14805 Mar 07 14:32	4°  ♊05'28	0.61795 AU
minimum elong	14804 Mar 27 16:26	18°  ♊00'18	0°16'29	inferior conj	14805 Mar 10 15:55	1°  ♊16'45	-1°32'17
asc. node	14804 Mar 28 12:30	17°  ♊08'30		minimum elong	14805 Mar 10 19:09	1°  ♊09'16	1°30'53
morning rise	14804 Apr 03 06:44	12°  ♊42'27			14805 Mar 12 01:46	30°  ♊☿	
direct	14804 Apr 05 18:26	12°  ♊11'32					

asc. node	14805 Mar 15 10:00	27° K 25'40	direct	14806 Mar 02 20:39	8° K 59'49	
morning rise	14805 Mar 17 21:08	26° K 15'11	morning max el	14806 Mar 10 10:40	12° K 45'59	18°08'20
direct	14805 Mar 20 01:54	25° K 53'51		14806 Mar 22 00:16	0° Y	
morning max el	14805 Mar 26 21:09	29° K 19'48 17°48'51	morning set	14806 Mar 26 01:13	7° Y 28'16	
	14805 Mar 27 12:59	0° Y	desc. node	14806 Apr 04 00:23	24° Y 01'29	
morning set	14805 Apr 11 15:28	23° Y 43'07				
	14805 Apr 15 04:16	0° Z	superior conj	14806 Apr 04 20:34	25° Y 31'58	-0°06'51
desc. node	14805 Apr 17 03:49	3° Z 29'27	minimum elong	14806 Apr 04 20:00	25° Y 29'25	0°07'05
			behind sun begin	14806 Apr 04 13:05	24° Y 58'28	
superior conj	14805 Apr 22 22:06	13° Z 25'48 -0°44'55	behind sun end	14806 Apr 05 02:55	26° Y 00'19	
minimum elong	14805 Apr 22 17:53	13° Z 07'56 0°44'54		14806 Apr 07 09:09	0° Z	
max. Earth dist.	14805 Apr 30 00:03	25° Z 09'33 1.43657 AU	max. Earth dist.	14806 Apr 12 11:16	8° Z 43'26	1.41738 AU
	14805 May 03 00:25	0° II	evening rise	14806 Apr 17 11:51	16° Z 59'27	
evening rise	14805 May 07 03:57	6° II 31'29		14806 Apr 25 19:27	0° II	
	14805 May 22 21:00	0° E		14806 May 17 16:03	0° E	
evening max el	14805 Jun 07 09:28	19° E 49'11 21°29'31	evening max el	14806 May 21 01:57	3° E 40'44	22°48'34
asc. node	14805 Jun 11 07:19	23° E 09'56	asc. node	14806 May 29 04:25	9° E 19'47	
retrograde	14805 Jun 16 07:51	25° E 01'37	retrograde	14806 May 31 04:43	9° E 37'47	
evening set	14805 Jun 20 19:32	23° E 11'28	evening set	14806 Jun 05 03:42	7° E 32'22	
inferior conj	14805 Jun 26 01:17	16° E 56'53 3°08'25	inferior conj	14806 Jun 10 11:07	1° E 09'01	2°56'42
minimum elong	14805 Jun 26 00:43	16° E 58'50 3°07'24	minimum elong	14806 Jun 10 09:43	1° E 13'52	2°55'29
min. Earth dist.	14805 Jun 26 06:50	16° E 37'31 0.68898 AU	min. Earth dist.	14806 Jun 10 03:42	1° E 34'47	0.69029 AU
morning rise	14805 Jul 01 05:43	10° E 39'41		14806 Jun 11 07:03	30° R II	
direct	14805 Jul 06 06:06	8° E 29'57	morning rise	14806 Jun 15 15:37	24° II 58'49	
desc. node	14805 Jul 14 03:46	12° E 25'40	direct	14806 Jun 20 03:28	23° II 08'00	
morning max el	14805 Jul 16 06:50	14° E 26'06 22°47'06	morning max el	14806 Jun 28 22:06	28° II 12'49	21°21'53
	14805 Jul 28 21:54	0° O		14806 Jun 30 15:01	0° E	
	14805 Aug 17 19:44	0° O	desc. node	14806 Jul 01 00:58	0° E 27'33	
morning set	14805 Aug 19 06:43	2° O 22'39		14806 Jul 22 11:49	0° O	
max. Earth dist.	14805 Aug 23 21:27	10° O 05'06 1.40426 AU	morning set	14806 Jul 30 06:34	11° O 59'49	
			max. Earth dist.	14806 Aug 06 01:44	22° O 53'56	1.42617 AU
				14806 Aug 10 08:32	0° O	
superior conj	14805 Aug 31 17:37	23° O 51'58 -0°56'49				
minimum elong	14805 Aug 31 21:59	24° O 11'46 0°56'20				
	14805 Sep 04 01:45	0° A	superior conj	14806 Aug 13 11:04	5° O 16'19	-1°31'35
asc. node	14805 Sep 07 08:21	6° A 08'34	minimum elong	14806 Aug 13 18:06	5° O 46'28	1°31'14
evening rise	14805 Sep 10 14:16	12° A 18'08	evening rise	14806 Aug 24 19:18	25° O 21'38	
	14805 Sep 20 10:45	0° M	asc. node	14806 Aug 25 04:56	26° O 05'11	
evening max el	14805 Sep 26 12:54	8° M 00'07 18°26'34		14806 Aug 27 08:59	0° A	
retrograde	14805 Oct 04 06:59	11° M 55'58	evening max el	14806 Sep 09 23:41	20° A 50'38	18°05'26
evening set	14805 Oct 06 06:54	11° M 41'04	retrograde	14806 Sep 16 20:34	24° A 21'54	
desc. node	14805 Oct 10 00:08	10° M 02'51	evening set	14806 Sep 19 03:32	23° A 58'41	
inferior conj	14805 Oct 14 01:00	7° M 07'35 -1°17'23	inferior conj	14806 Sep 26 03:51	19° A 04'42	0°13'48
minimum elong	14805 Oct 13 21:59	7° M 13'33 1°15'38	minimum elong	14806 Sep 26 04:18	19° A 03'39	0°13'51
min. Earth dist.	14805 Oct 17 06:44	4° M 34'12 0.57948 AU	transit middle	14806 Sep 26 04:18	19° A 03'39	0°13'51
morning rise	14805 Oct 21 09:33	1° M 52'55	transit begin	14806 Sep 26 02:35	19° A 07'38	
direct	14805 Oct 27 14:30	0° M 13'56	transit end	14806 Sep 26 06:02	18° A 59'40	
morning max el	14805 Nov 10 21:40	7° M 48'10 27°07'54	desc. node	14806 Sep 26 21:37	18° A 23'34	
	14805 Nov 27 14:27	0° J	min. Earth dist.	14806 Sep 29 08:56	16° A 08'19	0.60183 AU
asc. node	14805 Dec 04 09:44	12° J 07'31	morning rise	14806 Oct 03 01:51	13° A 18'23	
morning set	14805 Dec 11 05:28	25° J 57'45	direct	14806 Oct 09 15:45	11° A 13'23	
	14805 Dec 13 02:18	0° Z	morning max el	14806 Oct 23 22:27	19° A 04'37	27°51'36
				14806 Nov 02 05:03	0° M	
superior conj	14805 Dec 18 01:46	11° Z 03'01 1°35'55		14806 Nov 20 09:43	0° J	
minimum elong	14805 Dec 18 00:54	10° Z 58'10 1°36'53	asc. node	14806 Nov 21 06:38	1° J 42'25	
max. Earth dist.	14805 Dec 18 04:36	11° Z 18'51 1.31135 AU	morning set	14806 Nov 25 10:22	10° J 10'29	
evening rise	14805 Dec 24 21:05	26° Z 01'49	max. Earth dist.	14806 Dec 01 12:02	23° J 20'54	1.31179 AU
	14805 Dec 26 18:20	0° A				
desc. node	14806 Jan 05 22:25	19° A 16'13	superior conj	14806 Dec 02 12:58	25° J 39'43	1°28'01
	14806 Jan 12 17:59	0° K	minimum elong	14806 Dec 02 11:14	25° J 30'07	1°28'51
evening max el	14806 Jan 24 04:54	13° K 49'46 26°57'30		14806 Dec 04 11:36	0° Z	
retrograde	14806 Feb 07 04:49	21° K 03'41	evening rise	14806 Dec 09 05:35	10° Z 27'53	
evening set	14806 Feb 13 20:19	19° K 10'51		14806 Dec 19 01:13	0° A	
min. Earth dist.	14806 Feb 17 19:03	16° K 30'50 0.59579 AU	desc. node	14806 Dec 23 19:17	8° A 01'38	
inferior conj	14806 Feb 21 00:01	13° K 56'17 -2°57'28	evening max el	14807 Jan 06 00:52	24° A 55'55	25°50'00
minimum elong	14806 Feb 21 06:36	13° K 43'01 2°54'38		14807 Jan 12 19:14	0° K	
morning rise	14806 Feb 28 20:16	9° K 15'06	retrograde	14807 Jan 19 23:14	1° K 58'07	
asc. node	14806 Mar 02 07:27	9° K 00'59	evening set	14807 Jan 26 00:53	0° K 32'21	

	14807 Jan 27 03:12	30° \approx		evening set	14808 Jan 06 06:26	11° \approx 06'09	
min. Earth dist.	14807 Jan 30 13:52	27° \approx 54'07	0.57463 AU	min. Earth dist.	14808 Jan 12 00:50	8° \approx 12'42	0.55732 AU
inferior conj	14807 Feb 02 12:45	25° \approx 50'40	-4°23'30	inferior conj	14808 Jan 14 04:29	6° \approx 53'49	-5°32'47
minimum elong	14807 Feb 02 21:46	25° \approx 34'55	4°20'13	minimum elong	14808 Jan 14 11:50	6° \approx 42'35	5°30'42
morning rise	14807 Feb 10 21:35	21° \approx 31'02		morning rise	14808 Jan 22 19:06	2° \approx 54'00	
direct	14807 Feb 12 22:26	21° \approx 18'04		direct	14808 Jan 25 04:52	2° \approx 38'50	
asc. node	14807 Feb 17 04:53	22° \approx 18'43		asc. node	14808 Feb 04 02:16	7° \approx 16'20	
morning max el	14807 Feb 21 16:25	25° \approx 35'10	18°48'29	morning max el	14808 Feb 04 10:13	7° \approx 35'16	19°51'18
	14807 Feb 25 11:02	0° \approx			14808 Feb 18 23:28	0° \approx	
morning set	14807 Mar 09 22:13	21° \approx 42'54		morning set	14808 Feb 22 02:40	6° \approx 15'41	
	14807 Mar 14 03:58	0° \approx					
superior conj	14807 Mar 18 14:22	8° \approx 30'22	0°26'46	superior conj	14808 Feb 29 22:58	22° \approx 08'14	0°54'08
minimum elong	14807 Mar 18 16:04	8° \approx 38'22	0°26'27	minimum elong	14808 Mar 01 01:34	22° \approx 21'04	0°53'59
desc. node	14807 Mar 21 20:55	14° \approx 35'33			14808 Mar 04 23:53	0° \approx	
max. Earth dist.	14807 Mar 25 18:23	21° \approx 35'21	1.39525 AU	max. Earth dist.	14808 Mar 07 00:57	3° \approx 51'19	1.37261 AU
evening rise	14807 Mar 29 16:57	28° \approx 23'35		desc. node	14808 Mar 07 17:24	5° \approx 07'44	
	14807 Mar 30 15:51	0° \approx		evening rise	14808 Mar 10 18:11	10° \approx 38'25	
	14807 Apr 19 06:52	0° \approx			14808 Mar 22 08:27	0° \approx	
evening max el	14807 May 03 16:04	17° \approx 34'30	24°09'52	evening max el	14808 Apr 13 18:49	0° \approx	
retrograde	14807 May 14 22:26	24° \approx 10'42		retrograde	14808 Apr 15 05:38	1° \approx 28'16	25°26'27
asc. node	14807 May 16 01:35	24° \approx 05'06		asc. node	14808 Apr 27 11:44	8° \approx 33'31	
evening set	14807 May 20 08:58	21° \approx 52'34		asc. node	14808 May 01 22:51	7° \approx 10'39	
min. Earth dist.	14807 May 24 23:54	16° \approx 31'45	0.68685 AU	evening set	14808 May 03 09:40	6° \approx 06'03	
inferior conj	14807 May 25 20:03	15° \approx 23'29	2°34'38	min. Earth dist.	14808 May 07 17:14	1° \approx 21'38	0.67882 AU
minimum elong	14807 May 25 18:05	15° \approx 30'11	2°33'14		14808 May 08 18:33	30° \approx	
morning rise	14807 May 31 03:15	9° \approx 21'38		inferior conj	14808 May 09 02:08	29° \approx 35'26	2°01'54
direct	14807 Jun 04 03:01	7° \approx 50'58		minimum elong	14808 May 08 23:59	29° \approx 42'25	2°00'27
morning max el	14807 Jun 11 19:43	12° \approx 10'20	20°07'15	morning rise	14808 May 14 14:42	23° \approx 43'17	
desc. node	14807 Jun 17 22:04	19° \approx 17'37		direct	14808 May 18 03:04	22° \approx 32'20	
	14807 Jun 25 14:44	0° \approx		morning max el	14808 May 25 00:47	26° \approx 17'40	19°06'59
morning set	14807 Jul 09 12:14	20° \approx 52'05			14808 May 28 08:55	0° \approx	
	14807 Jul 15 09:23	0° \approx		desc. node	14808 Jun 03 19:01	8° \approx 22'25	
max. Earth dist.	14807 Jul 19 12:50	6° \approx 32'42	1.44376 AU	greatest brilliancy	14808 Jun 07 00:09	13° \approx 26'42	-0.7m
				morning set	14808 Jun 17 17:20	29° \approx 48'19	
superior conj	14807 Jul 25 05:10	15° \approx 41'54	-1°59'32		14808 Jun 17 20:22	0° \approx	
minimum elong	14807 Jul 25 12:11	16° \approx 10'31	1°59'49	max. Earth dist.	14808 Jul 01 05:42	20° \approx 48'07	1.45516 AU
	14807 Aug 02 19:25	0° \approx					
evening rise	14807 Aug 07 06:53	7° \approx 38'52		superior conj	14808 Jul 04 01:17	25° \approx 13'44	-2°13'23
asc. node	14807 Aug 12 01:33	15° \approx 50'01		minimum elong	14808 Jul 04 03:06	25° \approx 20'54	2°14'19
	14807 Aug 21 01:38	0° \approx			14808 Jul 07 01:40	0° \approx	
evening max el	14807 Aug 24 14:01	4° \approx 08'31	18°03'28	evening rise	14808 Jul 18 19:52	18° \approx 57'17	
retrograde	14807 Aug 31 00:09	7° \approx 29'08			14808 Jul 25 14:27	0° \approx	
evening set	14807 Sep 02 15:27	6° \approx 54'01		asc. node	14808 Jul 28 22:11	5° \approx 17'19	
inferior conj	14807 Sep 09 00:25	1° \approx 41'20	1°24'12	evening max el	14808 Aug 07 04:17	17° \approx 43'49	18°19'44
minimum elong	14807 Sep 09 02:31	1° \approx 35'48	1°23'25	retrograde	14808 Aug 13 13:25	21° \approx 07'41	
	14807 Sep 10 14:53	30° \approx		evening set	14808 Aug 16 13:28	20° \approx 17'59	
min. Earth dist.	14807 Sep 11 20:40	28° \approx 43'23	0.62471 AU	inferior conj	14808 Aug 22 10:36	14° \approx 48'45	2°14'22
desc. node	14807 Sep 13 19:06	26° \approx 53'41		minimum elong	14808 Aug 22 12:59	14° \approx 41'47	2°13'24
morning rise	14807 Sep 15 11:16	25° \approx 33'13		min. Earth dist.	14808 Aug 24 17:58	12° \approx 07'57	0.64573 AU
direct	14807 Sep 22 03:39	23° \approx 08'18		morning rise	14808 Aug 28 11:03	8° \approx 28'15	
	14807 Oct 05 01:24	0° \approx		desc. node	14808 Aug 30 16:36	6° \approx 59'00	
morning max el	14807 Oct 06 05:17	1° \approx 07'36	27°56'07	direct	14808 Sep 04 00:09	5° \approx 52'06	
	14807 Oct 27 10:00	0° \approx		morning max el	14808 Sep 17 15:39	13° \approx 49'08	27°25'02
asc. node	14807 Nov 08 03:27	21° \approx 33'06			14808 Sep 30 18:19	0° \approx	
morning set	14807 Nov 09 08:58	24° \approx 02'31			14808 Oct 19 01:07	0° \approx	
	14807 Nov 12 05:44	0° \approx		morning set	14808 Oct 22 22:45	7° \approx 28'11	
max. Earth dist.	14807 Nov 14 15:34	5° \approx 09'40	1.31776 AU	asc. node	14808 Oct 25 00:10	11° \approx 34'13	
				max. Earth dist.	14808 Oct 27 11:45	16° \approx 39'12	1.32922 AU
superior conj	14807 Nov 16 22:00	10° \approx 06'48	1°14'13				
minimum elong	14807 Nov 16 19:46	9° \approx 54'29	1°14'50	superior conj	14808 Oct 31 02:49	24° \approx 18'50	0°54'33
evening rise	14807 Nov 23 16:11	24° \approx 57'40		minimum elong	14808 Oct 31 00:35	24° \approx 06'49	0°54'56
	14807 Nov 26 01:00	0° \approx			14808 Nov 02 18:06	0° \approx	
desc. node	14807 Dec 10 16:14	25° \approx 56'00		evening rise	14808 Nov 07 03:05	9° \approx 26'40	
	14807 Dec 13 18:11	0° \approx			14808 Nov 17 15:43	0° \approx	
evening max el	14807 Dec 18 13:11	5° \approx 15'39	24°16'44	desc. node	14808 Nov 26 13:19	12° \approx 41'06	
retrograde	14808 Jan 01 04:25	12° \approx 02'36		evening max el	14808 Nov 28 23:11	15° \approx 13'53	22°33'47
				retrograde	14808 Dec 11 20:57	21° \approx 37'39	

evening set	14808 Dec 15 15:30	21°♄06'30		retrograde	14809 Nov 22 07:27	1°♄14'17	
min. Earth dist.	14808 Dec 23 07:09	17°♄38'40	0.54670 AU	evening set	14809 Nov 24 20:53	0°♄58'41	
inferior conj	14808 Dec 24 02:34	17°♄11'18	-6°00'03		14809 Nov 28 01:26	30°♄	
minimum elong	14808 Dec 24 02:11	17°♄11'50	5°59'04	inferior conj	14809 Dec 03 17:36	27°♄05'56	-5°27'29
morning rise	14809 Jan 01 14:06	13°♄23'43		minimum elong	14809 Dec 03 09:07	27°♄18'00	5°24'55
direct	14809 Jan 04 18:36	13°♄00'38		min. Earth dist.	14809 Dec 04 12:47	26°♄38'38	0.54489 AU
morning max el	14809 Jan 16 13:23	18°♄40'04	21°17'11	morning rise	14809 Dec 11 21:37	23°♄13'23	
asc. node	14809 Jan 20 23:36	23°♄38'39		direct	14809 Dec 16 01:50	22°♄35'58	
	14809 Jan 25 09:08	0°♄		morning max el	14809 Dec 29 03:44	28°♄56'32	23°01'17
morning set	14809 Feb 05 11:46	20°♄58'30			14809 Dec 30 05:35	0°♄	
	14809 Feb 09 18:45	0°♄		asc. node	14810 Jan 07 20:51	11°♄06'54	
					14810 Jan 18 05:37	0°♄	
superior conj	14809 Feb 12 18:29	6°♄14'55	1°14'46	morning set	14810 Jan 20 23:13	5°♄43'35	
minimum elong	14809 Feb 12 20:58	6°♄27'48	1°14'56				
max. Earth dist.	14809 Feb 17 11:14	15°♄46'32	1.35172 AU	superior conj	14810 Jan 27 21:32	20°♄40'06	1°28'44
evening rise	14809 Feb 21 12:23	23°♄35'17		minimum elong	14810 Jan 27 23:19	20°♄49'43	1°29'17
desc. node	14809 Feb 22 13:57	25°♄34'36		max. Earth dist.	14810 Jan 31 04:16	27°♄37'08	1.33429 AU
	14809 Feb 25 00:08	0°♄			14810 Feb 01 07:50	0°♄	
	14809 Mar 15 23:56	0°♄		evening rise	14810 Feb 04 19:57	7°♄04'01	
evening max el	14809 Mar 28 19:22	15°♄16'29	26°30'55	desc. node	14810 Feb 09 10:32	15°♄51'03	
retrograde	14809 Apr 10 19:53	22°♄39'29			14810 Feb 17 14:37	0°♄	
evening set	14809 Apr 17 04:06	20°♄07'22		evening max el	14810 Mar 11 08:46	28°♄49'18	27°16'05
asc. node	14809 Apr 18 20:11	18°♄36'17			14810 Mar 12 14:57	0°♄	
min. Earth dist.	14809 Apr 21 05:36	15°♄58'00	0.66641 AU	retrograde	14810 Mar 24 22:04	6°♄19'25	
inferior conj	14809 Apr 23 03:17	13°♄40'25	1°17'51	evening set	14810 Mar 31 14:11	3°♄48'44	
minimum elong	14809 Apr 23 01:31	13°♄45'46	1°16'36	min. Earth dist.	14810 Apr 04 11:04	0°♄11'52	0.64995 AU
morning rise	14809 Apr 28 23:58	7°♄59'36			14810 Apr 04 15:28	30°♄	
direct	14809 May 02 01:50	7°♄06'36		asc. node	14810 Apr 05 17:36	28°♄48'21	
morning max el	14809 May 08 12:30	10°♄31'03	18°22'57	inferior conj	14810 Apr 06 21:03	27°♄32'06	0°21'37
desc. node	14809 May 21 15:54	28°♄32'52		minimum elong	14810 Apr 06 20:27	27°♄33'45	0°21'01
	14809 May 22 14:09	0°♄		morning rise	14810 Apr 13 04:33	22°♄04'31	
morning set	14809 May 28 17:44	9°♄43'18		direct	14810 Apr 15 20:57	21°♄26'38	
	14809 Jun 10 14:55	0°♄		morning max el	14810 Apr 22 04:41	24°♄42'58	17°55'54
					14810 Apr 26 15:14	0°♄	
superior conj	14809 Jun 13 09:55	4°♄21'34	-2°07'39	desc. node	14810 May 08 12:41	18°♄41'39	
minimum elong	14809 Jun 13 04:06	3°♄58'49	2°08'24	morning set	14810 May 09 21:56	20°♄58'58	
max. Earth dist.	14809 Jun 14 01:36	5°♄22'43	1.45930 AU		14810 May 15 09:37	0°♄	
evening rise	14809 Jun 29 08:02	29°♄14'05					
	14809 Jun 29 19:45	0°♄		superior conj	14810 May 24 00:19	13°♄51'25	-1°43'15
greatest brilliancy	14809 Jul 08 22:17	14°♄12'34	-0.8m	minimum elong	14810 May 23 15:25	13°♄16'06	1°43'22
asc. node	14809 Jul 15 18:54	24°♄20'46		max. Earth dist.	14810 May 27 21:40	19°♄59'27	1.45587 AU
	14809 Jul 20 05:56	0°♄			14810 Jun 03 07:55	0°♄	
evening max el	14809 Jul 21 15:38	1°♄29'07	18°53'23	evening rise	14810 Jun 09 00:37	8°♄46'24	
retrograde	14809 Jul 28 08:40	5°♄09'32		greatest brilliancy	14810 Jun 23 04:49	0°♄08'53	-0.6m
evening set	14809 Jul 31 17:50	4°♄03'33			14810 Jun 23 02:23	0°♄	
	14809 Aug 04 22:29	30°♄		asc. node	14810 Jul 02 15:44	12°♄52'19	
inferior conj	14809 Aug 06 06:44	28°♄19'44	2°47'02	evening max el	14810 Jul 04 22:02	15°♄19'22	19°43'20
minimum elong	14809 Aug 06 08:36	28°♄13'49	2°46'06	retrograde	14810 Jul 12 06:56	19°♄28'29	
min. Earth dist.	14809 Aug 07 23:55	26°♄09'43	0.66344 AU	evening set	14810 Jul 16 01:49	18°♄05'21	
morning rise	14809 Aug 11 22:33	21°♄54'19		inferior conj	14810 Jul 21 09:45	12°♄08'35	3°05'00
desc. node	14809 Aug 17 14:06	19°♄17'15		minimum elong	14810 Jul 21 10:44	12°♄05'18	3°04'05
direct	14809 Aug 18 04:07	19°♄15'57		min. Earth dist.	14810 Jul 22 12:46	10°♄38'10	0.67702 AU
morning max el	14809 Aug 31 03:05	26°♄57'39	26°25'29	morning rise	14810 Jul 26 19:11	5°♄43'42	
	14809 Sep 02 23:20	0°♄		direct	14810 Aug 01 14:34	3°♄11'19	
	14809 Sep 24 09:33	0°♄		desc. node	14810 Aug 04 11:33	3°♄42'58	
morning set	14809 Oct 06 00:31	20°♄19'39		morning max el	14810 Aug 13 14:02	10°♄22'09	25°06'40
max. Earth dist.	14809 Oct 09 22:14	27°♄49'43	1.34593 AU		14810 Aug 29 04:41	0°♄	
	14809 Oct 11 00:35	0°♄			14810 Sep 17 00:54	0°♄	
asc. node	14809 Oct 11 20:48	1°♄40'58		morning set	14810 Sep 18 10:26	2°♄28'16	
				max. Earth dist.	14810 Sep 21 23:45	8°♄55'36	1.36701 AU
superior conj	14809 Oct 15 00:57	8°♄08'56	0°29'08				
minimum elong	14809 Oct 14 23:25	8°♄01'01	0°29'23	superior conj	14810 Sep 28 13:29	21°♄30'21	-0°01'31
evening rise	14809 Oct 22 12:17	23°♄49'13		minimum elong	14810 Sep 28 13:33	21°♄30'42	0°01'14
	14809 Oct 25 12:12	0°♄		behind sun begin	14810 Sep 28 07:06	20°♄58'54	
evening max el	14809 Nov 10 16:31	25°♄27'55	20°58'40	behind sun end	14810 Sep 28 20:00	22°♄02'33	
desc. node	14809 Nov 13 10:32	27°♄52'34		asc. node	14810 Sep 28 17:26	21°♄49'52	
	14809 Nov 16 21:47	0°♄			14810 Oct 02 19:12	0°♄	

evening rise	14810 Oct 06 17:38	7°♄59'57			14811 Sep 24 21:58	0°♄	
	14810 Oct 18 19:18	0°♄		evening max el	14811 Oct 06 20:47	18°♄13'43	18°48'01
evening max el	14810 Oct 23 23:50	6°♄26'13	19°42'21	retrograde	14811 Oct 15 07:38	22°♄29'09	
desc. node	14810 Oct 31 07:51	11°♄04'52		evening set	14811 Oct 17 05:08	22°♄17'06	
retrograde	14810 Nov 02 23:31	11°♄25'25		desc. node	14811 Oct 18 05:15	22°♄01'25	
evening set	14810 Nov 04 22:12	11°♄14'55		inferior conj	14811 Oct 25 09:26	17°♄55'58	-2°17'13
inferior conj	14810 Nov 13 16:20	7°♄12'28	-4°03'22	minimum elong	14811 Oct 25 03:46	18°♄06'13	2°14'18
minimum elong	14810 Nov 13 06:41	7°♄27'34	3°59'22	min. Earth dist.	14811 Oct 28 10:25	15°♄44'32	0.56804 AU
min. Earth dist.	14810 Nov 15 21:08	5°♄49'57	0.55248 AU	morning rise	14811 Nov 01 23:15	13°♄02'57	
morning rise	14810 Nov 21 13:27	2°♄55'13		direct	14811 Nov 07 20:36	11°♄39'15	
direct	14810 Nov 26 16:25	1°♄56'59		morning max el	14811 Nov 22 01:19	19°♄00'30	26°25'56
morning max el	14810 Dec 10 12:53	8°♄51'57	24°50'24		14811 Dec 01 08:05	0°♄	
asc. node	14810 Dec 25 18:03	29°♄25'32		asc. node	14811 Dec 12 15:07	18°♄21'21	
	14810 Dec 26 01:59	0°♄			14811 Dec 18 12:56	0°♄	
morning set	14811 Jan 05 11:08	20°♄25'55		morning set	14811 Dec 20 21:46	5°♄00'30	
	14811 Jan 09 20:09	0°♄					
				superior conj	14811 Dec 27 16:16	19°♄57'24	1°37'46
superior conj	14811 Jan 12 05:32	5°♄16'27	1°36'18	minimum elong	14811 Dec 27 15:59	19°♄55'50	1°38'46
minimum elong	14811 Jan 12 06:19	5°♄20'49	1°37'10	max. Earth dist.	14811 Dec 28 10:43	21°♄40'17	1.31351 AU
max. Earth dist.	14811 Jan 14 04:44	9°♄34'44	1.32142 AU		14812 Jan 01 05:27	0°♄	
evening rise	14811 Jan 19 13:44	20°♄57'13		evening rise	14812 Jan 03 15:00	5°♄07'55	
	14811 Jan 24 03:26	0°♄		desc. node	14812 Jan 14 03:54	25°♄31'31	
desc. node	14811 Jan 27 07:11	5°♄52'08			14812 Jan 16 18:49	0°♄	
	14811 Feb 11 14:09	0°♄		evening max el	14812 Feb 04 04:16	24°♄23'38	27°21'20
evening max el	14811 Feb 21 20:28	11°♄55'40	27°34'49		14812 Feb 11 17:21	0°♄	
retrograde	14811 Mar 07 17:14	19°♄23'33		retrograde	14812 Feb 18 03:59	1°♄42'54	
evening set	14811 Mar 14 13:30	17°♄01'50			14812 Feb 24 07:46	30°♄	
min. Earth dist.	14811 Mar 18 07:52	13°♄52'53	0.63024 AU	evening set	14812 Feb 24 23:08	29°♄37'47	
inferior conj	14811 Mar 21 04:30	11°♄03'13	-0°47'14	min. Earth dist.	14812 Feb 28 18:39	26°♄49'58	0.60853 AU
minimum elong	14811 Mar 21 06:03	10°♄59'22	0°46'41	inferior conj	14812 Mar 02 22:16	24°♄05'23	-2°07'34
asc. node	14811 Mar 23 15:04	8°♄44'15		minimum elong	14812 Mar 03 02:54	23°♄55'16	2°05'32
morning rise	14811 Mar 28 01:16	5°♄51'16		asc. node	14812 Mar 09 12:33	19°♄30'07	
direct	14811 Mar 30 09:39	5°♄25'01		morning rise	14812 Mar 10 09:54	19°♄11'51	
morning max el	14811 Apr 05 22:26	8°♄44'37	17°46'12	direct	14812 Mar 12 12:20	18°♄53'32	
	14811 Apr 20 03:46	0°♄		morning max el	14812 Mar 19 14:31	22°♄27'05	17°54'39
morning set	14811 Apr 22 03:38	3°♄27'07			14812 Mar 25 11:29	0°♄	
desc. node	14811 Apr 25 09:22	9°♄03'00		morning set	14812 Apr 04 04:53	16°♄50'07	
				desc. node	14812 Apr 11 05:57	29°♄32'40	
superior conj	14811 May 04 09:59	24°♄16'35	-1°07'25		14812 Apr 11 12:07	0°♄	
minimum elong	14811 May 04 03:27	23°♄49'38	1°07'18				
	14811 May 07 22:07	0°♄		superior conj	14812 Apr 14 19:29	5°♄47'48	-0°28'25
max. Earth dist.	14811 May 10 15:29	4°♄22'34	1.44539 AU	minimum elong	14812 Apr 14 16:57	5°♄36'47	0°28'30
evening rise	14811 May 19 11:41	18°♄12'33		max. Earth dist.	14812 Apr 22 05:50	18°♄20'00	1.42896 AU
	14811 May 27 06:31	0°♄		evening rise	14812 Apr 28 09:09	28°♄12'32	
evening max el	14811 Jun 17 22:34	29°♄11'01	20°47'33		14812 Apr 29 12:31	0°♄	
	14811 Jun 18 18:46	0°♄			14812 May 19 22:59	0°♄	
asc. node	14811 Jun 19 12:40	0°♄40'38		evening max el	14812 May 30 17:43	13°♄03'27	22°02'29
retrograde	14811 Jun 26 05:55	3°♄58'28		asc. node	14812 Jun 05 09:43	17°♄31'48	
evening set	14811 Jun 30 11:15	2°♄18'07		retrograde	14812 Jun 09 03:53	18°♄34'28	
	14811 Jul 02 18:42	30°♄		evening set	14812 Jun 13 20:21	16°♄37'41	
inferior conj	14811 Jul 05 17:05	26°♄09'45	3°10'25	inferior conj	14812 Jun 19 02:34	10°♄19'21	3°04'43
minimum elong	14811 Jul 05 17:04	26°♄09'47	3°09'27	minimum elong	14812 Jun 19 01:38	10°♄22'37	3°03'36
min. Earth dist.	14811 Jul 06 06:23	25°♄23'43	0.68603 AU	min. Earth dist.	14812 Jun 19 02:37	10°♄19'11	0.69021 AU
morning rise	14811 Jul 10 22:36	19°♄49'03		morning rise	14812 Jun 24 06:44	4°♄05'01	
direct	14811 Jul 16 06:14	17°♄29'25		direct	14812 Jun 29 01:53	2°♄02'52	
desc. node	14811 Jul 22 08:56	19°♄51'46		desc. node	14812 Jul 08 06:11	7°♄18'46	
morning max el	14811 Jul 27 00:37	23°♄55'04	23°38'21	morning max el	14812 Jul 08 13:15	7°♄36'21	22°09'48
	14811 Aug 01 10:32	0°♄			14812 Jul 25 22:19	0°♄	
	14811 Aug 22 14:00	0°♄		morning set	14812 Aug 10 13:41	23°♄55'07	
morning set	14811 Aug 31 00:01	13°♄42'40			14812 Aug 14 07:14	0°♄	
max. Earth dist.	14811 Sep 03 21:38	20°♄25'00	1.39065 AU	max. Earth dist.	14812 Aug 15 22:56	2°♄44'49	1.41408 AU
	14811 Sep 09 05:54	0°♄					
				superior conj	14812 Aug 23 18:12	16°♄10'11	-1°11'59
superior conj	14811 Sep 11 12:38	4°♄13'49	-0°36'06	minimum elong	14812 Aug 23 23:50	16°♄35'08	1°11'30
minimum elong	14811 Sep 11 15:15	4°♄26'05	0°35'39		14812 Aug 31 09:02	0°♄	
asc. node	14811 Sep 15 13:58	11°♄56'35		asc. node	14812 Sep 01 10:32	1°♄58'15	
evening rise	14811 Sep 20 16:21	21°♄51'31		evening rise	14812 Sep 03 05:03	5°♄15'53	

	14812 Sep 18 10:47	0°♌				14813 Aug 06 18:18	0°♍		
evening max el	14812 Sep 19 03:44	0°♌44'00	18°15'05		evening rise	14813 Aug 17 03:18	18°♍01'48		
retrograde	14812 Sep 26 11:14	4°♌27'28			asc. node	14813 Aug 19 07:08	21°♍50'50		
evening set	14812 Sep 28 14:04	4°♌09'21				14813 Aug 23 23:42	0°♌		
desc. node	14812 Oct 04 02:41	1°♌00'44			evening max el	14813 Sep 02 16:26	13°♌47'22	18°02'15	
	14812 Oct 05 08:34	30°♌♌			retrograde	14813 Sep 09 07:34	17°♌12'40		
inferior conj	14812 Oct 06 00:23	29°♌26'43	-0°36'15		evening set	14813 Sep 11 17:58	16°♌44'47		
minimum elong	14812 Oct 05 23:05	29°♌29'30	0°35'20		inferior conj	14813 Sep 18 11:19	11°♌42'14	0°46'17	
min. Earth dist.	14812 Oct 09 07:04	26°♌41'14	0.58882 AU		minimum elong	14813 Sep 18 12:40	11°♌38'54	0°45'52	
morning rise	14812 Oct 13 04:40	23°♌57'49			desc. node	14813 Sep 21 00:08	9°♌13'38		
direct	14812 Oct 19 14:19	22°♌07'30			min. Earth dist.	14813 Sep 21 13:12	8°♌42'51	0.61163 AU	
morning max el	14812 Nov 02 21:32	29°♌48'54	27°31'22		morning rise	14813 Sep 25 04:31	5°♌45'14		
	14812 Nov 03 02:04	0°♌			direct	14813 Oct 01 20:03	3°♌31'10		
	14812 Nov 24 08:34	0°♌			morning max el	14813 Oct 16 01:25	11°♌26'51	27°58'22	
asc. node	14812 Nov 28 12:04	7°♌44'19				14813 Oct 30 16:09	0°♌		
morning set	14812 Dec 04 05:16	19°♌22'26			asc. node	14813 Nov 15 08:54	27°♌27'05		
	14812 Dec 09 02:12	0°♌				14813 Nov 16 15:21	0°♌		
					morning set	14813 Nov 18 07:47	3°♌27'30		
superior conj	14812 Dec 11 03:47	4°♌36'51	1°33'17		max. Earth dist.	14813 Nov 24 01:17	15°♌45'39	1.31364 AU	
minimum elong	14812 Dec 11 02:31	4°♌29'48	1°34'13						
max. Earth dist.	14812 Dec 10 18:52	3°♌46'55	1.31087 AU		superior conj	14813 Nov 25 14:17	19°♌10'16	1°22'53	
evening rise	14812 Dec 17 21:26	19°♌29'47			minimum elong	14813 Nov 25 12:17	18°♌59'12	1°23'38	
	14812 Dec 22 23:23	0°♌				14813 Nov 30 11:23	0°♌		
desc. node	14812 Dec 31 00:42	14°♌39'54			evening rise	14813 Dec 02 07:04	3°♌58'17		
	14813 Jan 10 16:07	0°♌				14813 Dec 15 22:02	0°♌		
evening max el	14813 Jan 16 05:09	6°♌00'48	26°32'47		desc. node	14813 Dec 17 21:37	3°♌05'57		
retrograde	14813 Jan 30 04:28	13°♌09'08			evening max el	14813 Dec 28 21:23	16°♌44'47	25°12'38	
evening set	14813 Feb 05 15:23	11°♌27'20			retrograde	14814 Jan 11 17:20	23°♌41'25		
min. Earth dist.	14813 Feb 09 18:45	8°♌50'07	0.58651 AU		evening set	14814 Jan 17 10:25	22°♌27'47		
inferior conj	14813 Feb 12 22:31	6°♌27'06	-3°34'40		min. Earth dist.	14814 Jan 22 09:34	19°♌45'37	0.56661 AU	
minimum elong	14813 Feb 13 06:24	6°♌12'09	3°31'26		inferior conj	14814 Jan 25 02:14	17°♌59'37	-4°56'22	
morning rise	14813 Feb 21 00:37	1°♌54'51			minimum elong	14814 Jan 25 11:16	17°♌44'47	4°53'24	
direct	14813 Feb 23 00:36	1°♌40'55			morning rise	14814 Feb 02 14:39	13°♌49'20		
asc. node	14813 Feb 24 10:00	1°♌47'57			direct	14814 Feb 04 18:09	13°♌36'02		
morning max el	14813 Mar 03 01:10	5°♌38'48	18°22'46		asc. node	14814 Feb 11 07:23	15°♌49'30		
	14813 Mar 18 09:29	0°♌			morning max el	14814 Feb 14 02:21	18°♌08'32	19°12'27	
morning set	14813 Mar 18 19:59	0°♌49'57				14814 Feb 22 18:24	0°♌		
					morning set	14814 Mar 02 20:32	15°♌13'31		
superior conj	14813 Mar 28 02:45	18°♌18'02	0°08'07			14814 Mar 10 07:46	0°♌		
minimum elong	14813 Mar 28 03:19	18°♌20'39	0°07'49						
behind sun begin	14813 Mar 27 20:56	17°♌51'22			superior conj	14814 Mar 11 03:25	1°♌35'04	0°39'11	
behind sun end	14813 Mar 28 09:43	18°♌49'51			minimum elong	14814 Mar 11 05:38	1°♌45'47	0°38'53	
desc. node	14813 Mar 29 02:30	20°♌06'13			desc. node	14814 Mar 15 23:02	10°♌40'10		
	14813 Apr 03 16:40	0°♌			max. Earth dist.	14814 Mar 17 22:03	14°♌14'16	1.38552 AU	
max. Earth dist.	14813 Apr 04 15:43	1°♌39'01	1.40825 AU		evening rise	14814 Mar 21 15:53	20°♌51'03		
evening rise	14813 Apr 09 01:57	9°♌04'39				14814 Mar 27 02:24	0°♌		
	14813 Apr 22 12:39	0°♌				14814 Apr 16 13:21	0°♌		
evening max el	14813 May 13 08:57	26°♌56'11	23°23'10		evening max el	14814 Apr 25 22:27	10°♌49'40	24°43'20	
	14813 May 16 18:47	0°♌			retrograde	14814 May 07 15:29	17°♌40'03		
asc. node	14813 May 23 06:51	3°♌08'09			asc. node	14814 May 10 04:03	17°♌12'40		
retrograde	14813 May 23 23:27	3°♌10'16			evening set	14814 May 13 07:02	15°♌17'09		
evening set	14813 May 29 03:29	0°♌58'53			min. Earth dist.	14814 May 17 18:32	10°♌12'06	0.68402 AU	
	14813 May 30 04:22	30°♌♌			inferior conj	14814 May 18 20:12	8°♌46'41	2°22'03	
min. Earth dist.	14813 Jun 02 23:20	25°♌17'14	0.68951 AU		minimum elong	14814 May 18 18:05	8°♌53'43	2°20'37	
inferior conj	14813 Jun 03 12:14	24°♌32'48	2°48'34		morning rise	14814 May 24 05:23	2°♌48'58		
minimum elong	14813 Jun 03 10:33	24°♌38'35	2°47'17		direct	14814 May 28 00:06	1°♌27'04		
morning rise	14813 Jun 08 17:36	18°♌26'16			morning max el	14814 Jun 04 07:55	5°♌30'28	19°39'40	
direct	14813 Jun 13 00:16	16°♌44'03			desc. node	14814 Jun 12 00:22	14°♌49'14		
morning max el	14813 Jun 21 07:02	21°♌27'51	20°48'32		greatest brilliancy	14814 Jun 17 01:54	22°♌01'03	-0.6m	
desc. node	14813 Jun 25 03:19	25°♌42'57				14814 Jun 22 10:50	0°♌		
	14813 Jun 28 12:47	0°♌			morning set	14814 Jun 30 07:09	11°♌56'20		
	14813 Jul 19 03:22	0°♌				14814 Jul 11 21:48	0°♌		
morning set	14813 Jul 21 04:22	3°♌09'28			max. Earth dist.	14814 Jul 11 20:19	29°♌54'10	1.44943 AU	
max. Earth dist.	14813 Jul 29 06:41	15°♌58'25	1.43437 AU						
					superior conj	14814 Jul 16 09:57	7°♌10'13	-2°07'34	
superior conj	14813 Aug 05 01:54	27°♌09'49	-1°44'41		minimum elong	14814 Jul 16 15:25	7°♌32'09	2°08'11	
minimum elong	14813 Aug 05 09:27	27°♌41'27	1°44'34		evening rise	14814 Jul 30 05:51	29°♌55'27		

	14814 Jul 30 06:56	0° \mathbb{M}		superior conj	14815 Jun 25 23:33	16° \mathbb{Q} 28'19	-2°13'29
asc. node	14814 Aug 06 03:45	11° \mathbb{M} 29'05		minimum elong	14815 Jun 25 21:59	16° \mathbb{Q} 22'14	2°14'27
evening max el	14814 Aug 17 07:04	27° \mathbb{M} 13'28	18°08'12		14815 Jul 04 13:51	0° \mathbb{Q}	
	14814 Aug 21 02:34	0° \mathbb{L}		evening rise	14815 Jul 11 08:19	10° \mathbb{Q} 47'44	
retrograde	14814 Aug 23 15:50	0° \mathbb{L} 34'11			14815 Jul 23 11:42	0° \mathbb{M}	
evening set	14814 Aug 26 10:42	29° \mathbb{M} 53'18		asc. node	14815 Jul 24 00:27	0° \mathbb{M} 47'46	
	14814 Aug 26 04:54	30° \mathbb{R} \mathbb{M}		evening max el	14815 Jul 31 20:29	10° \mathbb{M} 54'41	18°32'00
inferior conj	14814 Sep 01 14:11	24° \mathbb{M} 33'22	1°47'49	retrograde	14815 Aug 07 08:00	14° \mathbb{M} 23'56	
minimum elong	14814 Sep 01 16:33	24° \mathbb{M} 26'53	1°46'54	evening set	14815 Aug 10 11:50	13° \mathbb{M} 27'37	
min. Earth dist.	14814 Sep 04 05:17	21° \mathbb{M} 40'28	0.63392 AU	inferior conj	14815 Aug 16 05:04	7° \mathbb{M} 52'16	2°30'09
morning rise	14814 Sep 07 20:24	18° \mathbb{M} 18'36		minimum elong	14815 Aug 16 07:18	7° \mathbb{M} 45'30	2°29'11
desc. node	14814 Sep 07 21:38	18° \mathbb{M} 16'16		min. Earth dist.	14815 Aug 18 06:35	5° \mathbb{M} 22'53	0.65377 AU
direct	14814 Sep 14 11:51	15° \mathbb{M} 47'41		morning rise	14815 Aug 22 01:36	1° \mathbb{M} 28'51	
morning max el	14814 Sep 28 10:15	23° \mathbb{M} 48'25	27°46'53		14815 Aug 24 04:52	30° \mathbb{R} \mathbb{Q}	
	14814 Oct 03 23:52	0° \mathbb{L}		desc. node	14815 Aug 25 19:08	29° \mathbb{Q} 17'21	
	14814 Oct 24 00:36	0° \mathbb{M}		direct	14815 Aug 28 12:03	28° \mathbb{Q} 50'20	
morning set	14814 Nov 02 02:58	17° \mathbb{M} 09'22			14815 Sep 02 04:01	0° \mathbb{M}	
asc. node	14814 Nov 02 05:40	17° \mathbb{M} 23'00		morning max el	14815 Sep 10 21:15	6° \mathbb{M} 43'02	27°02'29
max. Earth dist.	14814 Nov 07 02:02	27° \mathbb{M} 26'35	1.32193 AU		14815 Sep 28 20:33	0° \mathbb{L}	
	14814 Nov 08 06:41	0° \mathbb{X}			14815 Oct 16 07:33	0° \mathbb{M}	
				morning set	14815 Oct 16 12:03	0° \mathbb{M} 21'38	
superior conj	14814 Nov 09 21:46	3° \mathbb{X} 31'36	1°06'36	asc. node	14815 Oct 20 02:23	7° \mathbb{M} 27'19	
minimum elong	14814 Nov 09 19:27	3° \mathbb{X} 19'00	1°07'06	max. Earth dist.	14815 Oct 20 17:54	8° \mathbb{M} 45'45	1.33573 AU
evening rise	14814 Nov 16 17:59	18° \mathbb{X} 28'03					
	14814 Nov 22 07:36	0° \mathbb{Z}		superior conj	14815 Oct 25 00:05	17° \mathbb{M} 35'22	0°44'27
desc. node	14814 Dec 04 18:38	20° \mathbb{Z} 33'29		minimum elong	14815 Oct 24 22:03	17° \mathbb{M} 24'36	0°44'45
evening max el	14814 Dec 10 07:27	26° \mathbb{Z} 50'18	23°32'58		14815 Oct 30 19:33	0° \mathbb{X}	
	14814 Dec 14 01:51	0° \mathbb{Z}		evening rise	14815 Nov 01 04:24	2° \mathbb{X} 54'50	
retrograde	14814 Dec 23 17:16	3° \mathbb{Z} 29'40			14815 Nov 16 01:17	0° \mathbb{Z}	
evening set	14814 Dec 28 06:15	2° \mathbb{Z} 44'55		desc. node	14815 Nov 21 15:46	6° \mathbb{Z} 41'56	
	14815 Jan 03 03:34	30° \mathbb{R} \mathbb{Z}		evening max el	14815 Nov 21 19:33	6° \mathbb{Z} 51'16	21°51'31
min. Earth dist.	14815 Jan 03 18:13	29° \mathbb{Z} 38'53	0.55178 AU	retrograde	14815 Dec 04 05:53	13° \mathbb{Z} 00'20	
inferior conj	14815 Jan 05 09:33	28° \mathbb{Z} 41'14	-5°50'59	evening set	14815 Dec 07 10:39	12° \mathbb{Z} 37'26	
minimum elong	14815 Jan 05 14:14	28° \mathbb{Z} 34'22	5°49'37	inferior conj	14815 Dec 16 02:58	8° \mathbb{Z} 45'18	-5°53'45
morning rise	14815 Jan 13 23:50	24° \mathbb{Z} 48'07		minimum elong	14815 Dec 15 22:35	8° \mathbb{Z} 51'25	5°52'22
direct	14815 Jan 16 16:13	24° \mathbb{Z} 30'32		min. Earth dist.	14815 Dec 16 00:07	8° \mathbb{Z} 49'17	0.54479 AU
morning max el	14815 Jan 27 14:09	29° \mathbb{Z} 45'31	20°25'15	morning rise	14815 Dec 24 11:19	4° \mathbb{Z} 57'41	
	14815 Jan 27 20:06	0° \mathbb{Z}		direct	14815 Dec 28 01:50	4° \mathbb{Z} 29'07	
asc. node	14815 Jan 29 04:44	1° \mathbb{Z} 25'00		morning max el	14816 Jan 09 11:11	10° \mathbb{Z} 27'20	21°59'49
morning set	14815 Feb 15 03:14	29° \mathbb{Z} 50'58		asc. node	14816 Jan 16 02:03	18° \mathbb{Z} 17'26	
	14815 Feb 15 04:59	0° \mathbb{H}			14816 Jan 23 06:08	0° \mathbb{Z}	
				morning set	14816 Jan 30 13:32	14° \mathbb{Z} 35'02	
superior conj	14815 Feb 22 17:05	15° \mathbb{H} 26'21	1°03'43				
minimum elong	14815 Feb 22 19:44	15° \mathbb{H} 39'43	1°03'40	superior conj	14816 Feb 06 16:06	29° \mathbb{Z} 41'29	1°21'29
max. Earth dist.	14815 Feb 28 05:08	26° \mathbb{H} 16'48	1.36331 AU	minimum elong	14816 Feb 06 18:21	29° \mathbb{Z} 53'18	1°21'50
	14815 Mar 02 04:23	0° \mathbb{Y}			14816 Feb 06 19:38	0° \mathbb{H}	
desc. node	14815 Mar 02 19:35	1° \mathbb{Y} 10'44		max. Earth dist.	14816 Feb 10 17:55	8° \mathbb{H} 07'24	1.34378 AU
evening rise	14815 Mar 04 00:44	3° \mathbb{Y} 24'48		evening rise	14816 Feb 15 01:02	16° \mathbb{H} 36'17	
	14815 Mar 20 02:16	0° \mathbb{B}		desc. node	14816 Feb 17 16:09	21° \mathbb{H} 33'45	
evening max el	14815 Apr 08 11:59	24° \mathbb{B} 41'59	25°55'51		14816 Feb 22 09:13	0° \mathbb{Y}	
	14815 Apr 15 01:48	0° \mathbb{H}			14816 Mar 13 12:12	0° \mathbb{B}	
retrograde	14815 Apr 21 02:59	1° \mathbb{H} 57'05		evening max el	14816 Mar 21 01:52	8° \mathbb{B} 25'31	26°53'09
	14815 Apr 26 12:33	30° \mathbb{R} \mathbb{B}		retrograde	14816 Apr 03 08:43	15° \mathbb{B} 52'44	
evening set	14815 Apr 27 05:21	29° \mathbb{B} 26'57		evening set	14816 Apr 09 20:30	13° \mathbb{B} 20'45	
asc. node	14815 Apr 27 01:20	29° \mathbb{B} 35'14		asc. node	14816 Apr 12 22:43	10° \mathbb{B} 24'24	
min. Earth dist.	14815 May 01 10:07	24° \mathbb{B} 57'33	0.67397 AU	min. Earth dist.	14816 Apr 13 19:57	9° \mathbb{B} 25'20	0.65976 AU
inferior conj	14815 May 03 00:30	22° \mathbb{B} 56'53	1°44'40	inferior conj	14816 Apr 15 22:51	6° \mathbb{B} 57'14	0°55'34
minimum elong	14815 May 02 22:25	23° \mathbb{B} 03'26	1°43'16	minimum elong	14816 Apr 15 21:28	7° \mathbb{B} 01'17	0°54'32
morning rise	14815 May 08 16:10	17° \mathbb{B} 09'15		morning rise	14816 Apr 21 23:46	1° \mathbb{B} 21'29	
direct	14815 May 11 23:51	16° \mathbb{B} 06'21		direct	14816 Apr 24 21:28	0° \mathbb{B} 35'15	
morning max el	14815 May 18 16:04	19° \mathbb{B} 41'40	18°46'12	morning max el	14816 May 01 05:55	3° \mathbb{B} 54'58	18°09'21
	14815 May 26 20:56	0° \mathbb{H}		desc. node	14816 May 15 18:10	24° \mathbb{B} 25'39	
desc. node	14815 May 29 21:19	4° \mathbb{H} 26'30			14816 May 19 05:19	0° \mathbb{H}	
greatest brilliancy	14815 Jun 01 18:00	8° \mathbb{H} 47'00	-0.8m	morning set	14816 May 20 06:40	1° \mathbb{H} 42'05	
morning set	14815 Jun 09 18:37	21° \mathbb{H} 12'54					
	14815 Jun 15 10:00	0° \mathbb{Q}		superior conj	14816 Jun 04 08:32	25° \mathbb{H} 40'17	-1°59'15
max. Earth dist.	14815 Jun 24 14:24	14° \mathbb{Q} 18'46	1.45780 AU	minimum elong	14816 Jun 04 00:35	25° \mathbb{H} 09'09	1°59'43

max. Earth dist.	14816 Jun 06 10:41	28° Π 56'25	1.45876 AU	superior conj	14817 May 15 05:53	5° Π 30'22	-1°28'56
	14816 Jun 07 02:58	0° \mathfrak{D}		minimum elong	14817 May 14 21:32	4° Π 56'44	1°28'52
evening rise	14816 Jun 20 10:56	20° \mathfrak{D} 42'15		max. Earth dist.	14817 May 20 06:36	13° Π 31'08	1.45228 AU
	14816 Jun 26 11:18	0° Ω		evening rise	14817 May 30 23:08	0° \mathfrak{D} 06'50	
greatest brilliancy	14816 Jul 02 04:49	8° Ω 44'01	-0.7m		14817 May 30 21:21	0° \mathfrak{D}	
asc. node	14816 Jul 09 21:13	19° Ω 39'08			14817 Jun 20 06:45	0° Ω	
evening max el	14816 Jul 14 06:03	24° Ω 43'25	19°12'44	asc. node	14817 Jun 26 18:05	7° Ω 53'48	
retrograde	14816 Jul 21 04:45	28° Ω 34'11		evening max el	14817 Jun 27 10:02	8° Ω 34'38	20°09'01
evening set	14816 Jul 24 18:03	27° Ω 20'53		retrograde	14817 Jul 05 03:34	12° Ω 58'44	
inferior conj	14816 Jul 30 04:29	21° Ω 31'34	2°56'16	evening set	14817 Jul 09 02:55	11° Ω 28'00	
minimum elong	14816 Jul 30 06:00	21° Ω 26'38	2°55'21	inferior conj	14817 Jul 14 09:37	5° Ω 26'00	3°08'42
min. Earth dist.	14816 Jul 31 15:37	19° Ω 37'37	0.66986 AU	minimum elong	14817 Jul 14 10:10	5° Ω 24'06	3°07'47
morning rise	14816 Aug 04 17:19	15° Ω 06'05		min. Earth dist.	14817 Jul 15 06:39	4° Ω 14'26	0.68148 AU
direct	14816 Aug 10 18:58	12° Ω 29'15			14817 Jul 18 17:26	30° \mathfrak{R} \mathfrak{D}	
desc. node	14816 Aug 11 16:37	12° Ω 32'21		morning rise	14817 Jul 19 17:06	29° \mathfrak{D} 02'46	
morning max el	14816 Aug 23 08:23	19° Ω 58'55	25°53'37	direct	14817 Jul 25 07:35	26° \mathfrak{D} 35'22	
	14816 Aug 31 22:27	0° \mathfrak{M}		desc. node	14817 Jul 29 14:02	27° \mathfrak{D} 45'02	
	14816 Sep 20 23:16	0° $\underline{\mathfrak{A}}$			14817 Aug 01 23:45	0° Ω	
morning set	14816 Sep 28 07:35	12° $\underline{\mathfrak{A}}$ 56'04		morning max el	14817 Aug 05 19:05	3° Ω 27'43	24°29'43
max. Earth dist.	14816 Oct 02 00:08	19° $\underline{\mathfrak{A}}$ 51'25	1.35452 AU		14817 Aug 26 02:48	0° \mathfrak{M}	
asc. node	14816 Oct 05 23:02	27° $\underline{\mathfrak{A}}$ 35'41		morning set	14817 Sep 10 09:25	24° \mathfrak{M} 42'54	
	14816 Oct 07 03:48	0° \mathfrak{M}			14817 Sep 13 09:09	0° $\underline{\mathfrak{A}}$	
				max. Earth dist.	14817 Sep 13 23:49	1° $\underline{\mathfrak{A}}$ 06'00	1.37697 AU
superior conj	14816 Oct 07 18:34	1° \mathfrak{M} 14'44	0°16'43	superior conj	14817 Sep 21 01:55	14° $\underline{\mathfrak{A}}$ 21'16	-0°15'49
minimum elong	14816 Oct 07 17:36	1° \mathfrak{M} 09'50	0°16'58	minimum elong	14817 Sep 21 02:58	14° $\underline{\mathfrak{A}}$ 26'21	0°15'28
evening rise	14816 Oct 15 12:16	17° \mathfrak{M} 13'26		behind sun begin	14817 Sep 21 01:01	14° $\underline{\mathfrak{A}}$ 16'53	
	14816 Oct 21 22:33	0° \mathfrak{A}		behind sun end	14817 Sep 21 04:56	14° $\underline{\mathfrak{A}}$ 35'49	
evening max el	14816 Nov 02 18:35	17° \mathfrak{A} 22'48	20°23'32	asc. node	14817 Sep 22 19:38	17° $\underline{\mathfrak{A}}$ 44'10	
desc. node	14816 Nov 07 13:00	21° \mathfrak{A} 06'12			14817 Sep 28 23:42	0° \mathfrak{M}	
retrograde	14816 Nov 13 16:48	22° \mathfrak{A} 49'00		evening rise	14817 Sep 29 15:12	1° \mathfrak{M} 17'23	
evening set	14816 Nov 15 22:13	22° \mathfrak{A} 36'30		evening max el	14817 Oct 16 07:55	28° \mathfrak{M} 41'55	19°16'24
inferior conj	14816 Nov 24 19:33	18° \mathfrak{A} 41'06	-4°56'32		14817 Oct 17 17:31	0° \mathfrak{A}	
minimum elong	14816 Nov 24 09:37	18° \mathfrak{A} 55'39	4°53'05	desc. node	14817 Oct 25 10:19	3° \mathfrak{A} 21'45	
min. Earth dist.	14816 Nov 26 06:21	17° \mathfrak{A} 50'09	0.54707 AU	retrograde	14817 Oct 25 15:05	3° \mathfrak{A} 21'52	
morning rise	14816 Dec 02 20:34	14° \mathfrak{A} 40'34		evening set	14817 Oct 27 12:03	3° \mathfrak{A} 11'18	
direct	14816 Dec 07 11:09	13° \mathfrak{A} 54'51			14817 Nov 03 13:16	30° \mathfrak{R} \mathfrak{M}	
morning max el	14816 Dec 20 22:00	20° \mathfrak{A} 30'24	23°48'09	inferior conj	14817 Nov 05 01:12	29° \mathfrak{M} 01'11	-3°19'05
	14816 Dec 28 22:19	0° \mathfrak{Z}		minimum elong	14817 Nov 04 16:56	29° \mathfrak{M} 14'54	3°15'18
asc. node	14817 Jan 01 23:18	6° \mathfrak{Z} 09'24		min. Earth dist.	14817 Nov 07 16:14	27° \mathfrak{M} 16'51	0.55826 AU
morning set	14817 Jan 14 01:27	29° \mathfrak{Z} 20'11		morning rise	14817 Nov 12 19:26	24° \mathfrak{M} 29'28	
	14817 Jan 14 08:53	0° \approx		direct	14817 Nov 18 06:39	23° \mathfrak{M} 21'13	
					14817 Dec 01 20:00	0° \mathfrak{A}	
superior conj	14817 Jan 20 21:34	14° \approx 12'35	1°32'42	morning max el	14817 Dec 02 07:48	0° \mathfrak{A} 27'43	25°33'56
minimum elong	14817 Jan 20 22:57	14° \approx 20'08	1°33'25	asc. node	14817 Dec 19 20:27	24° \mathfrak{A} 45'20	
max. Earth dist.	14817 Jan 23 14:34	20° \approx 02'16	1.32825 AU		14817 Dec 22 16:27	0° \mathfrak{Z}	
	14817 Jan 28 09:59	0° \mathfrak{H}		morning set	14817 Dec 29 13:02	14° \mathfrak{Z} 00'05	
evening rise	14817 Jan 28 13:22	0° \mathfrak{H} 16'56					
desc. node	14817 Feb 03 12:45	11° \mathfrak{H} 44'49		superior conj	14818 Jan 05 06:58	28° \mathfrak{Z} 51'35	1°37'40
	14817 Feb 14 09:56	0° \mathfrak{Y}		minimum elong	14818 Jan 05 07:18	28° \mathfrak{Z} 53'27	1°38'36
evening max el	14817 Mar 03 15:00	21° \mathfrak{Y} 49'32	27°27'44		14818 Jan 05 19:20	0° \approx	
retrograde	14817 Mar 17 07:48	29° \mathfrak{Y} 18'45		max. Earth dist.	14818 Jan 06 17:54	2° \approx 04'31	1.31743 AU
evening set	14817 Mar 24 02:17	26° \mathfrak{Y} 51'09		evening rise	14818 Jan 12 10:37	14° \approx 18'09	
min. Earth dist.	14817 Mar 27 21:53	23° \mathfrak{Y} 26'49	0.64193 AU		14818 Jan 20 11:47	0° \mathfrak{H}	
inferior conj	14817 Mar 30 12:37	20° \mathfrak{Y} 41'28	-0°06'00	desc. node	14818 Jan 21 09:24	1° \mathfrak{H} 37'31	
minimum elong	14817 Mar 30 12:48	20° \mathfrak{Y} 40'58	0°06'11		14818 Feb 09 14:39	0° \mathfrak{Y}	
transit middle	14817 Mar 30 12:48	20° \mathfrak{Y} 40'58	0°06'11	evening max el	14818 Feb 14 01:11	4° \mathfrak{Y} 40'14	27°33'11
transit begin	14817 Mar 30 09:56	20° \mathfrak{Y} 48'33		retrograde	14818 Feb 27 23:18	12° \mathfrak{Y} 04'53	
transit end	14817 Mar 30 15:40	20° \mathfrak{Y} 33'23		evening set	14818 Mar 06 20:06	9° \mathfrak{Y} 49'00	
asc. node	14817 Mar 30 20:08	20° \mathfrak{Y} 21'36		min. Earth dist.	14818 Mar 10 14:17	6° \mathfrak{Y} 50'26	0.62122 AU
morning rise	14817 Apr 06 01:28	15° \mathfrak{Y} 20'02		inferior conj	14818 Mar 13 14:38	4° \mathfrak{Y} 00'52	-1°20'04
direct	14817 Apr 08 14:23	14° \mathfrak{Y} 47'22		minimum elong	14818 Mar 13 17:24	3° \mathfrak{Y} 54'21	1°18'54
morning max el	14817 Apr 14 23:06	18° \mathfrak{Y} 03'29	17°49'38	asc. node	14818 Mar 17 17:36	0° \mathfrak{Y} 30'55	
	14817 Apr 23 19:02	0° \mathfrak{B}			14818 Mar 18 12:28	30° \mathfrak{R} \mathfrak{H}	
morning set	14817 May 01 22:20	13° \mathfrak{B} 30'47		morning rise	14818 Mar 20 17:38	28° \mathfrak{H} 56'38	
desc. node	14817 May 02 14:55	14° \mathfrak{B} 40'35		direct	14818 Mar 22 23:15	28° \mathfrak{H} 34'11	
	14817 May 11 20:20	0° Π			14818 Mar 27 06:55	0° \mathfrak{Y}	

morning max el	14818 Mar 29 16:34	1° Υ 58'02	17°47'34	desc. node	14819 Apr 06 08:07	25° Υ 37'17	
morning set	14818 Apr 14 13:01	26° Υ 23'54					
	14818 Apr 16 13:55	0° \mathcal{B}		superior conj	14819 Apr 07 20:47	28° Υ 20'48	-0°12'23
desc. node	14818 Apr 19 11:33	5° \mathcal{B} 05'48		minimum elong	14819 Apr 07 19:44	28° Υ 16'10	0°12'35
				behind sun begin	14819 Apr 07 14:54	27° Υ 54'41	
superior conj	14818 Apr 26 01:36	16° \mathcal{B} 23'26	-0°50'51	behind sun end	14819 Apr 08 00:35	28° Υ 37'37	
minimum elong	14818 Apr 25 20:46	16° \mathcal{B} 03'06	0°50'47		14819 Apr 08 19:14	0° \mathcal{B}	
max. Earth dist.	14818 May 02 23:12	27° \mathcal{B} 45'07	1.43901 AU	max. Earth dist.	14819 Apr 15 11:00	11° \mathcal{B} 24'35	1.42047 AU
	14818 May 04 08:48	0° Π		evening rise	14819 Apr 20 17:49	20° \mathcal{B} 02'56	
evening rise	14818 May 10 12:51	9° Π 42'41			14819 Apr 27 02:13	0° Π	
	14818 May 24 01:16	0° \mathcal{C}			14819 May 18 10:30	0° \mathcal{C}	
evening max el	14818 Jun 10 07:58	22° \mathcal{C} 25'53	21°18'22	evening max el	14819 May 24 01:03	6° \mathcal{C} 17'32	22°36'34
asc. node	14818 Jun 13 15:02	25° \mathcal{C} 19'34		asc. node	14819 May 31 12:05	11° \mathcal{C} 40'43	
retrograde	14818 Jun 19 02:25	27° \mathcal{C} 31'59		retrograde	14819 Jun 02 23:36	12° \mathcal{C} 08'03	
evening set	14818 Jun 23 12:25	25° \mathcal{C} 44'20		evening set	14819 Jun 07 20:51	10° \mathcal{C} 04'54	
inferior conj	14818 Jun 28 18:06	19° \mathcal{C} 31'14	3°09'19	inferior conj	14819 Jun 13 03:53	3° \mathcal{C} 42'46	2°59'09
minimum elong	14818 Jun 28 17:41	19° \mathcal{C} 32'42	3°08'18	minimum elong	14819 Jun 13 02:36	3° \mathcal{C} 47'14	2°57'58
min. Earth dist.	14818 Jun 29 01:38	19° \mathcal{C} 04'58	0.68832 AU	min. Earth dist.	14819 Jun 12 22:25	4° \mathcal{C} 01'46	0.69039 AU
morning rise	14818 Jul 03 22:43	13° \mathcal{C} 13'00			14819 Jun 15 22:51	30° \mathcal{R} Π	
direct	14818 Jul 09 00:56	11° \mathcal{C} 00'36		morning rise	14819 Jun 18 08:12	27° Π 31'22	
desc. node	14818 Jul 16 11:22	14° \mathcal{C} 29'51		direct	14819 Jun 22 21:56	25° Π 37'31	
morning max el	14818 Jul 19 06:24	17° \mathcal{C} 04'51	23°00'21		14819 Jul 01 00:19	0° \mathcal{C}	
	14818 Jul 29 23:19	0° \mathcal{Q}		morning max el	14819 Jul 01 20:49	0° \mathcal{C} 49'45	21°34'00
	14818 Aug 19 03:40	0° \mathcal{P}		desc. node	14819 Jul 03 08:34	2° \mathcal{C} 22'59	
morning set	14818 Aug 22 13:15	5° \mathcal{P} 32'34			14819 Jul 23 17:48	0° \mathcal{Q}	
max. Earth dist.	14818 Aug 26 22:37	12° \mathcal{P} 55'44	1.40075 AU	morning set	14819 Aug 02 16:31	15° \mathcal{Q} 18'20	
				max. Earth dist.	14819 Aug 09 01:51	25° \mathcal{Q} 36'19	1.42314 AU
superior conj	14818 Sep 03 18:10	26° \mathcal{P} 46'14	-0°51'21		14819 Aug 11 17:28	0° \mathcal{P}	
minimum elong	14818 Sep 03 22:04	27° \mathcal{P} 04'05	0°50'52				
	14818 Sep 05 12:15	0° \mathcal{L}		superior conj	14819 Aug 16 14:51	8° \mathcal{P} 19'04	-1°26'35
asc. node	14818 Sep 09 16:12	7° \mathcal{L} 49'33		minimum elong	14819 Aug 16 21:34	8° \mathcal{P} 48'09	1°26'12
evening rise	14818 Sep 13 10:12	14° \mathcal{L} 59'19		evening rise	14819 Aug 27 17:19	28° \mathcal{P} 08'26	
	14818 Sep 21 14:08	0° \mathcal{M}		asc. node	14819 Aug 27 12:44	27° \mathcal{P} 47'32	
evening max el	14818 Sep 29 09:39	10° \mathcal{M} 49'12	18°31'26		14819 Aug 28 17:50	0° \mathcal{L}	
retrograde	14818 Oct 07 07:48	14° \mathcal{M} 49'44		evening max el	14819 Sep 12 19:36	23° \mathcal{L} 35'02	18°07'20
evening set	14818 Oct 09 06:53	14° \mathcal{M} 35'45		retrograde	14819 Sep 19 18:51	27° \mathcal{L} 08'52	
desc. node	14818 Oct 12 07:43	13° \mathcal{M} 24'13		evening set	14819 Sep 22 00:43	26° \mathcal{L} 47'05	
inferior conj	14818 Oct 17 03:42	10° \mathcal{M} 05'34	-1°32'43	inferior conj	14819 Sep 29 03:35	21° \mathcal{L} 56'03	0°01'15
minimum elong	14818 Oct 17 00:02	10° \mathcal{M} 12'43	1°30'40	minimum elong	14819 Sep 29 03:38	21° \mathcal{L} 55'56	0°01'30
min. Earth dist.	14818 Oct 20 08:41	7° \mathcal{M} 37'13	0.57639 AU	transit middle	14819 Sep 29 03:38	21° \mathcal{L} 55'56	0°01'30
morning rise	14818 Oct 24 13:41	4° \mathcal{M} 56'18		transit begin	14819 Sep 29 00:17	22° \mathcal{L} 03'29	
direct	14818 Oct 30 16:52	3° \mathcal{M} 21'10		transit end	14819 Sep 29 06:58	21° \mathcal{L} 48'23	
morning max el	14818 Nov 13 23:37	10° \mathcal{M} 52'30	26°58'05	desc. node	14819 Sep 29 05:11	21° \mathcal{L} 52'27	
	14818 Nov 28 18:16	0° \mathcal{X}		min. Earth dist.	14819 Oct 02 09:24	19° \mathcal{L} 01'48	0.59845 AU
asc. node	14818 Dec 06 17:29	13° \mathcal{X} 53'57		morning rise	14819 Oct 06 03:15	16° \mathcal{L} 14'02	
morning set	14818 Dec 13 22:34	28° \mathcal{X} 30'09		direct	14819 Oct 12 16:21	14° \mathcal{L} 12'34	
	14818 Dec 14 15:17	0° \mathcal{Z}		morning max el	14819 Oct 26 23:11	22° \mathcal{L} 01'24	27°47'33
					14819 Nov 02 23:57	0° \mathcal{M}	
superior conj	14818 Dec 20 18:17	13° \mathcal{Z} 32'49	1°36'35		14819 Nov 21 19:50	0° \mathcal{X}	
minimum elong	14818 Dec 20 17:34	13° \mathcal{Z} 28'49	1°37'34	asc. node	14819 Nov 23 14:24	3° \mathcal{X} 25'59	
max. Earth dist.	14818 Dec 21 01:06	14° \mathcal{Z} 10'59	1.31173 AU	morning set	14819 Nov 28 04:13	12° \mathcal{X} 45'28	
evening rise	14818 Dec 27 14:20	28° \mathcal{Z} 34'07		max. Earth dist.	14819 Dec 04 08:48	26° \mathcal{X} 14'28	1.31137 AU
	14818 Dec 28 06:33	0° \approx					
desc. node	14819 Jan 08 06:08	21° \approx 04'42		superior conj	14819 Dec 05 05:37	28° \mathcal{X} 10'35	1°29'36
	14819 Jan 13 18:38	0° \mathcal{H}		minimum elong	14819 Dec 05 04:01	28° \mathcal{X} 01'35	1°30'28
evening max el	14819 Jan 27 06:04	16° \mathcal{H} 46'30	27°04'46		14819 Dec 06 01:13	0° \mathcal{Z}	
retrograde	14819 Feb 10 06:11	24° \mathcal{H} 02'09		evening rise	14819 Dec 11 22:22	12° \mathcal{Z} 59'29	
evening set	14819 Feb 16 22:48	22° \mathcal{H} 05'58			14819 Dec 20 08:59	0° \approx	
min. Earth dist.	14819 Feb 20 20:25	19° \mathcal{H} 24'15	0.59906 AU	desc. node	14819 Dec 26 02:59	9° \approx 56'41	
inferior conj	14819 Feb 24 01:19	16° \mathcal{H} 46'29	-2°44'16	evening max el	14820 Jan 09 03:29	28° \approx 01'23	26°02'05
minimum elong	14819 Feb 24 07:24	16° \mathcal{H} 33'57	2°41'37		14820 Jan 11 09:03	0° \mathcal{H}	
morning rise	14819 Mar 03 19:24	12° \mathcal{H} 02'05		retrograde	14820 Jan 23 02:18	5° \mathcal{H} 05'06	
asc. node	14819 Mar 04 15:04	11° \mathcal{H} 51'54		evening set	14820 Jan 29 06:34	3° \mathcal{H} 35'11	
direct	14819 Mar 05 20:07	11° \mathcal{H} 46'11		min. Earth dist.	14820 Feb 02 16:41	0° \mathcal{H} 57'40	0.57758 AU
morning max el	14819 Mar 13 06:51	15° \mathcal{H} 28'52	18°04'07		14820 Feb 04 01:29	30° \mathcal{R} \approx	
	14819 Mar 23 08:16	0° \mathcal{Y}		inferior conj	14820 Feb 05 17:10	28° \approx 48'46	-4°11'05
morning set	14819 Mar 28 20:42	10° \mathcal{Y} 03'44		minimum elong	14820 Feb 06 02:00	28° \approx 33'01	4°07'44

morning rise	14820 Feb 14 00:26	24° \approx 25'45		morning rise	14821 Jan 25 02:20	5° \approx 57'09	
direct	14820 Feb 16 00:47	24° \approx 12'39		direct	14821 Jan 27 10:13	5° \approx 42'37	
asc. node	14820 Feb 19 12:30	24° \approx 54'08		asc. node	14821 Feb 05 09:55	9° \approx 37'22	
morning max el	14820 Feb 24 14:02	28° \approx 24'37	18°41'06	morning max el	14821 Feb 06 09:50	10° \approx 32'33	19°40'31
	14820 Feb 26 02:05	0° H			14821 Feb 19 09:11	0° H	
morning set	14820 Mar 11 16:21	24° H 15'29		morning set	14821 Feb 23 19:56	8° H 46'24	
	14820 Mar 14 15:16	0° Y					
superior conj	14820 Mar 20 12:03	11° Y 12'46	0°22'03	superior conj	14821 Mar 03 18:47	24° H 45'44	0°50'24
minimum elong	14820 Mar 20 13:30	11° Y 19'32	0°21'42	minimum elong	14821 Mar 03 21:18	24° H 58'10	0°50'12
desc. node	14820 Mar 23 04:39	16° Y 11'36			14821 Mar 06 11:22	0° Y	
max. Earth dist.	14820 Mar 27 18:55	24° Y 24'22	1.39868 AU	max. Earth dist.	14821 Mar 10 01:29	6° Y 45'43	1.37594 AU
	14820 Mar 31 00:58	0° B		desc. node	14821 Mar 10 01:12	6° Y 44'25	
evening rise	14820 Mar 31 19:51	1° B 19'37		evening rise	14821 Mar 13 18:18	13° Y 27'30	
	14820 Apr 19 09:48	0° II			14821 Mar 23 15:17	0° B	
evening max el	14820 May 05 15:28	20° II 11'28	23°57'51	evening max el	14821 Apr 14 08:34	0° II	
retrograde	14820 May 16 17:46	26° II 41'58		retrograde	14821 Apr 18 05:02	4° II 05'29	25°15'31
asc. node	14820 May 17 09:14	26° II 40'08		asc. node	14821 Apr 30 07:48	11° II 07'00	
evening set	14820 May 22 02:38	24° II 25'31		evening set	14821 May 04 06:29	10° II 01'37	
min. Earth dist.	14820 May 26 18:49	18° II 59'19	0.68773 AU	min. Earth dist.	14821 May 06 04:09	8° II 40'31	
inferior conj	14820 May 27 13:04	17° II 57'13	2°38'37	inferior conj	14821 May 10 12:41	3° II 50'52	0.68038 AU
minimum elong	14820 May 27 11:10	18° II 03'43	2°37'16	minimum elong	14821 May 11 19:44	2° II 09'50	2°07'34
morning rise	14820 Jun 01 19:42	11° II 54'05			14821 May 11 17:34	2° II 16'54	2°06'08
direct	14820 Jun 05 21:17	10° II 20'20		morning rise	14821 May 13 12:33	30° R B	
morning max el	14820 Jun 13 17:21	14° II 45'33	20°17'27	direct	14821 May 17 07:21	26° B 16'17	
desc. node	14820 Jun 19 05:41	21° II 06'36		morning max el	14821 May 20 21:22	25° B 02'32	
	14820 Jun 25 18:16	0° B			14821 May 27 21:23	28° B 51'56	19°14'55
morning set	14820 Jul 11 23:56	24° B 14'21		desc. node	14821 May 28 23:57	0° II	
	14820 Jul 15 17:05	0° O		greatest brilliancy	14821 Jun 06 02:42	10° II 26'53	
max. Earth dist.	14820 Jul 21 12:09	9° O 08'53	1.44156 AU		14821 Jun 09 16:16	15° II 39'09	-0.7m
					14821 Jun 19 03:17	0° B	
superior conj	14820 Jul 27 12:25	18° O 52'58	-1°56'02	morning set	14821 Jun 21 03:49	3° B 06'33	
minimum elong	14820 Jul 27 19:44	19° O 23'00	1°56'12	max. Earth dist.	14821 Jun 21 03:49	3° B 06'33	
	14820 Aug 03 04:14	0° H			14821 Jul 04 04:26	23° B 20'18	1.45393 AU
evening rise	14820 Aug 09 07:46	10° H 32'56		superior conj	14821 Jul 07 11:24	28° B 31'27	-2°12'29
asc. node	14820 Aug 13 09:19	17° H 34'11		minimum elong	14821 Jul 07 14:19	28° B 43'00	2°13'20
	14820 Aug 21 00:04	0° B			14821 Jul 08 09:45	0° O	
evening max el	14820 Aug 26 09:36	6° B 49'05	18°02'37	evening rise	14821 Jul 22 00:26	22° O 00'54	
retrograde	14820 Sep 01 20:40	10° B 10'24			14821 Jul 26 20:57	0° H	
evening set	14820 Sep 04 10:44	9° B 37'11		asc. node	14821 Jul 31 05:58	7° H 04'35	
inferior conj	14820 Sep 10 21:45	4° B 26'59	1°14'52	evening max el	14821 Aug 10 00:04	20° H 22'10	18°16'12
minimum elong	14820 Sep 10 23:42	4° B 21'56	1°14'10	retrograde	14821 Aug 16 08:51	23° H 44'54	
min. Earth dist.	14820 Sep 13 19:34	1° B 28'10	0.62137 AU	evening set	14821 Aug 19 07:31	22° H 57'33	
desc. node	14820 Sep 15 02:40	0° B 14'26		inferior conj	14821 Aug 25 06:11	17° H 30'32	2°07'57
	14820 Sep 15 09:06	30° R H		minimum elong	14821 Aug 25 08:35	17° H 23'37	2°06'59
morning rise	14820 Sep 17 10:13	28° H 21'31		min. Earth dist.	14821 Aug 27 15:33	14° H 46'12	0.64273 AU
direct	14820 Sep 24 02:36	25° H 59'15		morning rise	14821 Aug 31 08:04	11° H 11'14	
	14820 Oct 03 17:45	0° B		desc. node	14821 Sep 02 00:10	10° H 01'45	
morning max el	14820 Oct 08 05:16	3° B 57'36	27°57'55	direct	14821 Sep 06 21:51	8° H 36'16	
	14820 Oct 27 15:54	0° M		morning max el	14821 Sep 20 15:24	16° H 34'40	27°31'45
asc. node	14820 Nov 09 11:13	23° M 14'40			14821 Oct 01 18:37	0° B	
morning set	14820 Nov 11 03:54	26° M 40'54			14821 Oct 20 11:01	0° M	
	14820 Nov 12 18:19	0° A		morning set	14821 Oct 25 19:13	10° M 11'13	
max. Earth dist.	14820 Nov 16 13:16	8° A 06'13	1.31651 AU	asc. node	14821 Oct 27 07:57	13° M 14'42	
				max. Earth dist.	14821 Oct 30 10:52	19° M 39'33	1.32714 AU
superior conj	14820 Nov 18 15:06	12° A 39'25	1°16'43	superior conj	14821 Nov 02 20:43	26° M 54'09	0°57'56
minimum elong	14820 Nov 18 12:55	12° A 27'21	1°17'21	minimum elong	14821 Nov 02 18:26	26° M 41'52	0°58'20
evening rise	14820 Nov 25 08:48	27° A 29'08			14821 Nov 04 07:08	0° A	
	14820 Nov 26 12:55	0° B		evening rise	14821 Nov 09 19:47	11° A 58'43	
desc. node	14820 Dec 11 23:56	27° B 59'52			14821 Nov 18 20:59	0° B	
	14820 Dec 13 10:18	0° \approx		desc. node	14821 Nov 28 21:01	14° B 56'55	
evening max el	14820 Dec 20 16:45	8° \approx 26'53	24°31'43	evening max el	14821 Dec 02 02:24	18° B 25'38	22°49'00
retrograde	14821 Jan 03 09:18	15° \approx 16'20		retrograde	14821 Dec 15 03:43	24° B 54'03	
evening set	14821 Jan 08 15:39	14° \approx 15'27		evening set	14821 Dec 19 03:10	24° B 19'35	
min. Earth dist.	14821 Jan 14 04:31	11° \approx 25'37	0.55953 AU	min. Earth dist.	14821 Dec 26 11:14	20° B 57'58	0.54776 AU
inferior conj	14821 Jan 16 11:59	9° \approx 59'30	-5°24'23	inferior conj	14821 Dec 27 12:12	20° B 22'32	-5°59'35
minimum elong	14821 Jan 16 19:59	9° \approx 47'03	5°22'03	minimum elong	14821 Dec 27 13:14	20° B 21'03	5°58'35

morning rise	14822 Jan 05 00:40	16° ♁ 34'06		min. Earth dist.	14822 Dec 07 16:55	29° ♁ 59'10	0.54454 AU
direct	14822 Jan 08 01:47	16° ♁ 12'41			14822 Dec 07 16:20	30° ♁ 57'	
morning max el	14822 Jan 19 15:17	21° ♁ 45'39	21°03'04	morning rise	14822 Dec 15 08:28	26° ♁ 27'38	
asc. node	14822 Jan 23 07:17	25° ♁ 47'52		direct	14822 Dec 19 09:04	25° ♁ 52'43	
	14822 Jan 26 09:35	0° ♁			14822 Dec 29 19:57	0° ♁	
morning set	14822 Feb 08 04:30	23° ♁ 27'49		morning max el	14823 Jan 01 07:13	2° ♁ 07'57	22°45'03
	14822 Feb 11 07:27	0° ♁		asc. node	14823 Jan 10 04:34	13° ♁ 07'05	
					14823 Jan 19 16:37	0° ♁	
superior conj	14822 Feb 15 12:53	8° ♁ 48'34	1°12'02	morning set	14823 Jan 23 15:42	8° ♁ 12'37	
minimum elong	14822 Feb 15 15:27	9° ♁ 01'42	1°12'10				
max. Earth dist.	14822 Feb 20 10:45	18° ♁ 41'42	1.35462 AU	superior conj	14823 Jan 30 14:59	23° ♁ 11'17	1°27'00
evening rise	14822 Feb 24 10:10	26° ♁ 18'15		minimum elong	14823 Jan 30 16:54	23° ♁ 21'33	1°27'31
desc. node	14822 Feb 24 21:45	27° ♁ 12'08			14823 Feb 02 20:31	0° ♁	
	14822 Feb 26 10:19	0° ♁		max. Earth dist.	14823 Feb 03 02:32	0° ♁ 31'16	1.33659 AU
	14822 Mar 17 01:38	0° ♁		evening rise	14823 Feb 07 15:57	9° ♁ 42'40	
evening max el	14822 Mar 31 18:40	17° ♁ 54'33	26°22'21	desc. node	14823 Feb 11 18:20	17° ♁ 30'22	
retrograde	14822 Apr 13 16:53	25° ♁ 16'01			14823 Feb 18 21:39	0° ♁	
evening set	14822 Apr 19 23:40	22° ♁ 44'06			14823 Mar 12 19:59	0° ♁	
asc. node	14822 Apr 21 03:50	21° ♁ 41'28		evening max el	14823 Mar 14 08:12	1° ♁ 30'24	27°10'58
min. Earth dist.	14822 Apr 24 01:56	18° ♁ 29'43	0.66851 AU	retrograde	14823 Mar 27 20:08	9° ♁ 00'26	
inferior conj	14822 Apr 25 21:47	16° ♁ 16'06	1°25'19	evening set	14823 Apr 03 11:11	6° ♁ 29'10	
minimum elong	14822 Apr 25 19:54	16° ♁ 21'50	1°24'02	min. Earth dist.	14823 Apr 07 08:39	2° ♁ 47'33	0.65257 AU
morning rise	14822 May 01 17:06	10° ♁ 33'34		asc. node	14823 Apr 08 01:15	2° ♁ 01'48	
direct	14822 May 04 20:25	9° ♁ 38'08		inferior conj	14823 Apr 09 16:51	0° ♁ 10'21	0°31'02
morning max el	14822 May 11 08:17	13° ♁ 04'59	18°28'27	minimum elong	14823 Apr 09 16:00	0° ♁ 12'43	0°30'17
desc. node	14822 May 23 23:38	0° ♁			14823 Apr 09 20:32	30° ♁ 00'36	
	14822 May 23 20:00	0° ♁		morning rise	14823 Apr 15 22:33	24° ♁ 40'36	
morning set	14822 Jun 01 00:31	12° ♁ 50'34		direct	14823 Apr 18 16:15	24° ♁ 00'42	
	14822 Jun 11 22:48	0° ♁		morning max el	14823 Apr 24 23:58	27° ♁ 17'40	17°58'50
					14823 Apr 27 10:58	0° ♁	
superior conj	14822 Jun 16 20:50	7° ♁ 40'34	-2°09'49	desc. node	14823 May 10 20:26	20° ♁ 20'31	
minimum elong	14822 Jun 16 16:00	7° ♁ 21'46	2°10'40	morning set	14823 May 13 00:36	23° ♁ 54'27	
max. Earth dist.	14822 Jun 16 24:00	7° ♁ 52'55	1.45914 AU		14823 May 16 17:58	0° ♁	
	14822 Jul 01 03:03	0° ♁					
evening rise	14822 Jul 02 16:16	2° ♁ 26'39		superior conj	14823 May 27 09:23	17° ♁ 04'57	-1°47'55
greatest brilliancy	14822 Jul 11 11:06	16° ♁ 14'41	-0.8m	minimum elong	14823 May 27 00:32	16° ♁ 29'56	1°48'05
asc. node	14822 Jul 18 02:41	26° ♁ 12'13		max. Earth dist.	14823 May 30 20:01	22° ♁ 29'53	1.45684 AU
	14822 Jul 20 22:07	0° ♁			14823 Jun 04 15:32	0° ♁	
evening max el	14822 Jul 24 12:00	4° ♁ 06'21	18°47'18	evening rise	14823 Jun 12 11:05	12° ♁ 03'47	
retrograde	14822 Jul 31 03:24	7° ♁ 43'36			14823 Jun 24 06:24	0° ♁	
evening set	14822 Aug 03 11:08	6° ♁ 40'13		greatest brilliancy	14823 Jun 26 02:11	2° ♁ 41'49	-0.7m
inferior conj	14822 Aug 09 01:03	0° ♁ 58'33	2°43'06	asc. node	14823 Jul 04 23:30	14° ♁ 49'31	
minimum elong	14822 Aug 09 03:02	0° ♁ 52'21	2°42'07	evening max el	14823 Jul 07 19:18	17° ♁ 56'34	19°34'53
	14822 Aug 09 19:42	30° ♁		retrograde	14823 Jul 15 01:21	22° ♁ 00'33	
min. Earth dist.	14822 Aug 10 20:25	28° ♁ 43'06	0.66105 AU	evening set	14823 Jul 18 18:44	20° ♁ 40'04	
morning rise	14822 Aug 14 18:01	24° ♁ 33'20		inferior conj	14823 Jul 24 03:14	14° ♁ 45'14	3°03'04
desc. node	14822 Aug 19 21:41	21° ♁ 59'29		minimum elong	14823 Jul 24 04:22	14° ♁ 41'29	3°02'10
direct	14822 Aug 21 00:54	21° ♁ 54'39		min. Earth dist.	14823 Jul 25 08:23	13° ♁ 08'26	0.67535 AU
morning max el	14822 Sep 03 02:53	29° ♁ 40'02	26°35'45	morning rise	14823 Jul 29 13:29	8° ♁ 20'02	
	14822 Sep 03 10:43	0° ♁		direct	14823 Aug 04 10:34	5° ♁ 46'09	
	14822 Sep 25 16:13	0° ♁		desc. node	14823 Aug 06 19:07	6° ♁ 07'25	
morning set	14822 Oct 08 22:58	23° ♁ 08'03		morning max el	14823 Aug 16 13:49	13° ♁ 02'24	25°19'06
	14822 Oct 12 12:18	0° ♁			14823 Aug 30 07:16	0° ♁	
max. Earth dist.	14822 Oct 12 22:41	0° ♁ 51'21	1.34310 AU		14823 Sep 18 10:16	0° ♁	
asc. node	14822 Oct 14 04:37	3° ♁ 20'41		morning set	14823 Sep 21 11:29	5° ♁ 23'16	
				max. Earth dist.	14823 Sep 25 01:03	11° ♁ 54'59	1.36370 AU
superior conj	14822 Oct 17 20:00	10° ♁ 47'35	0°33'21				
minimum elong	14822 Oct 17 18:18	10° ♁ 38'46	0°33'36	superior conj	14823 Oct 01 10:08	24° ♁ 13'26	0°03'26
evening rise	14822 Oct 25 05:21	26° ♁ 22'01		minimum elong	14823 Oct 01 09:55	24° ♁ 12'19	0°03'43
	14822 Oct 26 23:11	0° ♁		behind sun begin	14823 Oct 01 03:41	23° ♁ 41'24	
evening max el	14822 Nov 13 18:05	28° ♁ 34'50	21°11'52	behind sun end	14823 Oct 01 16:08	24° ♁ 43'18	
	14822 Nov 15 06:51	0° ♁		asc. node	14823 Oct 01 01:14	23° ♁ 29'13	
desc. node	14822 Nov 15 18:12	0° ♁ 23'57			14823 Oct 04 07:07	0° ♁	
retrograde	14822 Nov 25 14:33	4° ♁ 27'37		evening rise	14823 Oct 09 11:23	10° ♁ 34'25	
evening set	14822 Nov 28 07:26	4° ♁ 10'32			14823 Oct 19 19:32	0° ♁	
inferior conj	14822 Dec 07 03:22	0° ♁ 18'20	-5°36'17	evening max el	14823 Oct 26 23:11	9° ♁ 25'19	19°52'19
minimum elong	14822 Dec 06 19:44	0° ♁ 29'06	5°34'03	desc. node	14823 Nov 02 15:27	13° ♁ 55'12	

retrograde	14823 Nov 06 04:39	14°♊31'18		desc. node	14824 Oct 19 12:46	25°♍12'33	
evening set	14823 Nov 08 04:36	14°♊20'31		inferior conj	14824 Oct 27 13:57	20°♍57'19	-2°33'23
inferior conj	14823 Nov 16 23:59	10°♊20'22	-4°18'12	minimum elong	14824 Oct 27 07:34	21°♍08'36	2°30'12
minimum elong	14823 Nov 16 14:03	10°♊35'36	4°14'15	min. Earth dist.	14824 Oct 30 12:50	18°♍52'32	0.56533 AU
min. Earth dist.	14823 Nov 19 00:39	9°♊05'47	0.55080 AU	morning rise	14824 Nov 04 04:59	16°♍10'01	
morning rise	14823 Nov 24 22:05	6°♊07'53		direct	14824 Nov 09 23:58	14°♍50'25	
direct	14823 Nov 29 22:03	5°♊12'57		morning max el	14824 Nov 24 03:51	22°♍07'47	26°13'24
morning max el	14823 Dec 13 16:21	12°♊03'17	24°34'37		14824 Dec 01 02:43	0°♊	
	14823 Dec 27 07:05	0°♊		asc. node	14824 Dec 13 22:50	20°♊09'46	
asc. node	14823 Dec 28 01:45	1°♊18'47			14824 Dec 19 00:28	0°♊	
morning set	14824 Jan 08 03:38	22°♊55'22		morning set	14824 Dec 22 14:34	7°♊31'26	
	14824 Jan 11 09:38	0°♊					
superior conj	14824 Jan 14 22:21	7°♋46'06	1°35'33	superior conj	14824 Dec 29 08:47	22°♊26'37	1°37'57
minimum elong	14824 Jan 14 23:18	7°♋51'21	1°36'23	minimum elong	14824 Dec 29 08:40	22°♊25'57	1°38'55
max. Earth dist.	14824 Jan 17 02:00	12°♋27'37	1.32300 AU	max. Earth dist.	14824 Dec 30 07:29	24°♊32'52	1.31435 AU
evening rise	14824 Jan 22 08:22	23°♋32'36			14825 Jan 01 18:46	0°♋	
	14824 Jan 25 14:16	0°♋		evening rise	14825 Jan 05 08:40	7°♋41'03	
desc. node	14824 Jan 29 14:57	7°♋34'05		desc. node	14825 Jan 15 11:37	27°♋17'03	
	14824 Feb 12 13:25	0°♋			14825 Jan 17 01:08	0°♋	
evening max el	14824 Feb 24 20:24	14°♋41'55	27°34'05	evening max el	14825 Feb 06 04:57	27°♋16'14	27°25'34
retrograde	14824 Mar 09 16:23	22°♋10'20			14825 Feb 09 08:08	0°♋	
evening set	14824 Mar 16 12:16	19°♋46'59		retrograde	14825 Feb 20 04:15	4°♋36'41	
min. Earth dist.	14824 Mar 20 06:53	16°♋34'10	0.63333 AU	evening set	14825 Feb 27 00:04	2°♋28'37	
inferior conj	14824 Mar 23 02:03	13°♋45'10	-0°35'56		14825 Mar 02 08:50	30°♋	
minimum elong	14824 Mar 23 03:12	13°♋42'14	0°35'36	min. Earth dist.	14825 Mar 02 19:06	29°♋38'20	0.61186 AU
asc. node	14824 Mar 24 22:42	11°♋55'39		inferior conj	14825 Mar 05 22:03	26°♋52'01	-1°54'47
morning rise	14824 Mar 29 20:41	8°♋30'33		minimum elong	14825 Mar 06 02:10	26°♋42'49	1°52'57
direct	14824 Apr 01 06:10	8°♋02'44		asc. node	14825 Mar 11 20:09	22°♋29'59	
morning max el	14824 Apr 07 17:39	11°♋21'10	17°46'29	morning rise	14825 Mar 13 07:25	21°♋55'32	
	14824 Apr 20 11:52	0°♋		direct	14825 Mar 15 10:39	21°♋36'13	
morning set	14824 Apr 24 02:49	6°♋12'49		morning max el	14825 Mar 22 10:10	25°♋06'48	17°52'12
desc. node	14824 Apr 26 17:07	10°♋40'10			14825 Mar 26 11:45	0°♋	
superior conj	14824 May 06 15:37	27°♋20'12	-1°13'15	morning set	14825 Apr 07 01:31	19°♋28'32	
minimum elong	14824 May 06 08:31	26°♋51'09	1°13'06		14825 Apr 12 22:13	0°♋	
	14824 May 08 06:49	0°♋		desc. node	14825 Apr 13 13:45	1°♋08'43	
max. Earth dist.	14824 May 12 14:26	6°♋56'16	1.44739 AU	superior conj	14825 Apr 17 21:34	8°♋41'23	-0°34'15
evening rise	14824 May 21 21:52	21°♋27'59		minimum elong	14825 Apr 17 18:27	8°♋27'57	0°34'19
	14824 May 27 12:42	0°♋		max. Earth dist.	14825 Apr 25 05:35	20°♋58'50	1.43177 AU
	14824 Jun 18 03:47	0°♋			14825 Apr 30 20:28	0°♋	
evening max el	14824 Jun 19 20:45	1°♋48'15	20°37'09	evening rise	14825 May 01 16:58	1°♋20'38	
asc. node	14824 Jun 20 20:24	2°♋45'09			14825 May 21 00:57	0°♋	
retrograde	14824 Jun 28 00:17	6°♋29'12		evening max el	14825 Jun 02 16:33	15°♋39'54	21°50'47
evening set	14824 Jul 02 04:04	4°♋51'19		asc. node	14825 Jun 07 17:23	19°♋45'31	
	14824 Jul 06 12:03	30°♋		retrograde	14825 Jun 11 22:30	21°♋04'15	
inferior conj	14824 Jul 07 10:04	28°♋44'40	3°10'16	evening set	14825 Jun 16 13:19	19°♋09'41	
minimum elong	14824 Jul 07 10:12	28°♋44'11	3°09'20	inferior conj	14825 Jun 21 19:20	12°♋52'37	3°06'13
min. Earth dist.	14824 Jul 08 01:22	27°♋51'54	0.68505 AU	minimum elong	14825 Jun 21 18:31	12°♋55'26	3°05'09
morning rise	14824 Jul 12 16:01	22°♋23'15		min. Earth dist.	14825 Jun 21 21:17	12°♋45'48	0.68991 AU
direct	14824 Jul 18 01:29	20°♋01'24		morning rise	14825 Jun 26 23:32	6°♋37'21	
desc. node	14824 Jul 23 16:30	22°♋02'09		direct	14825 Jul 01 20:32	4°♋32'29	
morning max el	14824 Jul 29 00:17	26°♋34'00	23°51'40	desc. node	14825 Jul 10 13:48	9°♋18'22	
	14824 Aug 01 04:31	0°♋		morning max el	14825 Jul 11 12:30	10°♋13'45	22°22'42
	14824 Aug 22 20:49	0°♋			14825 Jul 27 02:25	0°♋	
morning set	14824 Sep 02 04:22	16°♋46'21		morning set	14825 Aug 13 21:43	27°♋08'09	
max. Earth dist.	14824 Sep 05 23:14	23°♋19'58	1.38713 AU		14825 Aug 15 15:54	0°♋	
	14824 Sep 09 16:24	0°♋		max. Earth dist.	14825 Aug 18 23:57	5°♋32'17	1.41071 AU
superior conj	14824 Sep 13 11:35	7°♌03'27	-0°30'41	superior conj	14825 Aug 26 20:03	19°♋07'15	-1°06'37
minimum elong	14824 Sep 13 13:46	7°♌13'46	0°30'16	minimum elong	14825 Aug 27 01:14	19°♋30'28	1°06'08
asc. node	14824 Sep 16 21:48	13°♌36'41			14825 Sep 01 19:17	0°♌	
evening rise	14824 Sep 22 11:18	24°♌29'32		asc. node	14825 Sep 03 18:21	3°♌39'14	
	14824 Sep 25 07:13	0°♌		evening rise	14825 Sep 06 01:46	7°♌58'42	
evening max el	14824 Oct 08 18:18	21°♌05'45	18°54'38		14825 Sep 18 23:57	0°♌	
retrograde	14824 Oct 17 10:00	25°♌27'05		evening max el	14825 Sep 22 00:01	3°♌30'11	18°18'39
evening set	14824 Oct 19 07:12	25°♌15'31		retrograde	14825 Sep 29 11:00	7°♌17'46	
				evening set	14825 Oct 01 12:44	7°♌00'51	





























































































































desc. node	14825 Oct 06 10:12	4° \mathbb{M} 26'48		evening max el	14826 Sep 05 12:08	16° $\underline{\mathbf{a}}$ 29'17	18°02'59
inferior conj	14825 Oct 09 01:45	2° \mathbb{M} 21'16	-0°50'34	retrograde	14826 Sep 12 05:08	19° $\underline{\mathbf{a}}$ 56'31	
minimum elong	14825 Oct 08 23:52	2° \mathbb{M} 25'11	0°49'21	evening set	14826 Sep 14 14:16	19° $\underline{\mathbf{a}}$ 30'22	
	14825 Oct 11 22:05	30° \mathbb{R} $\underline{\mathbf{a}}$		inferior conj	14826 Sep 21 10:00	14° $\underline{\mathbf{a}}$ 30'45	0°35'04
min. Earth dist.	14825 Oct 12 08:17	29° $\underline{\mathbf{a}}$ 39'41	0.58550 AU	minimum elong	14826 Sep 21 11:05	14° $\underline{\mathbf{a}}$ 28'11	0°34'49
morning rise	14825 Oct 16 07:33	26° $\underline{\mathbf{a}}$ 57'13		desc. node	14826 Sep 23 07:42	12° $\underline{\mathbf{a}}$ 40'47	
direct	14825 Oct 22 15:41	25° $\underline{\mathbf{a}}$ 10'52		min. Earth dist.	14826 Sep 24 13:08	11° $\underline{\mathbf{a}}$ 31'57	0.60820 AU
	14825 Nov 02 18:49	0° \mathbb{M}		morning rise	14826 Sep 28 04:53	8° $\underline{\mathbf{a}}$ 37'11	
morning max el	14825 Nov 05 22:59	2° \mathbb{M} 49'45	27°24'00	direct	14826 Oct 04 19:55	6° $\underline{\mathbf{a}}$ 26'09	
	14825 Nov 25 15:51	0° \mathbb{A}		morning max el	14826 Oct 19 01:56	14° $\underline{\mathbf{a}}$ 20'34	27°56'46
asc. node	14825 Nov 30 19:49	9° \mathbb{A} 29'10			14826 Oct 31 17:36	0° \mathbb{M}	
morning set	14825 Dec 06 22:39	21° \mathbb{A} 55'27		asc. node	14826 Nov 17 16:42	29° \mathbb{M} 09'15	
	14825 Dec 10 15:48	0° \mathbb{Z}			14826 Nov 18 02:54	0° \mathbb{A}	
				morning set	14826 Nov 21 02:03	6° \mathbb{A} 03'11	
superior conj	14825 Dec 13 20:18	7° \mathbb{Z} 06'24	1°34'21	max. Earth dist.	14826 Nov 26 22:24	18° \mathbb{A} 39'36	1.31288 AU
minimum elong	14825 Dec 13 19:11	7° \mathbb{Z} 00'06	1°35'18				
max. Earth dist.	14825 Dec 13 15:32	6° \mathbb{Z} 39'41	1.31092 AU	superior conj	14826 Nov 28 07:05	21° \mathbb{A} 40'53	1°24'51
evening rise	14825 Dec 20 14:27	22° \mathbb{Z} 01'13		minimum elong	14826 Nov 28 05:11	21° \mathbb{A} 30'18	1°25'38
	14825 Dec 24 10:20	0° \approx			14826 Dec 02 00:48	0° \mathbb{Z}	
desc. node	14826 Jan 02 08:22	16° \approx 30'22		evening rise	14826 Dec 04 23:44	6° \mathbb{Z} 28'42	
	14826 Jan 11 08:45	0° \mathbb{H}			14826 Dec 17 02:06	0° \approx	
evening max el	14826 Jan 19 06:51	9° \mathbb{H} 00'25	26°42'06	desc. node	14826 Dec 20 05:15	5° \approx 03'19	
retrograde	14826 Feb 02 06:20	16° \mathbb{H} 10'43		evening max el	14827 Jan 01 00:19	19° \approx 51'28	25°26'08
evening set	14826 Feb 08 19:07	14° \mathbb{H} 24'56		retrograde	14827 Jan 14 21:18	26° \approx 50'17	
min. Earth dist.	14826 Feb 12 20:37	11° \mathbb{H} 47'06	0.58972 AU	evening set	14827 Jan 20 17:33	25° \approx 32'21	
inferior conj	14826 Feb 16 01:03	9° \mathbb{H} 19'41	-3°21'28	min. Earth dist.	14827 Jan 25 12:46	22° \approx 51'55	0.56930 AU
minimum elong	14826 Feb 16 08:31	9° \mathbb{H} 05'15	3°18'21	inferior conj	14827 Jan 28 07:55	20° \approx 59'30	-4°45'10
morning rise	14826 Feb 24 01:11	4° \mathbb{H} 44'22		minimum elong	14827 Jan 28 17:03	20° \approx 44'11	4°42'04
direct	14826 Feb 26 01:13	4° \mathbb{H} 30'01		morning rise	14827 Feb 05 19:17	16° \approx 46'06	
asc. node	14826 Feb 26 17:36	4° \mathbb{H} 31'45		direct	14827 Feb 07 21:36	16° \approx 33'02	
morning max el	14826 Mar 05 21:53	8° \mathbb{H} 23'29	18°17'20	asc. node	14827 Feb 13 15:03	18° \approx 17'28	
	14826 Mar 19 19:43	0° \mathbb{Y}		morning max el	14827 Feb 17 00:45	21° \approx 00'02	19°03'39
morning set	14826 Mar 21 14:50	3° \mathbb{Y} 23'20			14827 Feb 23 22:38	0° \mathbb{H}	
				morning set	14827 Mar 05 14:12	17° \mathbb{H} 43'39	
superior conj	14826 Mar 31 01:51	21° \mathbb{Y} 03'26	0°02'54		14827 Mar 11 19:36	0° \mathbb{Y}	
minimum elong	14826 Mar 31 02:02	21° \mathbb{Y} 04'17	0°02'35				
behind sun begin	14826 Mar 30 18:43	20° \mathbb{Y} 31'00		superior conj	14827 Mar 14 00:12	4° \mathbb{Y} 13'59	0°34'52
behind sun end	14826 Mar 31 09:22	21° \mathbb{Y} 37'29		minimum elong	14827 Mar 14 02:15	4° \mathbb{Y} 23'50	0°34'33
desc. node	14826 Mar 31 10:19	21° \mathbb{Y} 41'45		desc. node	14827 Mar 18 06:49	12° \mathbb{Y} 15'32	
	14826 Apr 05 02:40	0° \mathbb{B}		max. Earth dist.	14827 Mar 20 22:23	17° \mathbb{Y} 03'35	1.38889 AU
max. Earth dist.	14826 Apr 07 15:56	4° \mathbb{B} 23'10	1.41149 AU	evening rise	14827 Mar 24 17:28	23° \mathbb{Y} 42'36	
evening rise	14826 Apr 12 06:36	12° \mathbb{B} 04'05			14827 Mar 28 11:04	0° \mathbb{B}	
	14826 Apr 23 18:23	0° \mathbb{I}			14827 Apr 17 13:17	0° \mathbb{I}	
evening max el	14826 May 16 08:09	29° \mathbb{I} 32'10	23°11'02	evening max el	14827 Apr 28 21:49	13° \mathbb{I} 25'39	24°31'46
	14826 May 16 19:27	0° \mathbb{E}		retrograde	14827 May 10 11:17	20° \mathbb{I} 11'30	
asc. node	14826 May 25 14:28	5° \mathbb{E} 34'26		asc. node	14827 May 12 11:41	19° \mathbb{I} 53'54	
retrograde	14826 May 26 18:34	5° \mathbb{E} 40'30		evening set	14827 May 16 01:04	17° \mathbb{I} 50'10	
evening set	14826 May 31 20:52	3° \mathbb{E} 31'04		min. Earth dist.	14827 May 20 13:43	12° \mathbb{I} 39'37	0.68509 AU
	14826 Jun 04 01:41	30° \mathbb{R} \mathbb{I}		inferior conj	14827 May 21 13:28	11° \mathbb{I} 20'02	2°26'49
inferior conj	14826 Jun 06 05:06	27° \mathbb{I} 05'50	2°51'42	minimum elong	14827 May 21 11:24	11° \mathbb{I} 26'59	2°25'24
minimum elong	14826 Jun 06 03:31	27° \mathbb{I} 11'19	2°50'27	morning rise	14827 May 26 21:54	5° \mathbb{I} 20'49	
min. Earth dist.	14826 Jun 05 18:06	27° \mathbb{I} 43'53	0.68988 AU	direct	14827 May 30 18:21	3° \mathbb{I} 55'53	
morning rise	14826 Jun 11 10:07	20° \mathbb{I} 58'01		morning max el	14827 Jun 07 05:11	8° \mathbb{I} 04'45	19°49'00
direct	14826 Jun 15 18:34	19° \mathbb{I} 12'52		desc. node	14827 Jun 14 08:06	16° \mathbb{I} 35'53	
morning max el	14826 Jun 24 05:25	24° \mathbb{I} 03'51	20°59'58		14827 Jun 23 16:30	0° \mathbb{E}	
desc. node	14826 Jun 27 11:00	27° \mathbb{I} 35'07		morning set	14827 Jul 03 18:51	15° \mathbb{E} 17'46	
	14826 Jun 29 10:49	0° \mathbb{E}			14827 Jul 13 05:55	0° \mathbb{Q}	
	14826 Jul 20 10:24	0° \mathbb{Q}		max. Earth dist.	14827 Jul 14 19:13	2° \mathbb{Q} 27'15	1.44759 AU
morning set	14826 Jul 24 15:29	6° \mathbb{Q} 30'15					
max. Earth dist.	14826 Aug 01 06:32	18° \mathbb{Q} 37'36	1.43160 AU	superior conj	14827 Jul 19 18:43	10° \mathbb{Q} 24'31	-2°05'03
				minimum elong	14827 Jul 20 00:52	10° \mathbb{Q} 49'17	2°05'32
superior conj	14826 Aug 08 07:13	0° \mathbb{P} 15'36	-1°40'12		14827 Jul 31 15:21	0° \mathbb{P}	
minimum elong	14826 Aug 08 14:38	0° \mathbb{P} 47'01	1°39'59	evening rise	14827 Aug 02 08:20	2° \mathbb{P} 53'10	
	14826 Aug 08 03:31	0° \mathbb{P}		asc. node	14827 Aug 08 11:31	13° \mathbb{P} 13'46	
evening rise	14826 Aug 20 02:31	20° \mathbb{P} 51'10		evening max el	14827 Aug 20 02:45	29° \mathbb{P} 52'33	18°06'12
asc. node	14826 Aug 21 14:54	23° \mathbb{P} 33'16			14827 Aug 20 05:48	0° $\underline{\mathbf{a}}$	
	14826 Aug 25 06:31	0° $\underline{\mathbf{a}}$		retrograde	14827 Aug 26 11:50	3° $\underline{\mathbf{a}}$ 12'56	

evening set	14827 Aug 29 05:25	2°♄34'10			14828 Jul 23 15:42	0°♊	
	14827 Sep 01 19:03	30°♊♊		asc. node	14828 Jul 25 08:11	2°♊35'38	
inferior conj	14827 Sep 04 10:46	27°♊16'47	1°39'45	evening max el	14828 Aug 02 16:33	13°♊31'51	18°27'19
minimum elong	14827 Sep 04 13:03	27°♊10'35	1°38'52	retrograde	14828 Aug 09 03:01	16°♊58'49	
min. Earth dist.	14827 Sep 07 03:45	24°♊21'42	0.63076 AU	evening set	14828 Aug 12 05:31	16°♊04'50	
desc. node	14827 Sep 10 05:14	21°♊30'00		inferior conj	14828 Aug 18 00:04	10°♊31'38	2°24'51
morning rise	14827 Sep 10 18:34	21°♊04'08		minimum elong	14828 Aug 18 02:22	10°♊24'45	2°23'51
direct	14827 Sep 17 10:30	18°♊35'02		min. Earth dist.	14828 Aug 20 03:39	7°♊57'59	0.65108 AU
morning max el	14827 Oct 01 10:08	26°♊35'40	27°50'46	morning rise	14828 Aug 23 21:56	4°♊09'08	
	14827 Oct 04 14:46	0°♄		desc. node	14828 Aug 27 02:46	2°♊10'35	
	14827 Oct 25 08:50	0°♌		direct	14828 Aug 30 09:26	1°♊31'14	
morning set	14827 Nov 04 22:30	19°♌48'43		morning max el	14828 Sep 12 20:52	9°♊25'32	27°10'51
asc. node	14827 Nov 04 13:29	19°♌03'18			14828 Sep 29 00:32	0°♄	
	14827 Nov 09 19:51	0°♊			14828 Oct 16 18:39	0°♌	
max. Earth dist.	14827 Nov 10 00:08	0°♊22'56	1.32034 AU	morning set	14828 Oct 18 09:17	3°♌05'37	
				asc. node	14828 Oct 21 10:12	9°♌06'21	
superior conj	14827 Nov 12 15:11	6°♊04'23	1°09'27	max. Earth dist.	14828 Oct 22 17:30	11°♌45'19	1.33333 AU
minimum elong	14827 Nov 12 12:53	5°♊51'50	1°10'00				
evening rise	14827 Nov 19 10:36	20°♊58'32		superior conj	14828 Oct 26 18:26	20°♌11'06	0°48'11
	14827 Nov 23 17:57	0°♄		minimum elong	14828 Oct 26 16:19	19°♌59'48	0°48'31
desc. node	14827 Dec 07 02:16	22°♄40'55			14828 Oct 31 08:19	0°♊	
	14827 Dec 13 10:24	0°♌		evening rise	14828 Nov 02 21:13	5°♊26'05	
evening max el	14827 Dec 13 11:06	0°♌01'41	23°48'27		14828 Nov 15 23:09	0°♄	
retrograde	14827 Dec 26 23:10	6°♌43'57		desc. node	14828 Nov 22 23:23	9°♄02'53	
evening set	14827 Dec 31 16:47	5°♌55'15		evening max el	14828 Nov 23 22:17	10°♄00'50	22°06'05
min. Earth dist.	14828 Jan 06 22:20	2°♌53'58	0.55353 AU	retrograde	14828 Dec 06 12:49	16°♄15'12	
inferior conj	14828 Jan 08 18:10	1°♌48'50	-5°45'35	evening set	14828 Dec 09 22:21	15°♄49'38	
minimum elong	14828 Jan 08 23:55	1°♌40'16	5°43'59	min. Earth dist.	14828 Dec 18 04:16	12°♄09'00	0.54525 AU
	14828 Jan 11 22:23	30°♊♄		inferior conj	14828 Dec 18 12:56	11°♄56'52	-5°57'22
morning rise	14828 Jan 17 08:45	27°♄53'29		minimum elong	14828 Dec 18 09:56	12°♄01'04	5°56'10
direct	14828 Jan 19 22:33	27°♄36'54		morning rise	14828 Dec 26 22:27	8°♄09'39	
	14828 Jan 27 05:22	0°♌		direct	14828 Dec 30 09:26	7°♄43'06	
morning max el	14828 Jan 30 14:45	2°♌45'32	20°12'56	morning max el	14829 Jan 11 13:50	13°♄34'52	21°44'35
asc. node	14828 Jan 31 12:28	3°♌40'02		asc. node	14829 Jan 17 09:48	20°♄22'01	
	14828 Feb 16 16:44	0°♋			14829 Jan 23 13:09	0°♌	
morning set	14828 Feb 17 20:13	2°♋19'53		morning set	14829 Feb 01 06:09	17°♌03'31	
					14829 Feb 07 08:43	0°♋	
superior conj	14828 Feb 25 12:13	18°♋01'01	1°00'24				
minimum elong	14828 Feb 25 14:52	18°♋14'17	1°00'19	superior conj	14829 Feb 08 10:03	2°♋13'07	1°19'11
max. Earth dist.	14828 Mar 02 05:11	29°♋10'30	1.36650 AU	minimum elong	14829 Feb 08 12:24	2°♋25'23	1°19'29
	14828 Mar 02 15:39	0°♎		max. Earth dist.	14829 Feb 12 17:04	11°♋02'25	1.34647 AU
desc. node	14828 Mar 04 03:21	2°♎46'48		evening rise	14829 Feb 16 22:01	19°♋16'42	
evening rise	14828 Mar 05 23:48	6°♎10'23		desc. node	14829 Feb 18 23:52	23°♋11'00	
	14828 Mar 20 07:47	0°♄			14829 Feb 22 18:29	0°♎	
evening max el	14828 Apr 10 11:25	27°♄18'53	25°45'51		14829 Mar 14 09:35	0°♄	
	14828 Apr 13 10:12	0°♊		evening max el	14829 Mar 24 01:18	11°♄04'17	26°45'50
retrograde	14828 Apr 22 23:28	4°♊30'49		retrograde	14829 Apr 06 06:01	18°♄30'03	
asc. node	14828 Apr 28 09:00	2°♊31'59		evening set	14829 Apr 12 16:35	15°♄57'55	
evening set	14828 Apr 29 00:17	2°♊01'36		asc. node	14829 Apr 15 06:23	13°♄33'09	
	14828 May 01 02:19	30°♊♄		min. Earth dist.	14829 Apr 16 16:45	11°♄57'42	0.66218 AU
min. Earth dist.	14828 May 03 06:01	27°♄26'54	0.67577 AU	inferior conj	14829 Apr 18 17:50	9°♄33'08	1°03'51
inferior conj	14828 May 04 18:28	25°♄31'11	1°51'08	minimum elong	14829 Apr 18 16:17	9°♄37'41	1°02'43
minimum elong	14828 May 04 16:20	25°♄37'57	1°49'42	morning rise	14829 Apr 24 17:12	3°♄55'32	
morning rise	14828 May 10 08:59	19°♄41'52		direct	14829 Apr 27 16:22	3°♄06'55	
direct	14828 May 13 18:17	18°♄36'11		morning max el	14829 May 04 01:22	6°♄27'59	18°13'45
morning max el	14828 May 20 12:15	22°♄14'45	18°53'07	desc. node	14829 May 18 01:54	26°♄05'01	
	14828 May 26 22:17	0°♊			14829 May 20 12:50	0°♊	
desc. node	14828 May 31 05:04	6°♊09'00		morning set	14829 May 23 11:38	4°♊43'19	
greatest brilliancy	14828 Jun 03 01:08	10°♊24'29	-0.8m				
morning set	14828 Jun 12 03:46	24°♊26'21		superior conj	14829 Jun 07 18:53	28°♊56'29	-2°02'36
	14828 Jun 15 17:44	0°♄		minimum elong	14829 Jun 07 11:33	28°♊27'50	2°03'11
max. Earth dist.	14828 Jun 26 12:52	16°♄48'47	1.45708 AU		14829 Jun 08 11:08	0°♄	
				max. Earth dist.	14829 Jun 09 09:13	1°♄26'13	1.45913 AU
superior conj	14828 Jun 28 10:24	19°♄46'59	-2°13'52	evening rise	14829 Jun 23 20:22	23°♄56'41	
minimum elong	14828 Jun 28 10:04	19°♄45'41	2°14'51		14829 Jun 27 17:54	0°♊	
	14828 Jul 04 21:58	0°♊		greatest brilliancy	14829 Jul 04 20:42	10°♊56'42	-0.7m
evening rise	14828 Jul 13 14:33	13°♊54'40		asc. node	14829 Jul 12 04:57	21°♊31'43	

evening max el	14829 Jul 17 02:48	27°♎19'47	19°05'36	max. Earth dist.	14830 May 23 05:15	16°♐01'59	1.45366 AU
	14829 Jul 20 10:03	0°♏			14830 Jun 01 04:49	0°♑	
retrograde	14829 Jul 23 23:17	1°♏06'36		evening rise	14830 Jun 03 09:41	3°♑22'44	
evening set	14829 Jul 27 11:10	29°♎55'50		greatest brilliancy	14830 Jun 18 06:35	25°♑40'14	-0.6m
	14829 Jul 27 08:38	30°♎♎			14830 Jun 21 07:34	0°♎	
inferior conj	14829 Aug 01 22:23	24°♎08'23	2°53'13	asc. node	14830 Jun 29 01:47	9°♎52'40	
minimum elong	14829 Aug 02 00:02	24°♎03'04	2°52'17	evening max el	14830 Jun 30 07:35	11°♎10'33	19°59'44
min. Earth dist.	14829 Aug 03 11:37	22°♎08'43	0.66772 AU	retrograde	14830 Jul 07 21:58	15°♎29'18	
morning rise	14829 Aug 07 12:14	17°♎42'52		evening set	14830 Jul 11 19:44	14°♎01'13	
direct	14829 Aug 13 15:17	15°♎05'26		inferior conj	14830 Jul 17 02:48	8°♎00'57	3°07'35
desc. node	14829 Aug 14 00:14	15°♎05'57		minimum elong	14830 Jul 17 03:31	7°♎58'32	3°06'41
morning max el	14829 Aug 26 08:10	22°♎39'25	26°05'07	min. Earth dist.	14830 Jul 18 01:54	6°♎42'46	0.68000 AU
	14829 Sep 01 19:37	0°♏		morning rise	14830 Jul 22 10:55	1°♎37'03	
	14829 Sep 22 07:28	0°♎			14830 Jul 24 17:33	30°♎♑	
morning set	14829 Oct 01 07:06	15°♎46'29		direct	14830 Jul 28 03:06	29°♑07'52	
max. Earth dist.	14829 Oct 05 01:19	22°♎53'09	1.35145 AU	desc. node	14830 Jul 31 21:39	0°♎02'20	
asc. node	14829 Oct 08 06:49	29°♎14'19			14830 Jul 31 19:35	0°♎	
	14829 Oct 08 15:56	0°♏		morning max el	14830 Aug 08 18:58	6°♎07'02	24°42'49
					14830 Aug 27 07:47	0°♏	
superior conj	14829 Oct 10 14:17	3°♏54'40	0°21'17	morning set	14830 Sep 13 11:50	27°♏41'10	
minimum elong	14829 Oct 10 13:06	3°♏48'35	0°21'31		14830 Sep 14 19:15	0°♎	
evening rise	14829 Oct 18 05:37	19°♏46'31		max. Earth dist.	14830 Sep 17 01:32	4°♎04'18	1.37347 AU
	14829 Oct 23 07:11	0°♏					
evening max el	14829 Nov 05 19:11	20°♏25'46	20°35'22	superior conj	14830 Sep 23 23:29	17°♎06'30	-0°10'37
desc. node	14829 Nov 09 20:36	23°♏44'39		minimum elong	14830 Sep 24 00:10	17°♎09'50	0°10'19
retrograde	14829 Nov 16 23:19	25°♏59'10		behind sun begin	14830 Sep 23 19:00	16°♎44'42	
evening set	14829 Nov 19 07:16	25°♏45'46		behind sun end	14830 Sep 24 05:20	17°♎35'01	
inferior conj	14829 Nov 28 04:39	21°♏51'29	-5°08'28	asc. node	14830 Sep 25 03:22	19°♎22'55	
minimum elong	14829 Nov 27 19:04	22°♏05'21	5°05'19		14830 Sep 30 11:06	0°♏	
min. Earth dist.	14829 Nov 29 10:06	21°♏08'51	0.54612 AU	evening rise	14830 Oct 02 09:26	3°♏53'01	
morning rise	14829 Dec 06 06:42	17°♏54'14			14830 Oct 17 18:13	0°♏	
direct	14829 Dec 10 17:45	17°♏11'35		evening max el	14830 Oct 19 06:24	1°♏37'25	19°24'58
morning max el	14829 Dec 24 01:41	23°♏41'54	23°31'45	desc. node	14830 Oct 27 17:56	6°♏20'39	
	14829 Dec 29 16:46	0°♑		retrograde	14830 Oct 28 19:19	6°♏24'03	
asc. node	14830 Jan 04 07:02	8°♑05'48		evening set	14830 Oct 30 16:34	6°♏13'40	
	14830 Jan 15 21:28	0°♑		inferior conj	14830 Nov 08 07:40	2°♏06'19	-3°35'04
morning set	14830 Jan 16 17:54	1°♑48'41		minimum elong	14830 Nov 07 22:50	2°♏20'40	3°31'10
				min. Earth dist.	14830 Nov 10 19:25	0°♏29'26	0.55610 AU
superior conj	14830 Jan 23 14:41	16°♑42'05	1°31'24		14830 Nov 11 14:16	30°♏♏	
minimum elong	14830 Jan 23 16:13	16°♑50'25	1°32'03	morning rise	14830 Nov 16 02:55	27°♏39'47	
max. Earth dist.	14830 Jan 26 12:30	22°♑55'44	1.33026 AU	direct	14830 Nov 21 11:17	26°♏35'08	
	14830 Jan 29 22:18	0°♏			14830 Dec 01 01:15	0°♏	
evening rise	14830 Jan 31 08:42	2°♏53'05		morning max el	14830 Dec 05 11:06	3°♏37'50	25°19'07
desc. node	14830 Feb 05 20:27	13°♏23'55		asc. node	14830 Dec 22 04:10	26°♏35'36	
	14830 Feb 15 14:49	0°♑			14830 Dec 24 01:18	0°♑	
evening max el	14830 Mar 06 14:30	24°♑31'15	27°24'15	morning set	14831 Jan 01 05:38	16°♑29'28	
	14830 Mar 13 14:54	0°♑			14831 Jan 07 09:07	0°♑	
retrograde	14830 Mar 20 06:06	2°♑00'53					
	14830 Mar 26 08:00	30°♏♑		superior conj	14831 Jan 07 23:38	1°♑20'17	1°37'19
evening set	14830 Mar 26 23:55	29°♑32'00		minimum elong	14831 Jan 08 00:08	1°♑23'04	1°38'12
min. Earth dist.	14830 Mar 30 19:53	26°♑03'27	0.64480 AU	max. Earth dist.	14831 Jan 09 14:48	4°♑56'01	1.31869 AU
inferior conj	14830 Apr 02 09:02	23°♑19'45	0°04'09	evening rise	14831 Jan 15 04:46	16°♑51'30	
minimum elong	14830 Apr 02 08:55	23°♑20'04	0°03'48		14831 Jan 21 21:23	0°♏	
transit middle	14830 Apr 02 08:55	23°♑20'04	0°03'48	desc. node	14831 Jan 23 17:06	3°♏19'45	
transit begin	14830 Apr 02 05:55	23°♑28'08			14831 Feb 10 06:21	0°♑	
transit end	14830 Apr 02 11:54	23°♑12'01		evening max el	14831 Feb 17 01:12	7°♑27'36	27°34'29
asc. node	14830 Apr 02 03:49	23°♑33'48		retrograde	14831 Mar 02 23:00	14°♑53'46	
morning rise	14830 Apr 08 19:57	17°♑56'12		evening set	14831 Mar 09 19:44	12°♑35'37	
direct	14830 Apr 11 10:05	17°♑21'46		min. Earth dist.	14831 Mar 13 13:50	9°♑33'39	0.62437 AU
morning max el	14830 Apr 17 18:14	20°♑37'36	17°51'27	inferior conj	14831 Mar 16 13:01	6°♑43'37	-1°08'07
	14830 Apr 24 23:27	0°♑		minimum elong	14831 Mar 16 15:20	6°♑38'03	1°07'10
morning set	14830 May 04 23:17	16°♑20'19		asc. node	14831 Mar 20 01:16	3°♑37'06	
desc. node	14830 May 04 22:37	16°♑17'31		morning rise	14831 Mar 23 13:49	1°♑36'43	
	14830 May 13 05:12	0°♐		direct	14831 Mar 25 20:20	1°♑13'02	
				morning max el	14831 Apr 01 11:54	4°♑35'11	17°46'43
superior conj	14830 May 18 13:28	8°♐38'28	-1°34'14	morning set	14831 Apr 17 10:58	29°♑05'17	
minimum elong	14830 May 18 04:49	8°♐03'52	1°34'12		14831 Apr 17 23:26	0°♑	

desc. node	14831 Apr 21 19:17	6°♄41'37		14832 Apr 09 05:33	0°♄	
superior conj	14831 Apr 29 05:39	19°♄22'05 -0°56'48		superior conj	14832 Apr 09 21:33	1°♄10'32 -0°18'02
minimum elong	14831 Apr 29 00:12	18°♄59'19 0°56'42		minimum elong	14832 Apr 09 20:00	1°♄03'43 0°18'12
	14831 May 05 17:25	0°♄		max. Earth dist.	14832 Apr 17 10:51	14°♄05'01 1.42351 AU
max. Earth dist.	14831 May 05 22:13	0°♄19'18 1.44133 AU		evening rise	14832 Apr 23 00:22	23°♄07'32
evening rise	14831 May 13 22:09	12°♄54'36			14832 Apr 27 09:30	0°♄
	14831 May 25 06:22	0°♄			14832 May 18 08:01	0°♄
evening max el	14831 Jun 13 06:24	25°♄02'03 21°07'22		evening max el	14832 May 26 00:10	8°♄54'00 22°24'34
asc. node	14831 Jun 15 22:44	27°♄27'02		asc. node	14832 Jun 01 19:47	13°♄59'15
	14831 Jun 21 07:11	0°♄		retrograde	14832 Jun 04 18:25	14°♄37'42
retrograde	14831 Jun 21 20:56	0°♄01'41		evening set	14832 Jun 09 13:58	12°♄36'48
	14831 Jun 22 10:30	30°♄		inferior conj	14832 Jun 14 20:40	6°♄15'58 3°01'20
evening set	14831 Jun 26 05:16	28°♄16'36		minimum elong	14832 Jun 14 19:30	6°♄20'01 3°00'12
inferior conj	14831 Jul 01 10:56	22°♄05'06 3°09'53		min. Earth dist.	14832 Jun 14 17:09	6°♄28'13 0.69043 AU
minimum elong	14831 Jul 01 10:40	22°♄06'03 3°08'55		morning rise	14832 Jun 20 00:52	0°♄03'29
min. Earth dist.	14831 Jul 01 20:30	21°♄31'50 0.68760 AU			14832 Jun 20 02:32	30°♄
morning rise	14831 Jul 06 15:49	15°♄45'52		direct	14832 Jun 24 16:32	28°♄06'37
direct	14831 Jul 11 19:54	13°♄30'51			14832 Jun 29 19:08	0°♄
desc. node	14831 Jul 18 18:58	16°♄34'52		morning max el	14832 Jul 03 19:41	3°♄26'14 21°46'20
morning max el	14831 Jul 22 05:58	19°♄42'53 23°13'36		desc. node	14832 Jul 04 16:14	4°♄18'57
	14831 Jul 30 23:29	0°♄			14832 Jul 23 23:33	0°♄
	14831 Aug 20 11:31	0°♄		morning set	14832 Aug 05 01:59	18°♄34'43
morning set	14831 Aug 25 19:08	8°♄39'52		max. Earth dist.	14832 Aug 11 02:13	28°♄19'11 1.42004 AU
max. Earth dist.	14831 Aug 29 23:47	15°♄46'19 1.39725 AU			14832 Aug 12 02:31	0°♄
superior conj	14831 Sep 06 18:14	29°♄38'17 -0°45'53		superior conj	14832 Aug 18 18:07	11°♄19'36 -1°21'29
minimum elong	14831 Sep 06 21:41	29°♄54'09 0°45'25		minimum elong	14832 Aug 19 00:29	11°♄47'23 1°21'02
	14831 Sep 06 22:57	0°♄		asc. node	14832 Aug 28 20:30	29°♄28'34
asc. node	14831 Sep 11 23:56	9°♄29'03			14832 Aug 29 03:21	0°♄
evening rise	14831 Sep 16 05:49	17°♄38'37		evening rise	14832 Aug 29 14:58	0°♄53'18
	14831 Sep 22 20:02	0°♄		evening max el	14832 Sep 14 15:36	26°♄19'12 18°09'41
evening max el	14831 Oct 02 06:34	13°♄38'10 18°36'46		retrograde	14832 Sep 21 17:29	29°♄56'02
retrograde	14831 Oct 10 08:56	17°♄43'38		evening set	14832 Sep 23 22:17	29°♄35'35
evening set	14831 Oct 12 07:22	17°♄30'24		desc. node	14832 Sep 30 12:45	25°♄20'18
desc. node	14831 Oct 14 15:18	16°♄42'04		inferior conj	14832 Oct 01 03:43	24°♄47'30 -0°11'46
inferior conj	14831 Oct 20 06:52	13°♄03'29 -1°48'22		minimum elong	14832 Oct 01 03:19	24°♄48'23 0°11'17
minimum elong	14831 Oct 20 02:29	13°♄11'46 1°45'59		transit middle	14832 Oct 01 03:19	24°♄48'23 0°11'17
min. Earth dist.	14831 Oct 23 10:47	10°♄40'38 0.57342 AU		transit begin	14832 Oct 01 00:53	24°♄53'45
morning rise	14831 Oct 27 18:12	7°♄59'47		transit end	14832 Oct 01 05:45	24°♄43'00
direct	14831 Nov 02 19:30	6°♄28'34		min. Earth dist.	14832 Oct 04 10:02	21°♄55'56 0.59504 AU
morning max el	14831 Nov 17 01:40	13°♄56'37 26°47'29		morning rise	14832 Oct 08 05:01	19°♄10'00
	14831 Nov 29 20:29	0°♄		direct	14832 Oct 14 17:09	17°♄12'19
asc. node	14831 Dec 09 01:11	15°♄39'47		morning max el	14832 Oct 29 00:05	24°♄58'34 27°42'42
	14831 Dec 16 04:07	0°♄			14832 Nov 02 15:15	0°♄
morning set	14831 Dec 16 15:35	1°♄01'13			14832 Nov 22 05:24	0°♄
superior conj	14831 Dec 23 10:47	16°♄01'38 1°37'09		asc. node	14832 Nov 24 22:08	5°♄09'14
minimum elong	14831 Dec 23 10:14	15°♄58'30 1°38'07		morning set	14832 Nov 29 21:58	15°♄19'30
max. Earth dist.	14831 Dec 23 21:37	17°♄02'06 1.31224 AU		max. Earth dist.	14832 Dec 06 05:37	29°♄07'39 1.31111 AU
	14831 Dec 29 19:19	0°♄		superior conj	14832 Dec 06 22:17	0°♄40'44 1°31'03
evening rise	14831 Dec 30 07:41	1°♄05'51		minimum elong	14832 Dec 06 20:48	0°♄32'25 1°31'57
desc. node	14832 Jan 10 13:49	22°♄51'23			14832 Dec 06 15:00	0°♄
	14832 Jan 14 21:30	0°♄		evening rise	14832 Dec 13 15:16	15°♄30'46
evening max el	14832 Jan 30 07:11	19°♄41'41 27°11'20			14832 Dec 20 17:57	0°♄
retrograde	14832 Feb 13 07:19	26°♄58'48		desc. node	14832 Dec 27 10:39	11°♄49'45
evening set	14832 Feb 20 00:54	24°♄59'25			14833 Jan 10 03:19	0°♄
min. Earth dist.	14832 Feb 23 21:39	22°♄15'46 0.60232 AU		evening max el	14833 Jan 11 05:56	1°♄04'58 26°13'25
inferior conj	14832 Feb 27 02:15	19°♄35'14 -2°31'06		retrograde	14833 Jan 25 04:58	8°♄10'07
minimum elong	14832 Feb 27 07:49	19°♄23'30 2°28'39		evening set	14833 Jan 31 11:44	6°♄36'05
morning rise	14832 Mar 05 18:05	14°♄47'35		min. Earth dist.	14833 Feb 04 19:18	3°♄58'54 0.58066 AU
asc. node	14832 Mar 05 22:44	14°♄44'37		inferior conj	14833 Feb 07 21:08	1°♄44'52 -3°58'16
direct	14832 Mar 07 19:17	14°♄30'57		minimum elong	14833 Feb 08 05:41	1°♄29'17 3°54'57
morning max el	14832 Mar 15 02:54	18°♄10'20 18°00'26			14833 Feb 10 08:45	30°♄
	14832 Mar 23 15:07	0°♄		morning rise	14833 Feb 16 02:41	27°♄18'31
morning set	14832 Mar 30 16:33	12°♄39'39		direct	14833 Feb 18 02:47	27°♄05'12
desc. node	14832 Apr 07 15:52	27°♄12'30		asc. node	14833 Feb 20 20:11	27°♄31'06

	14833 Feb 25 03:32	0° H		morning max el	14834 Feb 09 09:10	13° \approx 27'55	19°30'11
morning max el	14833 Feb 26 11:24	1° H 12'05	18°34'13		14834 Feb 20 18:01	0° H	
morning set	14833 Mar 14 10:43	26° H 47'42		morning set	14834 Feb 26 13:18	11° H 16'17	
	14833 Mar 16 02:34	0° Y					
superior conj	14833 Mar 23 10:08	13° Y 55'15	0°17'11	superior conj	14834 Mar 06 14:49	27° H 22'54	0°46'30
minimum elong	14833 Mar 23 11:18	14° Y 00'39	0°16'50	minimum elong	14834 Mar 06 17:15	27° H 34'50	0°46'16
desc. node	14833 Mar 25 12:26	17° Y 46'42		desc. node	14834 Mar 07 23:08	0° Y	
max. Earth dist.	14833 Mar 30 19:27	27° Y 11'40	1.40209 AU	max. Earth dist.	14834 Mar 12 08:58	8° Y 19'57	
	14833 Apr 01 10:35	0° B		evening rise	14834 Mar 13 01:56	9° Y 38'00	1.37929 AU
evening rise	14833 Apr 03 23:13	4° B 15'51			14834 Mar 16 18:44	16° Y 16'21	
	14833 Apr 20 13:53	0° II			14834 Mar 24 22:53	0° B	
evening max el	14833 May 08 14:53	22° II 47'35	23°45'46	evening max el	14834 Apr 15 02:36	0° II	
retrograde	14833 May 19 13:02	29° II 12'19		retrograde	14834 Apr 21 04:25	6° II 41'41	25°04'27
asc. node	14833 May 19 16:56	29° II 12'12		asc. node	14834 May 03 03:49	13° II 39'30	
evening set	14833 May 24 20:15	26° II 57'34		evening set	14834 May 06 14:12	12° II 49'34	
min. Earth dist.	14833 May 29 13:43	21° II 26'00	0.68848 AU	min. Earth dist.	14834 May 08 22:33	11° II 14'06	
inferior conj	14833 May 30 06:04	20° II 30'03	2°42'26	inferior conj	14834 May 13 08:03	6° II 19'11	0.68175 AU
minimum elong	14833 May 30 04:14	20° II 36'20	2°41'06	minimum elong	14834 May 14 13:15	4° II 43'26	2°13'02
morning rise	14833 Jun 04 12:13	14° II 25'43			14834 May 14 11:05	4° II 50'31	2°11'35
direct	14833 Jun 08 15:35	12° II 48'58		morning rise	14834 May 18 13:21	30° R B	
morning max el	14833 Jun 16 15:12	17° II 20'19	20°28'02	direct	14834 May 19 23:57	28° B 48'30	
desc. node	14833 Jun 21 13:24	22° II 55'52			14834 May 23 15:37	27° B 31'55	
	14833 Jun 26 21:00	0° D		morning max el	14834 May 29 04:09	0° II	
morning set	14833 Jul 15 11:38	27° D 36'05		desc. node	14834 May 30 18:11	1° II 25'53	19°23'16
	14833 Jul 17 00:48	0° O		greatest brilliancy	14834 Jun 08 10:26	12° II 11'38	
max. Earth dist.	14833 Jul 24 11:43	11° O 45'33	1.43916 AU		14834 Jun 12 09:58	17° II 56'51	-0.7m
				morning set	14834 Jun 20 10:02	0° D	
superior conj	14833 Jul 30 19:14	22° O 02'15	-1°52'16	max. Earth dist.	14834 Jun 24 14:46	6° D 25'46	
minimum elong	14833 Jul 31 02:44	22° O 33'17	1°52'18		14834 Jun 24 03:20	25° D 52'51	1.45249 AU
	14833 Aug 04 13:20	0° np			14834 Jul 09 17:58	0° O	
evening rise	14833 Aug 12 08:15	13° np 25'21		superior conj	14834 Jul 10 21:17	1° O 48'21	-2°11'06
asc. node	14833 Aug 15 17:05	19° np 17'19		minimum elong	14834 Jul 11 01:13	2° O 03'59	2°11'55
	14833 Aug 22 02:15	0° u		evening rise	14834 Jul 25 04:31	25° O 03'00	
evening max el	14833 Aug 29 05:14	9° u 29'33	18°02'09		14834 Jul 28 04:10	0° np	
retrograde	14833 Sep 04 17:30	12° u 52'02		asc. node	14834 Jul 28 04:10	0° np	
evening set	14833 Sep 07 06:17	12° u 20'43		evening max el	14834 Aug 02 13:44	8° np 50'53	
inferior conj	14833 Sep 13 19:26	7° u 13'03	1°05'04	retrograde	14834 Aug 12 19:49	23° np 00'25	18°13'01
minimum elong	14833 Sep 13 21:13	7° u 08'33	1°04'28	evening set	14834 Aug 19 04:26	26° np 22'15	
min. Earth dist.	14833 Sep 16 18:45	4° u 13'45	0.61795 AU	inferior conj	14834 Aug 22 01:44	25° np 37'14	
desc. node	14833 Sep 17 10:17	3° u 36'52		minimum elong	14834 Aug 28 02:00	20° np 12'36	2°01'07
morning rise	14833 Sep 20 09:34	1° u 10'26		min. Earth dist.	14834 Aug 28 04:25	20° np 05'46	2°00'08
	14833 Sep 22 08:50	30° R np		morning rise	14834 Aug 30 13:24	17° np 24'56	0.63969 AU
direct	14833 Sep 27 01:44	28° np 50'57		desc. node	14834 Sep 03 05:22	13° np 54'37	
	14833 Oct 02 01:22	0° u		direct	14834 Sep 04 07:49	13° np 07'09	
morning max el	14833 Oct 11 05:25	6° u 48'23	27°58'55	morning max el	14834 Sep 09 19:47	11° np 20'57	
	14833 Oct 28 20:53	0° ml			14834 Sep 23 15:15	19° np 20'32	27°37'43
asc. node	14833 Nov 11 18:58	24° ml 56'00			14834 Oct 02 17:15	0° u	
morning set	14833 Nov 13 22:41	29° ml 18'29		morning set	14834 Oct 21 20:35	0° ml	
	14833 Nov 14 06:44	0° x		asc. node	14834 Oct 28 15:24	12° ml 52'49	
max. Earth dist.	14833 Nov 19 10:55	11° x 02'28	1.31540 AU	max. Earth dist.	14834 Oct 29 15:43	14° ml 54'34	
					14834 Nov 02 09:41	22° ml 38'22	1.32519 AU
superior conj	14833 Nov 21 08:09	15° x 11'18	1°19'03	superior conj	14834 Nov 05 14:27	29° ml 28'14	1°01'09
minimum elong	14833 Nov 21 06:02	14° x 59'32	1°19'44	minimum elong	14834 Nov 05 12:08	29° ml 15'45	1°01'36
evening rise	14833 Nov 28 01:27	0° Z 00'14			14834 Nov 05 20:19	0° x	
	14833 Nov 28 01:24	0° Z		evening rise	14834 Nov 12 12:25	14° x 29'44	
desc. node	14833 Dec 14 07:36	0° \approx 01'37			14834 Nov 20 04:09	0° Z	
	14833 Dec 14 07:10	0° \approx		desc. node	14834 Nov 20 04:09	0° Z	
evening max el	14833 Dec 23 20:11	11° \approx 36'45	24°46'21	evening max el	14834 Dec 01 04:39	17° Z 09'56	
retrograde	14834 Jan 06 13:59	18° \approx 28'42		retrograde	14834 Dec 05 05:43	21° Z 36'49	23°04'20
evening set	14834 Jan 12 00:22	17° \approx 23'20		evening set	14834 Dec 18 10:20	28° Z 09'30	
min. Earth dist.	14834 Jan 17 08:03	14° \approx 36'38	0.56193 AU	min. Earth dist.	14834 Dec 22 14:35	27° Z 31'34	
inferior conj	14834 Jan 19 19:04	13° \approx 03'21	-5°15'05	inferior conj	14834 Dec 29 15:19	24° Z 15'47	0.54899 AU
minimum elong	14834 Jan 20 03:34	12° \approx 49'53	5°12'31	minimum elong	14834 Dec 30 21:34	23° Z 32'25	-5°57'47
morning rise	14834 Jan 28 08:58	8° \approx 58'22		morning rise	14834 Dec 30 23:59	23° Z 28'57	5°56'41
direct	14834 Jan 30 15:08	8° \approx 44'21		direct	14835 Jan 08 10:51	19° Z 42'41	
asc. node	14834 Feb 07 17:37	11° \approx 59'50		morning max el	14835 Jan 11 08:40	19° Z 22'48	
					14835 Jan 22 16:51	24° Z 49'27	20°49'23

asc. node	14835 Jan 25 14:59	27°  58'15		direct	14835 Dec 22 16:23	29°  08'39	
	14835 Jan 27 05:45	0° 			14835 Dec 27 09:55	0° 	
morning set	14835 Feb 10 21:13	25°  56'26		morning max el	14836 Jan 04 10:26	5°  18'20	22°29'02
	14835 Feb 12 20:03	0° 		asc. node	14836 Jan 12 12:15	15°  08'26	
					14836 Jan 21 02:45	0° 	
superior conj	14835 Feb 18 07:25	11°  21'58	1°09'11	morning set	14836 Jan 26 08:10	10°  41'32	
minimum elong	14835 Feb 18 10:01	11°  35'15	1°09'15				
max. Earth dist.	14835 Feb 23 10:19	21°  35'51	1.35761 AU	superior conj	14836 Feb 02 08:30	25°  42'43	1°25'09
evening rise	14835 Feb 27 08:12	29°  01'20		minimum elong	14836 Feb 02 10:33	25°  53'35	1°25'36
desc. node	14835 Feb 27 05:28	28°  48'39			14836 Feb 04 09:18	0° 	
	14835 Feb 27 20:55	0° 		max. Earth dist.	14836 Feb 06 00:59	3°  25'48	1.33900 AU
	14835 Mar 18 04:40	0° 		evening rise	14836 Feb 10 12:09	12°  22'00	
evening max el	14835 Apr 03 17:55	20°  31'46	26°13'25	desc. node	14836 Feb 14 02:00	19°  09'01	
retrograde	14835 Apr 16 13:46	27°  51'29			14836 Feb 20 05:19	0° 	
evening set	14835 Apr 22 19:04	25°  20'00			14836 Mar 12 07:49	0° 	
asc. node	14835 Apr 23 11:33	24°  44'15		evening max el	14836 Mar 16 07:36	4°  11'05	27°05'12
min. Earth dist.	14835 Apr 26 22:09	21°  00'27	0.67051 AU	retrograde	14836 Mar 29 17:59	11°  40'27	
inferior conj	14835 Apr 28 16:07	18°  51'06	1°32'31	evening set	14836 Apr 05 07:54	9°  08'51	
minimum elong	14835 Apr 28 14:09	18°  57'10	1°31'10	asc. node	14836 Apr 09 08:56	5°  14'19	
morning rise	14835 May 04 10:05	13°  06'47		min. Earth dist.	14836 Apr 09 06:01	5°  22'24	0.65519 AU
direct	14835 May 07 14:53	12°  08'51		inferior conj	14836 Apr 11 12:23	2°  48'07	0°40'05
morning max el	14835 May 14 04:09	15°  38'28	18°34'18	minimum elong	14836 Apr 11 11:20	2°  51'07	0°39'14
	14835 May 25 01:03	0° 			14836 Apr 14 02:36	30°  R 	
desc. node	14835 May 26 07:20	1°  II55'19		morning rise	14836 Apr 17 16:22	27°  Y16'11	
morning set	14835 Jun 04 07:55	15°  II59'17		direct	14836 Apr 20 11:25	26°  Y34'08	
	14835 Jun 13 06:40	0° 			14836 Apr 26 22:34	0° 	
				morning max el	14836 Apr 26 19:15	29°  Y51'52	18°02'06
superior conj	14835 Jun 20 07:48	10°  59'44	-2°11'32	desc. node	14836 May 12 04:07	21°  S59'25	
minimum elong	14835 Jun 20 04:05	10°  54'51	2°12'27	morning set	14836 May 15 03:46	26°  S51'14	
max. Earth dist.	14835 Jun 19 22:16	10°  52'31	1.45882 AU		14836 May 17 02:09	0° 	
	14835 Jul 02 10:38	0° 					
evening rise	14835 Jul 06 00:02	5°  03'75		superior conj	14836 May 29 18:46	20°  II19'04	-1°52'15
greatest brilliancy	14835 Jul 13 22:04	18°  09'16	-0.8m	minimum elong	14836 May 29 10:06	19°  II44'55	1°52'31
asc. node	14835 Jul 20 10:26	28°  02'46		max. Earth dist.	14836 Jun 01 18:16	24°  II59'35	1.45770 AU
	14835 Jul 21 19:34	0° 			14836 Jun 04 23:18	0° 	
evening max el	14835 Jul 27 08:17	6°  04'33	18°41'33	evening rise	14836 Jun 14 21:17	15°  52'01	
retrograde	14835 Aug 02 22:11	10°  07'49			14836 Jun 24 11:21	0° 	
evening set	14835 Aug 06 04:30	9°  06'59		greatest brilliancy	14836 Jun 27 21:43	5°  08'11	-0.7m
inferior conj	14835 Aug 11 19:32	3°  07'30	2°38'44	asc. node	14836 Jul 06 07:14	16°  04'57	
minimum elong	14835 Aug 11 21:36	3°  07'31	2°37'46	evening max el	14836 Jul 09 16:24	20°  03'29	19°26'48
min. Earth dist.	14835 Aug 13 17:03	1°  06'54	0.65860 AU	retrograde	14836 Jul 16 19:43	24°  03'32	
	14835 Aug 14 19:08	30°  R 		evening set	14836 Jul 20 11:40	23°  01'43	
morning rise	14835 Aug 17 13:41	27°  01'24		inferior conj	14836 Jul 25 20:47	17°  02'14	3°00'51
desc. node	14835 Aug 22 05:19	24°  04'43		minimum elong	14836 Jul 25 22:03	17°  01'34	2°59'57
direct	14835 Aug 23 21:52	24°  03'35		min. Earth dist.	14836 Jul 27 04:03	15°  03'45	0.67356 AU
	14835 Sep 03 14:48	0° 		morning rise	14836 Jul 31 07:53	10°  05'22	
morning max el	14835 Sep 06 02:34	2°  02'21	26°45'32	direct	14836 Aug 06 06:38	8°  02'15	
	14835 Sep 26 22:17	0° 		desc. node	14836 Aug 08 02:46	8°  03'41	
morning set	14835 Oct 11 21:04	25°  05'55		morning max el	14836 Aug 18 13:31	15°  04'27	25°31'22
	14835 Oct 13 23:52	0° 			14836 Aug 30 08:39	0° 	
max. Earth dist.	14835 Oct 15 22:46	3°  05'51	1.34040 AU		14836 Sep 18 19:19	0° 	
asc. node	14835 Oct 16 12:22	4°  05'59		morning set	14836 Sep 23 12:06	8°  05'12	
				max. Earth dist.	14836 Sep 27 02:20	14°  05'52	1.36043 AU
superior conj	14835 Oct 20 14:49	13°  05'25	0°37'26	asc. node	14836 Oct 02 08:58	25°  08'28	
minimum elong	14835 Oct 20 12:59	13°  05'15	0°37'42				
evening rise	14835 Oct 27 22:17	28°  05'54		superior conj	14836 Oct 03 06:33	26°  05'56	0°08'17
	14835 Oct 28 10:50	0° 		minimum elong	14836 Oct 03 06:02	26°  05'53	0°08'32
	14835 Nov 15 04:54	0° 		behind sun begin	14836 Oct 03 00:40	26°  05'26	
evening max el	14835 Nov 16 19:55	1°  04'21	21°25'26	behind sun end	14836 Oct 03 11:24	27°  05'20	
desc. node	14835 Nov 18 01:48	2°  05'52			14836 Oct 04 19:04	0° 	
retrograde	14835 Nov 28 21:36	7°  04'10		evening rise	14836 Oct 11 05:01	13°  08'46	
evening set	14835 Dec 01 18:19	7°  02'22			14836 Oct 19 23:05	0° 	
inferior conj	14835 Dec 10 13:10	3°  03'20	-5°43'46	evening max el	14836 Oct 28 22:52	12°  05'25	20°02'46
minimum elong	14835 Dec 10 06:34	3°  03'39	5°41'53	desc. node	14836 Nov 03 23:04	16°  07'42	
min. Earth dist.	14835 Dec 10 21:05	3° 03'19	0.54437 AU	retrograde	14836 Nov 08 10:07	17° 07'38	
	14835 Dec 17 18:41	30° R		evening set	14836 Nov 10 11:43	17° 07'27	
morning rise	14835 Dec 18 19:23	29° 07'41		inferior conj	14836 Nov 19 08:03	13° 07'29	-4°32'29

minimum elong	14836 Nov 18 21:58	13° ♊ 44'33	4°28'40	min. Earth dist.	14837 Nov 02 15:27	22° ♍ 02'40	0.56275 AU
min. Earth dist.	14836 Nov 21 04:11	12° ♊ 22'53	0.54929 AU	morning rise	14837 Nov 07 11:14	19° ♍ 18'46	
morning rise	14836 Nov 27 07:08	9° ♊ 21'25		direct	14837 Nov 13 03:41	18° ♍ 03'12	
direct	14836 Dec 02 03:59	8° ♊ 29'45		morning max el	14837 Nov 27 06:40	25° ♍ 16'38	26°00'10
morning max el	14836 Dec 15 19:52	15° ♊ 15'09	24°18'36		14837 Dec 01 16:30	0° ♊	
	14836 Dec 27 10:03	0° ♊		asc. node	14837 Dec 16 06:31	21° ♊ 58'59	
asc. node	14836 Dec 29 09:26	3° ♊ 13'12			14837 Dec 20 11:18	0° ♊	
morning set	14837 Jan 09 20:07	25° ♊ 25'02		morning set	14837 Dec 25 07:19	10° ♊ 02'28	
	14837 Jan 11 22:52	0° ♊					
superior conj	14837 Jan 16 15:13	10° ♋ 16'09	1°34'40	superior conj	14838 Jan 01 01:21	24° ♊ 56'05	1°37'58
minimum elong	14837 Jan 16 16:20	10° ♋ 22'15	1°35'26	minimum elong	14838 Jan 01 01:23	24° ♊ 56'20	1°38'55
max. Earth dist.	14837 Jan 18 23:29	15° ♋ 21'26	1.32469 AU	max. Earth dist.	14838 Jan 02 04:18	27° ♋ 25'46	1.31532 AU
evening rise	14837 Jan 24 03:10	26° ♋ 08'42		evening rise	14838 Jan 03 08:14	0° ♋	
	14837 Jan 26 01:27	0° ♋		desc. node	14838 Jan 08 02:28	10° ♋ 14'37	
desc. node	14837 Jan 30 22:36	9° ♋ 15'27			14838 Jan 17 19:18	29° ♋ 02'04	
	14837 Feb 12 14:32	0° ♋		evening max el	14838 Jan 18 08:26	0° ♋	
evening max el	14837 Feb 26 20:13	17° ♋ 27'32	27°32'33		14838 Feb 09 05:25	0° ♋ 07'36	27°28'58
retrograde	14837 Mar 12 15:12	24° ♋ 56'15		retrograde	14838 Feb 09 02:14	0° ♋	
evening set	14837 Mar 19 10:40	22° ♋ 31'20		evening set	14838 Feb 23 04:17	7° ♋ 29'27	
min. Earth dist.	14837 Mar 23 05:36	19° ♋ 14'34	0.63641 AU	min. Earth dist.	14838 Mar 02 00:37	5° ♋ 18'31	
inferior conj	14837 Mar 25 23:15	16° ♋ 26'36	-0°24'58		14838 Mar 05 19:15	2° ♋ 25'35	0.61515 AU
minimum elong	14837 Mar 26 00:02	16° ♋ 24'34	0°24'49	inferior conj	14838 Mar 08 11:42	30° ♋	
asc. node	14837 Mar 27 06:22	15° ♋ 08'01		minimum elong	14838 Mar 08 21:25	29° ♋ 37'49	-1°42'11
morning rise	14837 Apr 01 15:48	11° ♋ 09'26		asc. node	14838 Mar 09 01:03	29° ♋ 29'34	1°40'36
direct	14837 Apr 04 02:28	10° ♋ 39'59		morning rise	14838 Mar 14 03:49	25° ♋ 31'58	
morning max el	14837 Apr 10 12:47	13° ♋ 57'22	17°47'10	direct	14838 Mar 16 04:32	24° ♋ 38'34	
	14837 Apr 21 19:11	0° ♋		morning max el	14838 Mar 18 08:36	24° ♋ 18'11	
morning set	14837 Apr 27 02:26	8° ♋ 59'49			14838 Mar 25 05:42	27° ♋ 46'06	17°50'12
desc. node	14837 Apr 29 00:48	12° ♋ 17'28		morning set	14838 Mar 27 06:34	0° ♋	
					14838 Apr 09 22:27	22° ♋ 08'02	
superior conj	14837 May 09 21:43	0° ♌ 25'12	-1°18'57	desc. node	14838 Apr 14 08:07	0° ♋	
minimum elong	14837 May 09 14:07	29° ♋ 54'17	1°18'49		14838 Apr 15 21:26	2° ♋ 44'51	
	14837 May 09 15:32	0° ♌		superior conj	14838 Apr 21 00:08	11° ♋ 36'42	-0°40'10
max. Earth dist.	14837 May 15 13:20	9° ♌ 29'39	1.44929 AU	minimum elong	14838 Apr 20 20:24	11° ♋ 20'49	0°40'10
evening rise	14837 May 25 08:11	24° ♌ 43'51		max. Earth dist.	14838 Apr 28 05:10	23° ♋ 37'02	1.43442 AU
	14837 May 28 19:12	0° ♌			14838 May 02 04:31	0° ♌	
	14837 Jun 18 20:09	0° ♌		evening rise	14838 May 05 01:11	4° ♌ 30'12	
evening max el	14837 Jun 22 18:46	4° ♌ 25'16	20°27'05		14838 May 22 03:49	0° ♌	
asc. node	14837 Jun 23 04:08	4° ♌ 48'21		evening max el	14838 Jun 05 15:17	18° ♌ 16'52	21°39'17
retrograde	14837 Jun 30 18:38	9° ♌ 00'02		asc. node	14838 Jun 10 01:08	21° ♌ 58'19	
evening set	14837 Jul 04 20:53	7° ♌ 24'36		retrograde	14838 Jun 14 17:07	23° ♌ 34'46	
inferior conj	14837 Jul 10 03:04	1° ♌ 19'36	3°09'54	evening set	14838 Jun 19 06:17	21° ♌ 42'31	
minimum elong	14837 Jul 10 03:21	1° ♌ 18'36	3°08'59	inferior conj	14838 Jun 24 12:07	15° ♌ 26'47	3°07'32
min. Earth dist.	14837 Jul 10 20:22	0° ♌ 20'14	0.68392 AU	minimum elong	14838 Jun 24 11:27	15° ♌ 29'06	3°06'30
	14837 Jul 11 02:18	30° ♌		min. Earth dist.	14838 Jun 24 16:00	15° ♌ 13'13	0.68947 AU
morning rise	14837 Jul 15 09:31	24° ♌ 57'34		morning rise	14838 Jun 29 16:26	9° ♌ 10'27	
direct	14837 Jul 20 20:46	22° ♌ 33'42		direct	14838 Jul 04 15:14	7° ♌ 03'00	
desc. node	14837 Jul 26 00:08	24° ♌ 14'37		desc. node	14838 Jul 12 21:27	11° ♌ 20'09	
morning max el	14837 Aug 01 00:02	29° ♌ 13'15	24°05'02	morning max el	14838 Jul 14 11:54	12° ♌ 52'13	22°35'44
	14837 Aug 01 18:12	0° ♌			14838 Jul 28 05:33	0° ♌	
	14837 Aug 24 03:05	0° ♌		morning set	14838 Aug 17 05:14	0° ♌ 20'34	
morning set	14837 Sep 05 08:12	19° ♌ 49'04			14838 Aug 17 00:11	0° ♌	
max. Earth dist.	14837 Sep 09 01:01	26° ♌ 16'57	1.38357 AU	max. Earth dist.	14838 Aug 22 01:03	8° ♌ 21'25	1.40728 AU
	14837 Sep 11 02:42	0° ♌					
superior conj	14837 Sep 16 10:10	9° ♍ 52'29	-0°25'19	superior conj	14838 Aug 29 21:25	22° ♌ 03'43	-1°01'13
minimum elong	14837 Sep 16 11:56	10° ♍ 00'54	0°24'55	minimum elong	14838 Aug 30 02:10	22° ♌ 25'05	1°00'42
asc. node	14837 Sep 19 05:33	15° ♍ 16'43			14838 Sep 03 05:34	0° ♍	
evening rise	14837 Sep 25 06:04	27° ♍ 07'35		asc. node	14838 Sep 06 02:07	5° ♍ 20'25	
	14837 Sep 26 17:08	0° ♍		evening rise	14838 Sep 08 22:13	10° ♍ 41'27	
evening max el	14837 Oct 11 16:04	23° ♍ 59'23	19°01'47		14838 Sep 19 20:56	0° ♍	
retrograde	14837 Oct 20 12:58	28° ♍ 26'59		evening max el	14838 Sep 24 20:28	6° ♍ 17'53	18°22'42
desc. node	14837 Oct 21 20:26	28° ♍ 21'29		retrograde	14838 Oct 02 11:12	10° ♍ 09'51	
evening set	14837 Oct 22 09:57	28° ♍ 15'51		evening set	14838 Oct 04 11:55	9° ♍ 54'04	
inferior conj	14837 Oct 30 19:03	24° ♍ 00'27	-2°49'41	desc. node	14838 Oct 08 17:53	7° ♍ 52'01	
minimum elong	14837 Oct 30 11:58	24° ♍ 12'42	2°46'15	inferior conj	14838 Oct 12 03:40	5° ♍ 17'41	-1°05'15
				minimum elong	14838 Oct 12 01:10	5° ♍ 22'44	1°03'45

min. Earth dist.	14838 Oct 15 09:51	2° \mathbb{M} 40'22	0.58225 AU	inferior conj	14839 Sep 24 09:03	17° \mathbb{Q} 20'36	0°23'25
morning rise	14838 Oct 19 10:56	29° \mathbb{Q} 58'37		minimum elong	14839 Sep 24 09:48	17° \mathbb{Q} 18'51	0°23'20
	14838 Oct 19 09:54	30° \mathbb{R} \mathbb{Q}		desc. node	14839 Sep 25 15:21	16° \mathbb{Q} 09'04	
direct	14838 Oct 25 17:24	28° \mathbb{Q} 16'11		min. Earth dist.	14839 Sep 27 13:18	14° \mathbb{Q} 22'53	0.60480 AU
	14838 Nov 01 05:43	0° \mathbb{M}		morning rise	14839 Oct 01 05:36	11° \mathbb{Q} 30'48	
morning max el	14838 Nov 09 00:42	5° \mathbb{M} 52'34	27°15'43	direct	14839 Oct 07 20:06	9° \mathbb{Q} 22'55	
	14838 Nov 26 21:55	0° \mathbb{J}		morning max el	14839 Oct 22 02:32	17° \mathbb{Q} 15'46	27°54'21
asc. node	14838 Dec 03 03:31	11° \mathbb{J} 14'39			14839 Nov 01 16:55	0° \mathbb{M}	
morning set	14838 Dec 09 15:58	24° \mathbb{J} 28'46			14839 Nov 19 13:53	0° \mathbb{J}	
	14838 Dec 12 05:09	0° \mathbb{S}		asc. node	14839 Nov 20 00:26	0° \mathbb{J} 51'59	
				morning set	14839 Nov 23 20:12	8° \mathbb{J} 39'13	
superior conj	14838 Dec 16 12:51	9° \mathbb{S} 36'29	1°35'17	max. Earth dist.	14839 Nov 29 19:22	21° \mathbb{J} 33'46	1.31222 AU
minimum elong	14838 Dec 16 11:52	9° \mathbb{S} 31'00	1°36'15				
max. Earth dist.	14838 Dec 16 12:10	9° \mathbb{S} 32'41	1.31110 AU	superior conj	14839 Nov 30 23:53	24° \mathbb{J} 12'12	1°26'41
evening rise	14838 Dec 23 07:36	24° \mathbb{S} 33'23		minimum elong	14839 Nov 30 22:04	24° \mathbb{J} 02'09	1°27'30
	14838 Dec 25 21:49	0° \mathbb{W}			14839 Dec 03 14:16	0° \mathbb{S}	
desc. node	14839 Jan 04 16:06	18° \mathbb{W} 20'36		evening rise	14839 Dec 07 16:28	9° \mathbb{S} 00'05	
	14839 Jan 12 05:03	0° \mathbb{H}			14839 Dec 18 07:44	0° \mathbb{W}	
evening max el	14839 Jan 22 08:24	11° \mathbb{H} 59'27	26°50'43	desc. node	14839 Dec 22 12:59	7° \mathbb{W} 00'36	
retrograde	14839 Feb 05 08:09	19° \mathbb{H} 11'48		evening max el	14840 Jan 04 03:12	22° \mathbb{W} 58'31	25°39'15
evening set	14839 Feb 11 22:27	17° \mathbb{H} 22'11		retrograde	14840 Jan 18 01:01	29° \mathbb{W} 59'18	
min. Earth dist.	14839 Feb 15 22:20	14° \mathbb{H} 43'20	0.59291 AU	evening set	14840 Jan 24 00:14	28° \mathbb{W} 37'09	
inferior conj	14839 Feb 19 03:11	12° \mathbb{H} 11'55	-3°08'11	min. Earth dist.	14840 Jan 28 15:57	25° \mathbb{W} 58'01	0.57206 AU
minimum elong	14839 Feb 19 10:11	11° \mathbb{H} 58'05	3°05'14	inferior conj	14840 Jan 31 13:14	23° \mathbb{W} 59'34	-4°33'28
morning rise	14839 Feb 27 01:16	7° \mathbb{H} 33'29		minimum elong	14840 Jan 31 22:21	23° \mathbb{W} 43'57	4°30'15
direct	14839 Mar 01 01:26	7° \mathbb{H} 18'41		morning rise	14840 Feb 08 23:19	19° \mathbb{W} 42'52	
asc. node	14839 Mar 01 01:16	7° \mathbb{H} 18'41		direct	14840 Feb 11 00:42	19° \mathbb{W} 29'55	
morning max el	14839 Mar 08 18:27	11° \mathbb{H} 08'08	18°12'22	asc. node	14840 Feb 15 22:43	20° \mathbb{W} 48'45	
	14839 Mar 21 05:11	0° \mathbb{Y}		morning max el	14840 Feb 19 22:56	23° \mathbb{W} 51'36	18°55'20
morning set	14839 Mar 24 09:57	5° \mathbb{Y} 58'07			14840 Feb 24 23:20	0° \mathbb{H}	
desc. node	14839 Apr 02 18:01	23° \mathbb{Y} 17'33		morning set	14840 Mar 07 08:05	20° \mathbb{H} 15'24	
					14840 Mar 12 07:11	0° \mathbb{Y}	
superior conj	14839 Apr 03 01:24	23° \mathbb{Y} 50'50	-0°02'31				
minimum elong	14839 Apr 03 01:10	23° \mathbb{Y} 49'49	0°02'47	superior conj	14840 Mar 15 21:20	6° \mathbb{Y} 54'52	0°30'24
behind sun begin	14839 Apr 02 17:43	23° \mathbb{Y} 16'15		minimum elong	14840 Mar 15 23:12	7° \mathbb{Y} 03'44	0°30'04
behind sun end	14839 Apr 03 08:37	24° \mathbb{Y} 23'18		desc. node	14840 Mar 19 14:33	13° \mathbb{Y} 51'31	
	14839 Apr 06 12:37	0° \mathbb{B}		max. Earth dist.	14840 Mar 22 22:48	19° \mathbb{Y} 53'28	1.39228 AU
max. Earth dist.	14839 Apr 10 16:04	7° \mathbb{B} 07'13	1.41465 AU	evening rise	14840 Mar 26 19:33	26° \mathbb{Y} 36'34	
evening rise	14839 Apr 15 11:46	15° \mathbb{B} 05'47			14840 Mar 28 19:47	0° \mathbb{B}	
	14839 Apr 25 00:25	0° \mathbb{I}			14840 Apr 17 14:23	0° \mathbb{I}	
	14839 May 17 06:01	0° \mathbb{G}		evening max el	14840 Apr 30 21:14	16° \mathbb{I} 02'46	24°20'01
evening max el	14839 May 19 07:22	2° \mathbb{G} 09'15	22°58'53	retrograde	14840 May 12 06:57	22° \mathbb{I} 43'36	
asc. node	14839 May 27 22:13	7° \mathbb{G} 59'35		asc. node	14840 May 13 19:25	22° \mathbb{I} 33'34	
retrograde	14839 May 29 13:41	8° \mathbb{G} 11'35		evening set	14840 May 17 18:59	20° \mathbb{I} 23'57	
evening set	14839 Jun 03 14:12	6° \mathbb{G} 04'15		min. Earth dist.	14840 May 22 08:51	15° \mathbb{I} 07'51	0.68610 AU
inferior conj	14839 Jun 08 21:58	29° \mathbb{I} 39'58	2°54'37	inferior conj	14840 May 23 06:40	13° \mathbb{I} 54'20	2°31'18
minimum elong	14839 Jun 08 20:29	29° \mathbb{I} 45'06	2°53'23	minimum elong	14840 May 23 04:38	14° \mathbb{I} 01'09	2°29'54
min. Earth dist.	14839 Jun 08 12:53	0° \mathbb{G} 11'28	0.69017 AU	morning rise	14840 May 28 14:24	7° \mathbb{I} 53'38	
	14839 Jun 08 16:12	30° \mathbb{R} \mathbb{I}		direct	14840 Jun 01 12:37	6° \mathbb{I} 25'37	
morning rise	14839 Jun 14 02:41	23° \mathbb{I} 30'50		morning max el	14840 Jun 09 02:34	10° \mathbb{I} 40'05	19°58'39
direct	14839 Jun 18 12:58	21° \mathbb{I} 42'40		desc. node	14840 Jun 15 15:44	18° \mathbb{I} 23'53	
morning max el	14839 Jun 27 03:59	26° \mathbb{I} 41'03	21°11'38		14840 Jun 23 21:17	0° \mathbb{G}	
desc. node	14839 Jun 29 18:39	29° \mathbb{I} 29'06		morning set	14840 Jul 06 06:41	18° \mathbb{G} 40'31	
	14839 Jun 30 05:23	0° \mathbb{G}			14840 Jul 13 13:44	0° \mathbb{Q}	
	14839 Jul 21 16:58	0° \mathbb{Q}		max. Earth dist.	14840 Jul 16 18:12	5° \mathbb{Q} 01'46	1.44564 AU
morning set	14839 Jul 28 02:16	9° \mathbb{Q} 50'59					
max. Earth dist.	14839 Aug 04 06:28	21° \mathbb{Q} 18'20	1.42877 AU	superior conj	14840 Jul 22 03:03	13° \mathbb{Q} 38'37	-2°02'09
	14839 Aug 09 12:33	0° \mathbb{P}		minimum elong	14840 Jul 22 09:43	14° \mathbb{Q} 05'43	2°02'31
					14840 Jul 31 23:50	0° \mathbb{P}	
superior conj	14839 Aug 11 12:01	3° \mathbb{P} 20'53	-1°35'31	evening rise	14840 Aug 04 10:17	5° \mathbb{P} 50'16	
minimum elong	14839 Aug 11 19:16	3° \mathbb{P} 51'45	1°35'12	asc. node	14840 Aug 09 19:19	14° \mathbb{P} 59'01	
evening rise	14839 Aug 23 01:20	23° \mathbb{P} 40'06			14840 Aug 19 15:37	0° \mathbb{Q}	
asc. node	14839 Aug 23 22:43	25° \mathbb{P} 16'07		evening max el	14840 Aug 21 22:24	2° \mathbb{Q} 32'46	18°04'34
	14839 Aug 26 14:12	0° \mathbb{Q}		retrograde	14840 Aug 28 07:58	5° \mathbb{Q} 53'08	
evening max el	14839 Sep 08 07:55	19° \mathbb{Q} 12'25	18°04'05	evening set	14840 Aug 31 00:18	5° \mathbb{Q} 16'23	
retrograde	14839 Sep 15 02:55	22° \mathbb{Q} 41'42		inferior conj	14840 Sep 06 07:35	0° \mathbb{Q} 01'31	1°31'13
evening set	14839 Sep 17 10:52	22° \mathbb{Q} 17'11		minimum elong	14840 Sep 06 09:47	29° \mathbb{P} 55'40	1°30'24

	14840 Sep 06 08:09	30° \mathbb{R} \mathbb{M}		inferior conj	14841 Aug 20 19:13	13° \mathbb{M} 12'23	2°19'06
min. Earth dist.	14840 Sep 09 02:22	27° \mathbb{M} 04'43	0.62753 AU	minimum elong	14841 Aug 20 21:34	13° \mathbb{M} 05'26	2°18'07
desc. node	14840 Sep 11 12:51	24° \mathbb{M} 46'59		min. Earth dist.	14841 Aug 23 00:50	10° \mathbb{M} 34'47	0.64825 AU
morning rise	14840 Sep 12 17:01	23° \mathbb{M} 51'15		morning rise	14841 Aug 26 18:28	6° \mathbb{M} 50'55	
direct	14840 Sep 19 09:16	21° \mathbb{M} 24'17		desc. node	14841 Aug 29 10:21	5° \mathbb{M} 07'47	
morning max el	14840 Oct 03 10:00	29° \mathbb{M} 24'20	27°54'00	direct	14841 Sep 02 06:51	4° \mathbb{M} 13'54	
	14840 Oct 04 00:07	0° \mathbb{L}		morning max el	14841 Sep 15 20:30	12° \mathbb{M} 09'41	27°18'44
	14840 Oct 25 16:07	0° \mathbb{M}			14841 Sep 30 03:06	0° \mathbb{L}	
asc. node	14840 Nov 05 21:15	20° \mathbb{M} 44'27			14841 Oct 18 05:11	0° \mathbb{M}	
morning set	14840 Nov 06 17:51	22° \mathbb{M} 28'34		morning set	14841 Oct 21 06:14	5° \mathbb{M} 49'53	
	14840 Nov 10 08:41	0° \mathbb{X}		asc. node	14841 Oct 23 17:56	10° \mathbb{M} 46'18	
max. Earth dist.	14840 Nov 11 22:06	3° \mathbb{X} 20'14	1.31885 AU	max. Earth dist.	14841 Oct 25 16:59	14° \mathbb{M} 46'13	1.33106 AU
superior conj	14840 Nov 14 08:31	8° \mathbb{X} 38'00	1°12'11	superior conj	14841 Oct 29 12:36	22° \mathbb{M} 47'20	0°51'48
minimum elong	14840 Nov 14 06:15	8° \mathbb{X} 25'33	1°12'46	minimum elong	14841 Oct 29 10:24	22° \mathbb{M} 35'36	0°52'09
evening rise	14840 Nov 21 03:13	23° \mathbb{X} 30'13			14841 Nov 01 21:04	0° \mathbb{X}	
	14840 Nov 24 04:51	0° \mathbb{Z}		evening rise	14841 Nov 05 13:58	7° \mathbb{X} 58'17	
desc. node	14840 Dec 08 09:58	24° \mathbb{Z} 47'58			14841 Nov 17 00:25	0° \mathbb{Z}	
	14840 Dec 12 12:58	0° \mathbb{A}		desc. node	14841 Nov 25 07:04	11° \mathbb{Z} 22'39	
evening max el	14840 Dec 15 14:49	3° \mathbb{A} 14'07	24°03'50	evening max el	14841 Nov 27 01:13	13° \mathbb{Z} 11'56	22°20'55
retrograde	14840 Dec 29 04:42	9° \mathbb{A} 58'58		retrograde	14841 Dec 09 19:44	19° \mathbb{Z} 31'26	
evening set	14841 Jan 03 02:55	9° \mathbb{A} 06'10		evening set	14841 Dec 13 10:08	19° \mathbb{Z} 02'57	
min. Earth dist.	14841 Jan 09 02:20	6° \mathbb{A} 09'16	0.55548 AU	inferior conj	14841 Dec 21 22:50	15° \mathbb{Z} 09'04	-5°59'27
inferior conj	14841 Jan 11 02:28	4° \mathbb{A} 56'43	-5°39'00	minimum elong	14841 Dec 21 21:16	15° \mathbb{Z} 11'16	5°58'24
minimum elong	14841 Jan 11 09:09	4° \mathbb{A} 46'36	5°37'09	min. Earth dist.	14841 Dec 21 08:20	15° \mathbb{Z} 29'25	0.54594 AU
morning rise	14841 Jan 19 17:10	0° \mathbb{A} 59'00		morning rise	14841 Dec 30 09:30	11° \mathbb{Z} 21'51	
direct	14841 Jan 22 04:41	0° \mathbb{A} 43'15		direct	14842 Jan 02 16:58	10° \mathbb{Z} 57'13	
morning max el	14841 Feb 01 15:02	5° \mathbb{A} 45'22	20°01'02	morning max el	14842 Jan 14 16:14	16° \mathbb{Z} 42'23	21°29'38
asc. node	14841 Feb 01 20:07	5° \mathbb{A} 57'46		asc. node	14842 Jan 19 17:26	22° \mathbb{Z} 38'30	
	14841 Feb 17 03:43	0° \mathbb{H}			14842 Jan 24 18:03	0° \mathbb{A}	
morning set	14841 Feb 19 13:16	4° \mathbb{H} 49'53		morning set	14842 Feb 03 22:45	19° \mathbb{A} 32'42	
					14842 Feb 08 21:36	0° \mathbb{H}	
superior conj	14841 Feb 27 07:33	20° \mathbb{H} 37'02	0°56'57	superior conj	14842 Feb 11 04:06	4° \mathbb{H} 45'47	1°16'46
minimum elong	14841 Feb 27 10:10	20° \mathbb{H} 50'05	0°56'49	minimum elong	14842 Feb 11 06:32	4° \mathbb{H} 58'26	1°16'59
	14841 Mar 04 02:57	0° \mathbb{Y}		max. Earth dist.	14842 Feb 15 16:23	13° \mathbb{H} 58'09	1.34927 AU
max. Earth dist.	14841 Mar 05 05:22	2° \mathbb{Y} 04'51	1.36979 AU	evening rise	14842 Feb 19 19:14	21° \mathbb{H} 58'18	
desc. node	14841 Mar 06 11:05	4° \mathbb{Y} 23'22		desc. node	14842 Feb 21 07:37	24° \mathbb{H} 48'43	
evening rise	14841 Mar 08 23:11	8° \mathbb{Y} 57'31			14842 Feb 24 04:04	0° \mathbb{Y}	
	14841 Mar 21 13:46	0° \mathbb{B}			14842 Mar 15 08:50	0° \mathbb{B}	
evening max el	14841 Apr 13 10:50	29° \mathbb{B} 56'16	25°35'31	evening max el	14842 Mar 27 00:39	13° \mathbb{B} 42'59	26°38'02
	14841 Apr 13 12:22	0° \mathbb{I}		retrograde	14842 Apr 09 03:08	21° \mathbb{B} 07'18	
retrograde	14841 Apr 25 19:44	7° \mathbb{I} 04'39		evening set	14842 Apr 15 12:28	18° \mathbb{B} 35'05	
asc. node	14841 Apr 30 16:41	5° \mathbb{I} 26'46		asc. node	14842 Apr 17 14:02	16° \mathbb{B} 40'51	
evening set	14841 May 01 19:01	4° \mathbb{I} 36'22		min. Earth dist.	14842 Apr 19 13:21	14° \mathbb{B} 30'01	0.66449 AU
min. Earth dist.	14841 May 06 01:44	29° \mathbb{B} 56'25	0.67748 AU	inferior conj	14842 Apr 21 12:36	12° \mathbb{B} 09'07	1°11'48
	14841 May 06 00:36	30° \mathbb{R} \mathbb{B}		minimum elong	14842 Apr 21 10:55	12° \mathbb{B} 14'09	1°10'37
inferior conj	14841 May 07 12:15	28° \mathbb{B} 05'47	1°57'17	morning rise	14842 Apr 27 10:29	6° \mathbb{B} 29'47	
minimum elong	14841 May 07 10:06	28° \mathbb{B} 12'41	1°55'50	direct	14842 Apr 30 11:07	5° \mathbb{B} 38'48	
morning rise	14841 May 13 01:41	22° \mathbb{B} 14'53		morning max el	14842 May 06 20:54	9° \mathbb{B} 01'32	18°18'33
direct	14841 May 16 12:39	21° \mathbb{B} 06'21		desc. node	14842 May 20 09:33	27° \mathbb{B} 45'04	
morning max el	14841 May 23 08:32	24° \mathbb{B} 48'23	19°00'23		14842 May 21 19:43	0° \mathbb{I}	
	14841 May 27 20:54	0° \mathbb{I}		morning set	14842 May 26 17:11	7° \mathbb{I} 46'55	
desc. node	14841 Jun 02 12:42	7° \mathbb{I} 52'16			14842 Jun 09 19:06	0° \mathbb{G}	
greatest brilliancy	14841 Jun 05 13:06	12° \mathbb{I} 21'17	-0.7m	superior conj	14842 Jun 11 05:25	2° \mathbb{G} 14'05	-2°05'34
morning set	14841 Jun 15 13:22	27° \mathbb{I} 41'51		minimum elong	14842 Jun 10 22:52	1° \mathbb{G} 48'29	2°06'15
	14841 Jun 17 01:05	0° \mathbb{G}		max. Earth dist.	14842 Jun 12 07:45	3° \mathbb{G} 56'48	1.45927 AU
max. Earth dist.	14841 Jun 29 11:27	19° \mathbb{G} 20'04	1.45615 AU	evening rise	14842 Jun 27 05:23	27° \mathbb{G} 11'00	
superior conj	14841 Jul 01 21:00	23° \mathbb{G} 05'47	-2°13'48		14842 Jun 29 00:41	0° \mathbb{O}	
minimum elong	14841 Jul 01 21:52	23° \mathbb{G} 09'12	2°14'45	greatest brilliancy	14842 Jul 07 11:38	13° \mathbb{O} 06'49	-0.8m
	14841 Jul 06 05:56	0° \mathbb{O}		asc. node	14842 Jul 14 12:43	23° \mathbb{O} 24'28	
evening rise	14841 Jul 16 20:10	17° \mathbb{O} 00'52		evening max el	14842 Jul 19 23:22	29° \mathbb{O} 56'55	18°58'50
	14841 Jul 24 20:45	0° \mathbb{M}			14842 Jul 20 00:37	0° \mathbb{M}	
asc. node	14841 Jul 27 15:59	4° \mathbb{M} 23'58		retrograde	14842 Jul 26 17:54	3° \mathbb{M} 40'07	
evening max el	14841 Aug 05 12:29	16° \mathbb{M} 10'02	18°23'04	evening set	14842 Jul 30 04:18	2° \mathbb{M} 31'56	
retrograde	14841 Aug 11 22:07	19° \mathbb{M} 35'09			14842 Aug 02 00:21	30° \mathbb{R} \mathbb{O}	
evening set	14841 Aug 14 23:18	18° \mathbb{M} 43'28					

inferior conj	14842 Aug 04 16:24	26° Ω 46'23	2°49'50	asc. node	14843 Jul 01 09:33	11° Ω 51'15	
minimum elong	14842 Aug 04 18:10	26° Ω 40'43	2°48'54	evening max el	14843 Jul 03 05:01	13° Ω 47'08	19°50'45
min. Earth dist.	14842 Aug 06 07:44	24° Ω 41'07	0.66547 AU	retrograde	14843 Jul 10 16:24	18° Ω 00'40	
morning rise	14842 Aug 10 07:17	20° Ω 20'52		evening set	14843 Jul 14 12:36	16° Ω 35'14	
direct	14842 Aug 16 11:43	17° Ω 42'55		inferior conj	14843 Jul 19 20:06	10° Ω 36'49	3°06'12
desc. node	14842 Aug 16 07:49	17° Ω 43'01		minimum elong	14843 Jul 19 20:58	10° Ω 33'54	3°05'18
morning max el	14842 Aug 29 07:56	25° Ω 21'08	26°16'14	min. Earth dist.	14843 Jul 20 21:18	9° Ω 12'00	0.67844 AU
	14842 Sep 02 13:48	0° \mathbb{M}		morning rise	14843 Jul 25 04:54	4° Ω 12'18	
	14842 Sep 23 14:57	0° $\underline{\Omega}$		direct	14843 Jul 30 22:47	1° Ω 41'22	
morning set	14842 Oct 04 06:12	18° $\underline{\Omega}$ 36'29		desc. node	14843 Aug 03 05:14	2° Ω 22'19	
max. Earth dist.	14842 Oct 08 02:14	25° $\underline{\Omega}$ 55'25	1.34848 AU	morning max el	14843 Aug 11 18:50	8° Ω 46'58	24°55'42
	14842 Oct 10 03:50	0° \mathbb{M}			14843 Aug 28 11:55	0° \mathbb{M}	
asc. node	14842 Oct 10 14:34	0° \mathbb{M} 53'40			14843 Sep 16 05:01	0° $\underline{\Omega}$	
				morning set	14843 Sep 16 13:46	0° $\underline{\Omega}$ 38'37	
superior conj	14842 Oct 13 09:42	6° \mathbb{M} 34'25	0°25'43	max. Earth dist.	14843 Sep 20 03:06	7° $\underline{\Omega}$ 03'16	1.37000 AU
minimum elong	14842 Oct 13 08:19	6° \mathbb{M} 27'16	0°25'57				
evening rise	14842 Oct 20 22:50	22° \mathbb{M} 19'50		superior conj	14843 Sep 26 20:43	19° $\underline{\Omega}$ 51'15	-0°05'32
	14842 Oct 24 16:48	0° \mathbb{M}		minimum elong	14843 Sep 26 21:03	19° $\underline{\Omega}$ 52'55	0°05'14
evening max el	14842 Nov 08 20:05	23° \mathbb{M} 30'19	20°47'39	behind sun begin	14843 Sep 26 14:49	19° $\underline{\Omega}$ 22'21	
desc. node	14842 Nov 12 04:15	26° \mathbb{M} 20'43		behind sun end	14843 Sep 27 03:18	20° $\underline{\Omega}$ 23'33	
retrograde	14842 Nov 20 06:05	29° \mathbb{M} 10'44		asc. node	14843 Sep 27 11:10	21° $\underline{\Omega}$ 02'20	
evening set	14842 Nov 22 16:51	28° \mathbb{M} 56'14			14843 Oct 01 22:42	0° \mathbb{M}	
inferior conj	14842 Dec 01 13:58	25° \mathbb{M} 02'51	-5°19'24	evening rise	14843 Oct 05 03:30	6° \mathbb{M} 28'30	
minimum elong	14842 Dec 01 04:54	25° \mathbb{M} 15'49	5°16'33		14843 Oct 18 08:32	0° \mathbb{M}	
min. Earth dist.	14842 Dec 02 13:58	24° \mathbb{M} 28'27	0.54539 AU	evening max el	14843 Oct 22 05:11	4° \mathbb{M} 34'31	19°34'03
morning rise	14842 Dec 09 17:03	21° \mathbb{M} 08'20		desc. node	14843 Oct 30 01:33	9° \mathbb{M} 16'47	
direct	14842 Dec 14 00:27	20° \mathbb{M} 28'33		retrograde	14843 Oct 31 23:52	9° \mathbb{M} 27'52	
morning max el	14842 Dec 27 05:18	26° \mathbb{M} 53'40	23°15'23	evening set	14843 Nov 02 21:46	9° \mathbb{M} 17'29	
	14842 Dec 30 04:50	0° \mathbb{M}		inferior conj	14843 Nov 11 14:34	5° \mathbb{M} 12'50	-3°50'49
asc. node	14843 Jan 06 14:41	10° \mathbb{M} 03'27		minimum elong	14843 Nov 11 05:15	5° \mathbb{M} 27'41	3°46'49
	14843 Jan 17 09:28	0° \mathbb{M}		min. Earth dist.	14843 Nov 13 22:46	3° \mathbb{M} 43'31	0.55408 AU
morning set	14843 Jan 19 10:21	4° \mathbb{M} 17'39		morning rise	14843 Nov 19 10:48	0° \mathbb{M} 51'21	
					14843 Nov 22 14:33	30° \mathbb{M}	
superior conj	14843 Jan 26 07:54	19° \mathbb{M} 12'32	1°29'57	direct	14843 Nov 24 16:19	29° \mathbb{M} 50'09	
minimum elong	14843 Jan 26 09:35	19° \mathbb{M} 21'36	1°30'33		14843 Nov 26 17:56	0° \mathbb{M}	
max. Earth dist.	14843 Jan 29 10:31	25° \mathbb{M} 49'38	1.33237 AU	morning max el	14843 Dec 08 14:30	6° \mathbb{M} 48'54	25°03'55
	14843 Jan 31 10:44	0° \mathbb{M}		asc. node	14843 Dec 24 11:50	28° \mathbb{M} 27'01	
evening rise	14843 Feb 03 04:15	5° \mathbb{M} 30'23			14843 Dec 25 08:52	0° \mathbb{M}	
desc. node	14843 Feb 08 04:11	15° \mathbb{M} 03'25		morning set	14844 Jan 03 22:13	18° \mathbb{M} 59'24	
	14843 Feb 16 20:33	0° \mathbb{M}			14844 Jan 08 22:46	0° \mathbb{M}	
evening max el	14843 Mar 09 13:55	27° \mathbb{M} 12'56	27°20'09				
	14843 Mar 12 17:00	0° \mathbb{M}		superior conj	14844 Jan 10 16:23	3° \mathbb{M} 49'57	1°36'48
retrograde	14843 Mar 23 04:20	4° \mathbb{M} 43'00		minimum elong	14844 Jan 10 17:03	3° \mathbb{M} 53'38	1°37'41
evening set	14843 Mar 29 21:18	2° \mathbb{M} 13'03		max. Earth dist.	14844 Jan 12 11:51	7° \mathbb{M} 48'31	1.32005 AU
	14843 Apr 01 10:24	30° \mathbb{M}		evening rise	14844 Jan 17 23:08	19° \mathbb{M} 26'11	
min. Earth dist.	14843 Apr 02 17:43	28° \mathbb{M} 40'07	0.64758 AU		14844 Jan 23 07:27	0° \mathbb{M}	
asc. node	14843 Apr 04 11:27	26° \mathbb{M} 47'01		desc. node	14844 Jan 26 00:51	5° \mathbb{M} 02'18	
inferior conj	14843 Apr 05 05:12	25° \mathbb{M} 58'21	0°14'02		14844 Feb 11 01:26	0° \mathbb{M}	
minimum elong	14843 Apr 05 04:48	25° \mathbb{M} 59'25	0°13'32	evening max el	14844 Feb 20 01:14	10° \mathbb{M} 15'07	27°35'03
transit middle	14843 Apr 05 04:48	25° \mathbb{M} 59'25	0°13'32	retrograde	14844 Mar 04 22:35	17° \mathbb{M} 42'26	
transit begin	14843 Apr 05 03:11	26° \mathbb{M} 03'53		evening set	14844 Mar 11 19:04	15° \mathbb{M} 22'17	
transit end	14843 Apr 05 06:26	25° \mathbb{M} 54'58		min. Earth dist.	14844 Mar 15 13:15	12° \mathbb{M} 16'41	0.62753 AU
morning rise	14843 Apr 11 14:15	20° \mathbb{M} 32'40		inferior conj	14844 Mar 18 11:08	9° \mathbb{M} 26'35	-0°56'20
direct	14843 Apr 14 05:36	19° \mathbb{M} 56'24		minimum elong	14844 Mar 18 13:01	9° \mathbb{M} 21'59	0°55'38
morning max el	14843 Apr 20 13:26	23° \mathbb{M} 12'20	17°53'41	asc. node	14844 Mar 21 08:54	6° \mathbb{M} 45'54	
	14843 Apr 26 01:30	0° \mathbb{M}		morning rise	14844 Mar 25 09:45	4° \mathbb{M} 16'58	
desc. node	14843 May 07 06:19	17° \mathbb{M} 55'17		direct	14844 Mar 27 17:14	3° \mathbb{M} 51'56	
morning set	14843 May 08 00:50	19° \mathbb{M} 12'14		morning max el	14844 Apr 03 07:14	7° \mathbb{M} 12'38	17°46'15
	14843 May 14 13:50	0° \mathbb{M}			14844 Apr 18 08:28	0° \mathbb{M}	
superior conj	14843 May 21 21:36	11° \mathbb{M} 48'56	-1°39'19	morning set	14844 Apr 19 09:24	1° \mathbb{M} 48'35	
minimum elong	14843 May 21 12:46	11° \mathbb{M} 13'45	1°39'21	desc. node	14844 Apr 23 03:00	8° \mathbb{M} 17'57	
max. Earth dist.	14843 May 26 03:44	18° \mathbb{M} 32'45	1.45489 AU				
	14843 Jun 02 12:19	0° \mathbb{M}		superior conj	14844 May 01 10:19	22° \mathbb{M} 22'51	-1°02'43
evening rise	14843 Jun 06 20:16	6° \mathbb{M} 39'37		minimum elong	14844 May 01 04:16	21° \mathbb{M} 57'43	1°02'36
greatest brilliancy	14843 Jun 21 10:07	28° \mathbb{M} 34'25	-0.6m		14844 May 06 02:04	0° \mathbb{M}	
	14843 Jun 22 09:48	0° Ω		max. Earth dist.	14844 May 07 21:11	2° \mathbb{M} 53'17	1.44359 AU
				evening rise	14844 May 16 07:51	16° \mathbb{M} 08'03	

	14844 May 25 11:58	0°☿				14845 May 19 07:39	0°☿	
evening max el	14844 Jun 15 04:46	27°☿38'34	20°56'35		evening max el	14845 May 28 23:15	11°☿30'31	22°12'38
asc. node	14844 Jun 17 06:29	29°☿33'21			asc. node	14845 Jun 04 03:32	16°☿16'01	
	14844 Jun 17 19:35	0°♌			retrograde	14845 Jun 07 13:08	17°☿07'19	
retrograde	14844 Jun 23 15:25	2°♌31'34			evening set	14845 Jun 12 07:03	15°☿08'36	
evening set	14844 Jun 27 22:07	0°♌49'03			inferior conj	14845 Jun 17 13:28	8°☿49'09	3°03'18
	14844 Jun 28 20:11	30°☿			minimum elong	14845 Jun 17 12:26	8°☿52'46	3°02'11
inferior conj	14844 Jul 03 03:51	24°☿39'13	3°10'15		min. Earth dist.	14845 Jun 17 11:53	8°☿54'39	0.69039 AU
minimum elong	14844 Jul 03 03:43	24°☿39'39	3°09'17		morning rise	14845 Jun 22 17:38	2°☿35'38	
min. Earth dist.	14844 Jul 03 15:26	23°☿59'01	0.68682 AU		direct	14845 Jun 27 11:10	0°☿35'52	
morning rise	14844 Jul 08 09:03	18°☿19'07			desc. node	14845 Jul 06 23:52	6°☿15'56	
direct	14844 Jul 13 15:03	16°☿01'34			morning max el	14845 Jul 06 18:41	6°☿02'53	21°58'51
desc. node	14844 Jul 20 02:36	18°☿41'32				14845 Jul 25 04:48	0°♌	
morning max el	14844 Jul 24 05:36	22°☿21'03	23°26'51		morning set	14845 Aug 08 10:59	21°♌49'47	
	14844 Jul 30 21:52	0°♌				14845 Aug 13 11:30	0°♍	
	14844 Aug 20 19:04	0°♍			max. Earth dist.	14845 Aug 14 02:49	1°♍03'31	1.41684 AU
morning set	14844 Aug 28 00:29	11°♍45'40						
max. Earth dist.	14844 Sep 01 01:04	18°♍37'59	1.39370 AU		superior conj	14845 Aug 21 20:54	14°♍18'48	-1°16'16
	14844 Sep 07 09:36	0°♎			minimum elong	14845 Aug 22 02:53	14°♍45'05	1°15'47
						14845 Aug 30 13:16	0°♎	
superior conj	14844 Sep 08 17:54	2°♎29'19	-0°40'27		asc. node	14845 Aug 31 04:20	1°♎09'35	
minimum elong	14844 Sep 08 20:53	2°♎43'12	0°39'59		evening rise	14845 Sep 01 12:18	3°♎37'16	
asc. node	14844 Sep 13 07:45	11°♎08'48			evening max el	14845 Sep 17 11:43	29°♎03'58	18°12'28
evening rise	14844 Sep 18 01:11	20°♎17'17				14845 Sep 18 11:44	0°♏	
	14844 Sep 23 03:35	0°♏			retrograde	14845 Sep 24 16:31	2°♏44'15	
evening max el	14844 Oct 04 03:43	16°♏28'25	18°42'37		evening set	14845 Sep 26 20:15	2°♏25'05	
retrograde	14844 Oct 12 10:32	20°♏39'05				14845 Oct 01 07:40	30°☿	
evening set	14844 Oct 14 08:26	20°♏26'32			desc. node	14845 Oct 02 20:24	28°♎47'33	
desc. node	14844 Oct 15 22:57	19°♏57'47			inferior conj	14845 Oct 04 04:18	27°♎39'54	-0°25'13
inferior conj	14844 Oct 22 10:33	16°♏02'47	-2°04'13		minimum elong	14845 Oct 04 03:25	27°♎41'49	0°24'30
minimum elong	14844 Oct 22 05:27	16°♏12'10	2°01'33		min. Earth dist.	14845 Oct 07 10:53	24°♎51'30	0.59165 AU
min. Earth dist.	14844 Oct 25 13:01	13°♏45'54	0.57048 AU		morning rise	14845 Oct 11 07:12	22°♎07'03	
morning rise	14844 Oct 29 23:12	11°♏04'49			direct	14845 Oct 17 18:06	20°♎13'16	
direct	14844 Nov 04 22:30	9°♏37'35			morning max el	14845 Nov 01 01:09	27°♎56'49	27°36'59
morning max el	14844 Nov 19 03:54	17°♏02'04	26°36'13			14845 Nov 03 01:13	0°♏	
	14844 Nov 29 20:19	0°♐				14845 Nov 23 14:13	0°♐	
asc. node	14844 Dec 10 08:54	17°♐26'38			asc. node	14845 Nov 27 05:51	6°♐52'43	
	14844 Dec 16 16:30	0°♑			morning set	14845 Dec 02 15:34	17°♐52'58	
morning set	14844 Dec 18 08:33	3°♑32'35				14845 Dec 08 04:47	0°♑	
					max. Earth dist.	14845 Dec 09 02:23	2°♑00'38	1.31095 AU
superior conj	14844 Dec 25 03:20	18°♑30'59	1°37'33					
minimum elong	14844 Dec 25 02:56	18°♑28'43	1°38'32		superior conj	14845 Dec 09 14:53	3°♑10'27	1°32'22
max. Earth dist.	14844 Dec 25 18:15	19°♑54'12	1.31286 AU		minimum elong	14845 Dec 09 13:31	3°♑02'49	1°33'16
	14844 Dec 30 08:18	0°♒			evening rise	14845 Dec 16 08:11	18°♑01'56	
evening rise	14845 Jan 01 01:11	3°♒38'30				14845 Dec 22 03:48	0°♒	
desc. node	14845 Jan 11 21:35	24°♒38'04			desc. node	14845 Dec 29 18:25	13°♒42'01	
	14845 Jan 15 01:52	0°♓				14846 Jan 10 09:47	0°♓	
evening max el	14845 Feb 01 08:12	22°♓36'26	27°17'05		evening max el	14846 Jan 14 08:08	4°♓07'02	26°24'05
retrograde	14845 Feb 15 08:11	29°♓54'47			retrograde	14846 Jan 28 07:19	11°♓13'44	
evening set	14845 Feb 22 02:39	27°♓52'20			evening set	14846 Feb 03 16:23	9°♓35'33	
min. Earth dist.	14845 Feb 25 22:42	25°♓06'30	0.60564 AU		min. Earth dist.	14846 Feb 07 21:38	6°♓58'27	0.58380 AU
inferior conj	14845 Mar 01 02:49	22°♓23'39	-2°17'59		inferior conj	14846 Feb 11 00:35	4°♓39'28	-3°45'19
minimum elong	14845 Mar 01 07:53	22°♓12'47	2°15'45		minimum elong	14846 Feb 11 08:48	4°♓24'12	3°42'02
asc. node	14845 Mar 08 06:23	17°♓40'22			morning rise	14846 Feb 19 04:20	0°♓09'55	
morning rise	14845 Mar 08 16:24	17°♓32'47				14846 Feb 20 03:25	30°☿	
direct	14845 Mar 10 18:13	17°♓15'18			direct	14846 Feb 21 04:20	29°♒56'17	
morning max el	14845 Mar 17 22:51	20°♓51'28	17°57'08			14846 Feb 22 04:57	0°♓	
	14845 Mar 24 20:06	0°♔			asc. node	14846 Feb 23 03:49	0°♓10'14	
morning set	14845 Apr 02 12:42	15°♔16'41			morning max el	14846 Mar 01 08:30	3°♓58'13	18°27'51
desc. node	14845 Apr 09 23:37	28°♔47'58			morning set	14846 Mar 17 05:14	29°♓20'03	
	14845 Apr 10 15:49	0°♕				14846 Mar 17 13:34	0°♔	
superior conj	14845 Apr 12 22:48	4°♕01'48	-0°23'47		superior conj	14846 Mar 26 08:32	16°♔38'25	0°12'11
minimum elong	14845 Apr 12 20:43	3°♕52'41	0°23'54		minimum elong	14846 Mar 26 09:23	16°♔42'20	0°11'51
max. Earth dist.	14845 Apr 20 10:43	16°♕45'03	1.42652 AU		behind sun begin	14846 Mar 26 04:33	16°♔20'04	
evening rise	14845 Apr 26 07:27	26°♕13'38			behind sun end	14846 Mar 26 14:13	17°♔04'34	
	14845 Apr 28 17:04	0°♖			desc. node	14846 Mar 27 20:11	19°♔21'36	

	14846 Apr 02 20:26	0°♄		max. Earth dist.	14847 Mar 16 02:24	12°♑29'20	1.38262 AU
max. Earth dist.	14846 Apr 02 19:58	29°♑58'01	1.40543 AU	evening rise	14847 Mar 19 19:32	19°♑05'53	
evening rise	14846 Apr 07 03:01	7°♄12'55			14847 Mar 26 06:57	0°♄	
	14846 Apr 21 18:42	0°♄			14847 Apr 15 23:26	0°♄	
evening max el	14846 May 11 14:15	25°♄23'39	23°33'37	evening max el	14847 Apr 24 03:44	9°♄17'33	24°53'10
	14846 May 17 04:28	0°♄		retrograde	14847 May 05 23:45	16°♄11'32	
retrograde	14846 May 22 08:16	1°♄42'38		asc. node	14847 May 08 21:52	15°♄35'04	
asc. node	14846 May 22 00:40	1°♄42'11		evening set	14847 May 11 16:47	13°♄47'23	
	14846 May 26 22:50	30°♄		min. Earth dist.	14847 May 16 03:20	8°♄47'05	0.68301 AU
evening set	14846 May 27 13:48	29°♄29'38		inferior conj	14847 May 17 06:39	7°♄16'47	2°18'12
inferior conj	14846 Jun 01 23:01	23°♄02'53	2°45'58	minimum elong	14847 May 17 04:30	7°♄23'51	2°16'46
minimum elong	14846 Jun 01 21:17	23°♄08'54	2°44'40	morning rise	14847 May 22 16:30	1°♄20'22	
min. Earth dist.	14846 Jun 01 08:32	23°♄52'41	0.68909 AU	direct	14847 May 26 09:48	0°♄00'57	
morning rise	14846 Jun 07 04:44	16°♄57'23		morning max el	14847 Jun 02 15:09	3°♄59'54	19°31'59
direct	14846 Jun 11 09:53	15°♄17'41		desc. node	14847 Jun 10 18:04	13°♄56'34	
morning max el	14846 Jun 19 13:15	19°♄55'33	20°38'55	greatest brilliancy	14847 Jun 15 06:20	20°♄24'04	-0.6m
desc. node	14846 Jun 23 21:01	24°♄45'51			14847 Jun 21 16:29	0°♄	
	14846 Jun 27 22:21	0°♄		morning set	14847 Jun 28 02:03	9°♄45'51	
	14846 Jul 18 08:19	0°♄		max. Earth dist.	14847 Jul 10 02:11	28°♄25'16	1.45095 AU
morning set	14846 Jul 18 23:14	0°♄57'41			14847 Jul 11 02:12	0°♄	
max. Earth dist.	14846 Jul 27 11:30	14°♄23'24	1.43666 AU				
				superior conj	14847 Jul 14 06:49	5°♄04'19	-2°09'20
superior conj	14846 Aug 03 01:33	25°♄10'19	-1°48'10	minimum elong	14847 Jul 14 11:39	5°♄23'37	2°10'01
minimum elong	14846 Aug 03 09:07	25°♄41'52	1°48'08	evening rise	14847 Jul 28 08:03	28°♄03'22	
	14846 Aug 05 22:33	0°♄			14847 Jul 29 11:59	0°♄	
evening rise	14846 Aug 15 08:18	16°♄16'38		asc. node	14847 Aug 04 21:33	10°♄36'35	
asc. node	14846 Aug 18 00:55	21°♄00'13		evening max el	14847 Aug 15 15:28	25°♄38'22	18°10'11
	14846 Aug 23 06:47	0°♄		retrograde	14847 Aug 22 00:06	28°♄59'28	
evening max el	14846 Sep 01 00:51	12°♄10'03	18°02'01	evening set	14847 Aug 24 20:03	28°♄16'43	
retrograde	14846 Sep 07 14:34	15°♄33'58		inferior conj	14847 Aug 30 22:02	22°♄54'35	1°53'48
evening set	14846 Sep 10 02:03	15°♄04'32		minimum elong	14847 Aug 31 00:25	22°♄47'55	1°52'52
inferior conj	14846 Sep 16 17:26	9°♄59'33	0°54'46	min. Earth dist.	14847 Sep 02 11:26	20°♄03'56	0.63666 AU
minimum elong	14846 Sep 16 18:59	9°♄55'40	0°54'17	morning rise	14847 Sep 06 02:55	16°♄38'10	
desc. node	14846 Sep 19 17:53	7°♄00'40		desc. node	14847 Sep 06 15:22	16°♄15'07	
min. Earth dist.	14846 Sep 19 18:09	7°♄00'02	0.61455 AU	direct	14847 Sep 12 17:57	14°♄05'53	
morning rise	14846 Sep 23 09:12	3°♄59'51		morning max el	14847 Sep 26 15:04	22°♄06'16	27°42'55
direct	14846 Sep 30 01:03	1°♄43'15			14847 Oct 03 13:43	0°♄	
morning max el	14846 Oct 14 05:43	9°♄39'46	27°59'01		14847 Oct 23 05:48	0°♄	
	14846 Oct 30 00:51	0°♄		morning set	14847 Oct 31 11:18	15°♄32'52	
asc. node	14846 Nov 14 02:43	26°♄37'02		asc. node	14847 Oct 31 23:29	16°♄33'59	
	14846 Nov 15 18:56	0°♄		max. Earth dist.	14847 Nov 05 08:07	25°♄35'09	1.32335 AU
morning set	14846 Nov 16 17:16	1°♄54'49			14847 Nov 07 09:38	0°♄	
max. Earth dist.	14846 Nov 22 08:21	13°♄57'18	1.31439 AU				
				superior conj	14847 Nov 08 08:01	2°♄01'03	1°04'16
superior conj	14846 Nov 24 01:05	17°♄42'05	1°21'16	minimum elong	14847 Nov 08 05:42	1°♄48'28	1°04'43
minimum elong	14846 Nov 23 23:01	17°♄30'42	1°21'58	evening rise	14847 Nov 15 05:00	16°♄59'41	
	14846 Nov 29 14:23	0°♄			14847 Nov 21 12:52	0°♄	
evening rise	14846 Nov 30 18:03	2°♄30'27		desc. node	14847 Dec 03 12:20	19°♄20'28	
	14846 Dec 15 07:28	0°♄		evening max el	14847 Dec 08 09:06	24°♄47'21	23°19'48
desc. node	14846 Dec 16 15:19	2°♄01'34			14847 Dec 15 15:16	0°♄	
evening max el	14846 Dec 26 23:25	14°♄45'00	25°00'40	retrograde	14847 Dec 21 16:42	1°♄23'53	
retrograde	14847 Jan 09 18:24	21°♄39'28		evening set	14847 Dec 26 01:41	0°♄42'20	
evening set	14847 Jan 15 08:30	20°♄29'37			14847 Dec 28 00:06	30°♄	
min. Earth dist.	14847 Jan 20 11:24	17°♄45'34	0.56439 AU	min. Earth dist.	14848 Jan 01 19:25	27°♄32'00	0.55035 AU
inferior conj	14847 Jan 23 01:37	16°♄05'21	-5°05'05	inferior conj	14848 Jan 03 06:38	26°♄40'56	-5°54'37
minimum elong	14847 Jan 23 10:28	15°♄51'03	5°02'17	minimum elong	14848 Jan 03 10:21	26°♄35'32	5°53'24
morning rise	14847 Jan 31 14:50	11°♄57'34		morning rise	14848 Jan 11 20:34	22°♄49'31	
direct	14847 Feb 02 19:27	11°♄44'00		direct	14848 Jan 14 15:17	22°♄30'59	
asc. node	14847 Feb 10 01:13	14°♄23'44		morning max el	14848 Jan 25 18:03	27°♄51'26	20°36'13
morning max el	14847 Feb 12 08:08	16°♄21'30	19°20'26	asc. node	14848 Jan 27 22:36	0°♄09'36	
	14847 Feb 22 01:32	0°♄			14848 Jan 27 19:13	0°♄	
morning set	14847 Mar 01 06:43	13°♄45'58		morning set	14848 Feb 13 14:00	28°♄24'47	
					14848 Feb 14 08:26	0°♄	
superior conj	14847 Mar 09 11:04	0°♄00'28	0°42'29				
minimum elong	14847 Mar 09 13:24	0°♄11'45	0°42'12	superior conj	14848 Feb 21 02:07	13°♄55'29	1°06'10
	14847 Mar 09 10:59	0°♄		minimum elong	14848 Feb 21 04:45	14°♄08'50	1°06'11
desc. node	14847 Mar 14 16:43	9°♄55'17		max. Earth dist.	14848 Feb 26 10:00	24°♄29'26	1.36063 AU

	14848 Feb 29 07:50	0°♿		minimum elong	14849 Feb 04 04:19	28°≈24'57	1°23'32
desc. node	14848 Feb 29 13:13	0°♿25'00			14849 Feb 04 22:21	0°♿	
evening rise	14848 Mar 01 06:33	1°♿44'57		max. Earth dist.	14849 Feb 07 23:39	6°♿19'46	1.34152 AU
	14848 Mar 18 08:49	0°♿		evening rise	14849 Feb 12 08:36	15°♿01'03	
evening max el	14848 Apr 05 17:11	23°♿08'37	26°04'07	desc. node	14849 Feb 15 09:47	20°♿47'01	
	14848 Apr 15 16:16	0°♿			14849 Feb 20 13:49	0°♿	
retrograde	14848 Apr 18 10:32	0°♿26'07			14849 Mar 13 00:28	0°♿	
	14848 Apr 21 01:15	30°♿♿		evening max el	14849 Mar 19 07:02	6°♿50'29	26°58'55
evening set	14848 Apr 24 14:16	27°♿55'16		retrograde	14849 Apr 01 15:36	14°♿18'46	
asc. node	14848 Apr 24 19:10	27°♿44'57		evening set	14849 Apr 08 04:22	11°♿46'55	
min. Earth dist.	14848 Apr 28 18:14	23°♿30'26	0.67243 AU	asc. node	14849 Apr 11 16:32	8°♿25'16	
inferior conj	14848 Apr 30 10:17	21°♿25'38	1°39'26	min. Earth dist.	14849 Apr 12 03:11	7°♿55'39	0.65773 AU
minimum elong	14848 Apr 30 08:15	21°♿31'59	1°38'04	inferior conj	14849 Apr 14 07:42	5°♿24'33	0°48'54
morning rise	14848 May 06 02:59	15°♿39'32		minimum elong	14849 Apr 14 06:28	5°♿28'09	0°47'55
direct	14848 May 09 09:19	14°♿38'57		morning rise	14849 Apr 20 10:00	29°♿50'30	
morning max el	14848 May 16 00:06	18°♿11'32	18°40'31		14849 Apr 20 02:56	30°♿♿	
	14848 May 25 05:03	0°♿		direct	14849 Apr 23 06:29	29°♿06'12	
desc. node	14848 May 27 14:58	3°♿♿36'27			14849 Apr 26 11:14	0°♿	
morning set	14848 Jun 06 15:56	19°♿09'26		morning max el	14849 Apr 29 14:33	2°♿24'53	18°05'46
	14848 Jun 13 14:35	0°♿		desc. node	14849 May 14 11:49	23°♿37'51	
max. Earth dist.	14848 Jun 21 20:29	12°♿51'32	1.45837 AU	morning set	14849 May 18 07:32	29°♿48'51	
					14849 May 18 10:17	0°♿	
superior conj	14848 Jun 22 18:48	14°♿18'36	-2°12'49	superior conj	14849 Jun 02 04:28	23°♿33'14	-1°56'15
minimum elong	14848 Jun 22 16:15	14°♿08'40	2°13'45	minimum elong	14849 Jun 01 20:08	23°♿00'31	1°56'38
	14848 Jul 02 18:30	0°♿		max. Earth dist.	14849 Jun 04 16:37	27°♿28'45	1.45837 AU
evening rise	14848 Jul 08 07:15	8°♿47'17			14849 Jun 06 07:23	0°♿	
greatest brilliancy	14848 Jul 15 04:57	19°♿47'03	-0.9m	evening rise	14849 Jun 18 07:12	18°♿35'29	
asc. node	14848 Jul 21 18:14	29°♿52'16			14849 Jun 25 17:10	0°♿	
	14848 Jul 21 20:21	0°♿		greatest brilliancy	14849 Jun 30 15:40	7°♿28'08	-0.7m
evening max el	14848 Jul 29 04:28	9°♿20'29	18°36'13	asc. node	14849 Jul 08 15:00	18°♿39'44	
retrograde	14848 Aug 04 17:01	12°♿51'56		evening max el	14849 Jul 12 13:23	23°♿09'48	19°19'07
evening set	14848 Aug 07 21:59	11°♿53'35		retrograde	14849 Jul 19 14:08	27°♿04'12	
inferior conj	14848 Aug 13 14:10	6°♿16'19	2°34'01	evening set	14849 Jul 23 04:40	25°♿48'47	
minimum elong	14848 Aug 13 16:20	6°♿09'41	2°33'03	inferior conj	14849 Jul 28 14:28	19°♿57'52	2°58'22
min. Earth dist.	14848 Aug 15 13:52	3°♿50'50	0.65607 AU	minimum elong	14849 Jul 28 15:52	19°♿53'15	2°57'27
morning rise	14848 Aug 19 09:35	29°♿52'11		min. Earth dist.	14849 Jul 29 23:49	18°♿08'54	0.67161 AU
	14848 Aug 19 05:54	30°♿♿		morning rise	14849 Aug 03 02:29	13°♿32'23	
desc. node	14848 Aug 23 12:51	27°♿32'20		direct	14849 Aug 09 02:48	10°♿56'18	
direct	14848 Aug 25 19:01	27°♿13'22		desc. node	14849 Aug 10 10:19	11°♿02'53	
	14848 Sep 02 04:42	0°♿		morning max el	14849 Aug 21 13:14	18°♿22'11	25°43'26
morning max el	14848 Sep 08 02:13	5°♿04'18	26°54'50		14849 Aug 31 08:50	0°♿	
	14848 Sep 27 03:43	0°♿		morning set	14849 Sep 20 04:10	0°♿	
morning set	14848 Oct 13 18:52	28°♿40'47		max. Earth dist.	14849 Sep 26 12:20	11°♿09'33	
	14848 Oct 14 11:19	0°♿		asc. node	14849 Sep 30 03:41	17°♿56'16	1.35723 AU
asc. node	14848 Oct 17 20:11	6°♿39'01			14849 Oct 04 16:49	26°♿47'35	
max. Earth dist.	14848 Oct 17 22:41	6°♿51'38	1.33781 AU	superior conj	14849 Oct 06 02:44	29°♿37'32	0°13'02
				minimum elong	14849 Oct 06 01:57	29°♿33'37	0°13'17
superior conj	14848 Oct 22 09:29	16°♿01'58	0°41'24	behind sun begin	14849 Oct 05 22:25	29°♿15'49	
minimum elong	14848 Oct 22 07:31	15°♿51'41	0°41'42	behind sun end	14849 Oct 06 05:29	29°♿51'25	
	14848 Oct 28 23:02	0°♿			14849 Oct 06 07:11	0°♿	
evening rise	14848 Oct 29 15:12	1°♿25'35		evening rise	14849 Oct 13 22:34	15°♿42'28	
	14848 Nov 14 16:22	0°♿			14849 Oct 21 05:09	0°♿	
evening max el	14848 Nov 18 22:07	4°♿50'18	21°39'22	evening max el	14849 Oct 31 22:56	15°♿27'06	20°13'42
desc. node	14848 Nov 19 09:27	5°♿17'38		desc. node	14849 Nov 06 06:42	19°♿27'01	
retrograde	14848 Dec 01 04:36	10°♿54'47		retrograde	14849 Nov 11 16:03	20°♿47'04	
evening set	14848 Dec 04 05:34	10°♿33'53		evening set	14849 Nov 13 19:35	20°♿35'12	
inferior conj	14848 Dec 12 23:06	6°♿42'07	-5°49'55	inferior conj	14849 Nov 22 16:34	16°♿38'39	-4°46'04
minimum elong	14848 Dec 12 17:41	6°♿49'43	5°48'19	minimum elong	14849 Nov 22 06:29	16°♿53'35	4°42'25
min. Earth dist.	14848 Dec 13 01:17	6°♿39'05	0.54446 AU	min. Earth dist.	14849 Nov 24 07:48	15°♿40'29	0.54802 AU
morning rise	14848 Dec 21 06:28	2°♿53'56		morning rise	14849 Nov 30 16:39	12°♿34'54	
direct	14848 Dec 24 23:58	2°♿23'35		direct	14849 Dec 05 10:15	11°♿46'26	
morning max el	14849 Jan 06 13:29	8°♿27'21	22°13'13	morning max el	14849 Dec 18 23:30	18°♿26'35	24°02'19
asc. node	14849 Jan 13 19:54	17°♿10'12			14849 Dec 28 10:41	0°♿	
	14849 Jan 21 12:01	0°♿		asc. node	14849 Dec 31 17:08	5°♿07'41	
morning set	14849 Jan 28 00:40	13°≈09'35		morning set	14850 Jan 12 12:36	27°♿53'39	
superior conj	14849 Feb 04 02:09	28°≈13'31	1°23'08				

	14850 Jan 13 12:04	0°♊		morning max el	14850 Nov 30 09:41	28°♊25'34	25°46'18
					14850 Dec 01 23:34	0°♊	
superior conj	14850 Jan 19 08:13	12°♊45'20	1°33'36	asc. node	14850 Dec 18 14:17	23°♊48'14	
minimum elong	14850 Jan 19 09:29	12°♊52'15	1°34'21		14850 Dec 21 21:36	0°♊	
max. Earth dist.	14850 Jan 21 21:09	18°♊14'32	1.32656 AU	morning set	14850 Dec 28 00:02	12°♊32'25	
evening rise	14850 Jan 26 22:11	28°♊44'12					
	14850 Jan 27 13:18	0°♋		superior conj	14851 Jan 03 17:58	27°♊24'44	1°37'51
desc. node	14850 Feb 02 06:24	10°♋55'47		minimum elong	14851 Jan 03 18:11	27°♊25'54	1°38'48
	14850 Feb 13 17:32	0°♋			14851 Jan 04 22:00	0°♊	
evening max el	14850 Mar 01 19:58	20°♋10'56	27°30'16	max. Earth dist.	14851 Jan 05 01:11	0°♊17'36	1.31640 AU
retrograde	14850 Mar 15 13:48	27°♋39'56		evening rise	14851 Jan 10 20:25	12°♊47'32	
evening set	14850 Mar 22 08:47	25°♋13'33			14851 Jan 19 16:53	0°♋	
min. Earth dist.	14850 Mar 26 04:04	21°♋52'46	0.63940 AU	desc. node	14851 Jan 20 03:05	0°♋45'40	
inferior conj	14850 Mar 28 20:10	19°♋06'06	-0°14'14		14851 Feb 09 08:20	0°♋	
minimum elong	14850 Mar 28 20:37	19°♋04'56	0°14'18	evening max el	14851 Feb 12 05:43	2°♋56'50	27°31'35
transit middle	14850 Mar 28 20:37	19°♋04'56	0°14'18	retrograde	14851 Feb 26 04:13	10°♋20'15	
transit begin	14850 Mar 28 19:13	19°♋08'35		evening set	14851 Mar 05 00:51	8°♋06'37	
transit end	14850 Mar 28 22:00	19°♋01'17		min. Earth dist.	14851 Mar 08 19:10	5°♋10'48	0.61838 AU
asc. node	14850 Mar 29 13:58	18°♋19'59		inferior conj	14851 Mar 11 20:26	2°♋21'52	-1°29'48
morning rise	14850 Apr 04 10:42	13°♋46'35		minimum elong	14851 Mar 11 23:35	2°♋14'35	1°28'27
direct	14850 Apr 06 22:35	13°♋15'25			14851 Mar 14 12:52	30°♋	
morning max el	14850 Apr 13 07:55	16°♋31'58	17°48'20	asc. node	14851 Mar 16 11:27	28°♋35'07	
	14850 Apr 23 01:51	0°♌		morning rise	14851 Mar 19 01:20	27°♋19'59	
morning set	14850 Apr 30 02:32	11°♌47'07		direct	14851 Mar 21 06:14	26°♋58'30	
desc. node	14850 May 01 08:34	13°♌54'18			14851 Mar 27 15:03	0°♋	
	14850 May 11 00:29	0°♌		morning max el	14851 Mar 28 01:11	0°♋24'05	17°48'39
				morning set	14851 Apr 12 19:46	24°♋47'39	
superior conj	14850 May 13 04:23	3°♌30'47	-1°24'32		14851 Apr 15 18:04	0°♌	
minimum elong	14850 May 12 20:21	2°♌58'16	1°24'26	desc. node	14851 Apr 18 05:13	4°♌20'42	
max. Earth dist.	14850 May 18 12:15	12°♌01'54	1.45096 AU				
evening rise	14850 May 28 18:40	27°♌59'28		superior conj	14851 Apr 24 03:15	14°♌32'45	-0°46'06
	14850 May 30 02:14	0°♍		minimum elong	14851 Apr 23 22:55	14°♌14'24	0°46'04
	14850 Jun 19 16:59	0°♍		max. Earth dist.	14851 May 01 04:37	26°♌13'29	1.43692 AU
asc. node	14850 Jun 25 11:51	6°♍49'32			14851 May 03 12:58	0°♌	
evening max el	14850 Jun 25 16:38	7°♍01'34	20°17'15	evening rise	14851 May 08 09:49	7°♌40'10	
retrograde	14850 Jul 03 13:02	11°♍30'29			14851 May 23 07:45	0°♍	
evening set	14850 Jul 07 13:44	9°♍57'33		evening max el	14851 Jun 08 13:55	20°♍53'10	21°27'55
inferior conj	14850 Jul 12 20:09	3°♍54'09	3°09'19	asc. node	14851 Jun 12 08:49	24°♍08'42	
minimum elong	14850 Jul 12 20:36	3°♍52'38	3°08'23	retrograde	14851 Jun 17 11:44	26°♍04'40	
min. Earth dist.	14850 Jul 13 15:28	2°♍48'13	0.68265 AU	evening set	14851 Jun 21 23:12	24°♍14'51	
	14850 Jul 15 19:12	30°♍		inferior conj	14851 Jun 27 04:56	18°♍00'29	3°08'36
morning rise	14850 Jul 18 03:09	27°♍31'29		minimum elong	14851 Jun 27 04:24	18°♍02'20	3°07'35
direct	14850 Jul 23 16:09	25°♍05'42		min. Earth dist.	14851 Jun 27 10:47	17°♍40'06	0.68892 AU
desc. node	14850 Jul 28 07:44	26°♍28'22		morning rise	14851 Jul 02 09:24	11°♍43'05	
	14850 Aug 02 01:13	0°♎		direct	14851 Jul 07 10:01	9°♍33'01	
morning max el	14850 Aug 03 23:51	1°♎52'09	24°18'21	desc. node	14851 Jul 15 05:04	13°♍22'40	
	14850 Aug 25 09:02	0°♎		morning max el	14851 Jul 17 11:26	15°♍30'19	22°48'54
morning set	14850 Sep 08 11:34	22°♎49'47			14851 Jul 29 07:53	0°♎	
max. Earth dist.	14850 Sep 12 02:54	29°♎14'17	1.38003 AU		14851 Aug 18 08:25	0°♎	
	14850 Sep 12 13:05	0°♏		morning set	14851 Aug 20 12:14	3°♎30'57	
				max. Earth dist.	14851 Aug 25 02:14	11°♎10'43	1.40381 AU
superior conj	14850 Sep 19 08:24	12°♏39'42	-0°20'01				
minimum elong	14850 Sep 19 09:46	12°♏46'14	0°19'38	superior conj	14851 Sep 01 22:21	24°♎58'11	-0°55'45
asc. node	14850 Sep 21 13:24	16°♏56'12		minimum elong	14851 Sep 02 02:38	25°♎17'38	0°55'16
evening rise	14850 Sep 28 00:41	29°♏44'22			14851 Sep 04 16:08	0°♏	
	14850 Sep 28 03:50	0°♐		asc. node	14851 Sep 08 09:57	7°♏00'47	
evening max el	14850 Oct 14 14:06	26°♐53'03	19°09'24	evening rise	14851 Sep 11 18:22	13°♏22'30	
	14850 Oct 18 12:53	0°♑			14851 Sep 20 22:37	0°♐	
retrograde	14850 Oct 23 16:26	1°♑27'13		evening max el	14851 Sep 27 17:04	9°♐05'26	18°27'12
desc. node	14850 Oct 24 04:02	1°♑26'29		retrograde	14851 Oct 05 11:43	13°♐01'58	
evening set	14850 Oct 25 13:20	1°♑16'26		evening set	14851 Oct 07 11:30	12°♐47'11	
	14850 Oct 29 04:48	30°♑		desc. node	14851 Oct 11 01:27	11°♐14'26	
inferior conj	14850 Nov 03 00:40	27°♐03'50	-3°05'56	inferior conj	14851 Oct 15 05:59	8°♐14'08	-1°20'20
minimum elong	14850 Nov 02 16:54	27°♐16'57	3°02'17	minimum elong	14851 Oct 15 02:51	8°♐20'21	1°18'31
min. Earth dist.	14850 Nov 05 18:18	25°♐13'12	0.56032 AU	min. Earth dist.	14851 Oct 18 11:38	5°♐41'26	0.57907 AU
morning rise	14850 Nov 10 17:56	22°♐27'34		morning rise	14851 Oct 22 14:42	3°♐00'15	
direct	14850 Nov 16 07:38	21°♐15'56		direct	14851 Oct 28 19:28	1°♐21'43	

morning max el	14851 Nov 12 02:34	8°♌55'32	27°06'38	desc. node	14852 Sep 26 22:55	19°♊36'53	
	14851 Nov 28 02:50	0°♊		min. Earth dist.	14852 Sep 29 13:35	17°♊14'16	0.60137 AU
asc. node	14851 Dec 05 11:18	13°♊00'15		morning rise	14852 Oct 03 06:37	14°♊24'39	
morning set	14851 Dec 12 09:11	27°♊01'04		direct	14852 Oct 09 20:27	12°♊20'05	
	14851 Dec 13 18:23	0°♊		morning max el	14852 Oct 24 03:09	20°♊10'58	27°51'08
					14852 Nov 01 13:54	0°♌	
superior conj	14851 Dec 19 05:24	12°♊05'54	1°36'05		14852 Nov 20 00:25	0°♊	
minimum elong	14851 Dec 19 04:34	12°♊01'15	1°37'03	asc. node	14852 Nov 21 08:12	2°♊34'51	
max. Earth dist.	14851 Dec 19 08:46	12°♊24'49	1.31135 AU	morning set	14852 Nov 25 14:10	11°♊14'13	
evening rise	14851 Dec 26 00:48	27°♊05'06		max. Earth dist.	14852 Dec 01 16:12	24°♊27'07	1.31167 AU
	14851 Dec 27 09:55	0°♋					
desc. node	14852 Jan 06 23:50	20°♋09'21		superior conj	14852 Dec 02 16:35	26°♊42'51	1°28'23
	14852 Jan 13 04:22	0°♋		minimum elong	14852 Dec 02 14:53	26°♊33'23	1°29'13
evening max el	14852 Jan 25 09:47	14°♋56'58	26°58'41		14852 Dec 04 03:54	0°♊	
retrograde	14852 Feb 08 09:48	22°♋11'16		evening rise	14852 Dec 09 09:12	11°♊31'09	
evening set	14852 Feb 15 01:23	20°♋18'02			14852 Dec 18 14:51	0°♋	
min. Earth dist.	14852 Feb 18 23:57	17°♋37'49	0.59617 AU	desc. node	14852 Dec 23 20:40	8°♋56'10	
inferior conj	14852 Feb 22 04:56	15°♋02'46	-2°54'56	evening max el	14853 Jan 06 05:57	26°♋04'26	25°51'51
minimum elong	14852 Feb 22 11:27	14°♋49'38	2°52'08		14853 Jan 11 02:31	0°♋	
morning rise	14852 Mar 01 00:53	10°♋21'10		retrograde	14853 Jan 20 04:24	3°♋06'55	
asc. node	14852 Mar 02 08:55	10°♋07'36		evening set	14853 Jan 26 06:24	1°♋40'36	
direct	14852 Mar 03 01:17	10°♋05'49			14853 Jan 29 07:46	30°♋	
morning max el	14852 Mar 10 14:51	13°♋51'33	18°07'46	min. Earth dist.	14853 Jan 30 18:59	29°♋02'29	0.57497 AU
	14852 Mar 21 13:57	0°♌		inferior conj	14853 Feb 02 18:06	26°♋58'16	-4°21'17
morning set	14852 Mar 26 05:18	8°♌32'48		minimum elong	14853 Feb 03 03:06	26°♋42'31	4°17'59
desc. node	14852 Apr 04 01:48	24°♌53'06		morning rise	14853 Feb 11 02:44	22°♋38'11	
				direct	14853 Feb 13 03:27	22°♋25'14	
superior conj	14852 Apr 05 01:20	26°♌38'32	-0°07'59	asc. node	14853 Feb 17 06:23	23°♋21'57	
minimum elong	14852 Apr 05 00:40	26°♌35'33	0°08'14	morning max el	14853 Feb 21 20:48	26°♋41'39	18°47'27
behind sun begin	14852 Apr 04 18:01	26°♌05'53			14853 Feb 24 19:06	0°♋	
behind sun end	14852 Apr 05 07:18	27°♌05'09		morning set	14853 Mar 10 02:04	22°♋46'59	
	14852 Apr 06 22:48	0°♌			14853 Mar 13 18:45	0°♌	
max. Earth dist.	14852 Apr 12 16:02	9°♌49'12	1.41781 AU				
evening rise	14852 Apr 17 17:24	18°♌08'00		superior conj	14853 Mar 18 18:44	9°♌35'55	0°25'48
	14852 Apr 25 07:07	0°♍		minimum elong	14853 Mar 18 20:23	9°♌43'40	0°25'27
	14852 May 16 22:25	0°♍		desc. node	14853 Mar 21 22:19	15°♌27'09	
evening max el	14852 May 21 06:31	4°♍45'25	22°46'46	max. Earth dist.	14853 Mar 25 23:12	22°♌42'01	1.39574 AU
asc. node	14852 May 29 05:54	10°♍21'36		evening rise	14853 Mar 29 22:03	29°♌31'02	
retrograde	14852 May 31 08:41	10°♍41'28			14853 Mar 30 04:55	0°♍	
evening set	14852 Jun 05 07:26	8°♍36'21			14853 Apr 18 16:54	0°♍	
inferior conj	14852 Jun 10 14:46	2°♍13'10	2°57'13	evening max el	14853 May 03 20:39	18°♍39'09	24°08'06
minimum elong	14852 Jun 10 13:24	2°♍17'56	2°56'02	retrograde	14853 May 15 02:26	25°♍14'30	
min. Earth dist.	14852 Jun 10 07:39	2°♍37'58	0.69038 AU	asc. node	14853 May 16 03:04	25°♍09'54	
	14852 Jun 12 05:42	30°♍		evening set	14853 May 20 12:46	22°♍56'35	
morning rise	14852 Jun 15 19:16	26°♍02'45		min. Earth dist.	14853 May 25 03:52	17°♍35'00	0.68705 AU
direct	14852 Jun 20 07:23	24°♍11'30		inferior conj	14853 May 25 23:44	16°♍27'38	2°35'30
morning max el	14852 Jun 29 02:37	29°♍17'21	21°23'30	minimum elong	14853 May 25 21:47	16°♍34'17	2°34'08
	14852 Jun 29 19:21	0°♎		morning rise	14853 May 31 06:51	10°♍25'34	
desc. node	14852 Jul 01 02:17	1°♎23'12		direct	14853 Jun 04 06:53	8°♍54'27	
	14852 Jul 21 23:24	0°♎		morning max el	14853 Jun 12 00:03	13°♍14'35	20°08'36
morning set	14852 Jul 30 12:33	13°♎09'33		desc. node	14853 Jun 17 23:23	20°♍11'56	
max. Earth dist.	14852 Aug 06 06:21	23°♎58'35	1.42583 AU		14853 Jun 25 01:29	0°♎	
	14852 Aug 09 21:41	0°♎		morning set	14853 Jul 09 18:29	22°♎02'36	
					14853 Jul 14 21:35	0°♎	
superior conj	14852 Aug 13 16:13	6°♎23'48	-1°30'39	max. Earth dist.	14853 Jul 19 17:19	7°♎36'34	1.44351 AU
minimum elong	14852 Aug 13 23:12	6°♎53'48	1°30'18				
evening rise	14852 Aug 24 23:40	26°♎26'52		superior conj	14853 Jul 25 10:49	16°♎50'47	-1°58'55
asc. node	14852 Aug 25 06:30	26°♎57'48		minimum elong	14853 Jul 25 17:54	17°♎19'43	1°59'10
	14852 Aug 26 22:49	0°♏			14853 Aug 02 08:37	0°♎	
evening max el	14852 Sep 10 03:43	21°♏55'19	18°05'39	evening rise	14853 Aug 07 11:40	8°♎45'26	
retrograde	14852 Sep 17 00:55	25°♏26'56		asc. node	14853 Aug 12 03:05	16°♎43'15	
evening set	14852 Sep 19 07:43	25°♏03'56			14853 Aug 20 10:53	0°♏	
inferior conj	14852 Sep 26 08:25	20°♏10'21	0°11'17	evening max el	14853 Aug 24 18:00	5°♏12'57	18°03'19
minimum elong	14852 Sep 26 08:47	20°♏09'29	0°11'24	retrograde	14853 Aug 31 04:16	8°♏33'40	
transit middle	14852 Sep 26 08:47	20°♏09'29	0°11'24	evening set	14853 Sep 02 19:22	7°♏58'51	
transit begin	14852 Sep 26 06:25	20°♏14'55		inferior conj	14853 Sep 09 04:38	2°♏46'29	1°22'16
transit end	14852 Sep 26 11:09	20°♏04'02		minimum elong	14853 Sep 09 06:43	2°♏41'03	1°21'30

	14853 Sep 11 20:30	30° \mathbb{R} \mathbb{M}		inferior conj	14854 Aug 23 14:36	15° \mathbb{M} 53'42	2°13'00
min. Earth dist.	14853 Sep 12 01:07	29° \mathbb{M} 48'26	0.62423 AU	minimum elong	14854 Aug 23 16:59	15° \mathbb{M} 46'44	2°12'01
desc. node	14853 Sep 13 20:23	28° \mathbb{M} 05'57		min. Earth dist.	14854 Aug 25 22:14	13° \mathbb{M} 12'23	0.64533 AU
morning rise	14853 Sep 15 15:42	26° \mathbb{M} 38'47		morning rise	14854 Aug 29 15:16	9° \mathbb{M} 33'19	
direct	14853 Sep 22 08:06	24° \mathbb{M} 14'13		desc. node	14854 Aug 31 17:54	8° \mathbb{M} 08'07	
	14853 Oct 04 01:09	0° \mathbb{L}		direct	14854 Sep 05 04:26	6° \mathbb{M} 57'23	
morning max el	14853 Oct 06 09:52	2° \mathbb{L} 13'22	27°56'28	morning max el	14854 Sep 18 20:14	14° \mathbb{M} 54'34	27°25'58
	14853 Oct 26 22:37	0° \mathbb{M}			14854 Oct 01 04:22	0° \mathbb{L}	
asc. node	14853 Nov 08 05:00	22° \mathbb{M} 25'32			14854 Oct 19 15:21	0° \mathbb{M}	
morning set	14853 Nov 09 12:56	25° \mathbb{M} 07'11		morning set	14854 Oct 24 02:53	8° \mathbb{M} 33'12	
	14853 Nov 11 21:24	0° \mathbb{X}		asc. node	14854 Oct 26 01:43	12° \mathbb{M} 26'22	
max. Earth dist.	14853 Nov 14 19:54	6° \mathbb{X} 16'52	1.31752 AU	max. Earth dist.	14854 Oct 28 16:15	17° \mathbb{M} 46'33	1.32892 AU
superior conj	14853 Nov 17 01:41	11° \mathbb{X} 10'39	1°14'47	superior conj	14854 Nov 01 06:36	25° \mathbb{M} 22'47	0°55'17
minimum elong	14853 Nov 16 23:27	10° \mathbb{X} 58'23	1°15'23	minimum elong	14854 Nov 01 04:21	25° \mathbb{M} 10'42	0°55'40
evening rise	14853 Nov 23 19:48	26° \mathbb{X} 01'22			14854 Nov 03 10:02	0° \mathbb{X}	
	14853 Nov 25 16:29	0° \mathbb{Z}		evening rise	14854 Nov 08 06:41	10° \mathbb{X} 30'06	
desc. node	14853 Dec 10 17:37	26° \mathbb{Z} 52'37			14854 Nov 18 04:26	0° \mathbb{Z}	
	14853 Dec 13 01:13	0° \mathbb{Z}		desc. node	14854 Nov 27 14:41	13° \mathbb{Z} 39'37	
evening max el	14853 Dec 18 18:24	6° \mathbb{Z} 25'20	24°18'58	evening max el	14854 Nov 30 04:15	16° \mathbb{Z} 22'55	22°35'55
retrograde	14854 Jan 01 09:50	13° \mathbb{Z} 12'38		retrograde	14854 Dec 13 02:31	22° \mathbb{Z} 47'17	
evening set	14854 Jan 06 12:29	12° \mathbb{Z} 15'33		evening set	14854 Dec 16 21:48	22° \mathbb{Z} 15'39	
min. Earth dist.	14854 Jan 12 06:05	9° \mathbb{Z} 22'37	0.55760 AU	min. Earth dist.	14854 Dec 24 12:21	18° \mathbb{Z} 48'41	0.54682 AU
inferior conj	14854 Jan 14 10:16	8° \mathbb{Z} 02'44	-5°31'21	inferior conj	14854 Dec 25 08:31	18° \mathbb{Z} 20'15	-6°00'09
minimum elong	14854 Jan 14 17:45	7° \mathbb{Z} 51'16	5°29'15	minimum elong	14854 Dec 25 08:24	18° \mathbb{Z} 20'25	5°59'10
morning rise	14854 Jan 23 00:54	4° \mathbb{Z} 02'33		morning rise	14855 Jan 02 20:14	14° \mathbb{Z} 32'33	
direct	14854 Jan 25 10:22	3° \mathbb{Z} 47'30		direct	14855 Jan 06 00:12	14° \mathbb{Z} 09'45	
asc. node	14854 Feb 04 03:46	8° \mathbb{Z} 16'43		morning max el	14855 Jan 17 18:19	19° \mathbb{Z} 48'23	21°15'14
morning max el	14854 Feb 04 14:54	8° \mathbb{Z} 43'05	19°49'44	asc. node	14855 Jan 22 01:06	24° \mathbb{Z} 36'12	
	14854 Feb 18 14:03	0° \mathbb{X}			14855 Jan 25 20:31	0° \mathbb{Z}	
morning set	14854 Feb 22 06:24	7° \mathbb{X} 19'34		morning set	14855 Feb 06 15:25	22° \mathbb{Z} 01'51	
					14855 Feb 10 10:25	0° \mathbb{X}	
superior conj	14854 Mar 02 03:05	23° \mathbb{X} 13'06	0°53'20	superior conj	14855 Feb 13 22:21	7° \mathbb{X} 18'52	1°14'10
minimum elong	14854 Mar 02 05:39	23° \mathbb{X} 25'51	0°53'10	minimum elong	14855 Feb 14 00:51	7° \mathbb{X} 31'48	1°14'21
	14854 Mar 05 14:31	0° \mathbb{Y}		max. Earth dist.	14855 Feb 18 15:49	16° \mathbb{X} 53'35	1.35209 AU
max. Earth dist.	14854 Mar 08 05:43	4° \mathbb{Y} 58'35	1.37310 AU	evening rise	14855 Feb 22 16:44	24° \mathbb{X} 40'33	
desc. node	14854 Mar 08 18:51	5° \mathbb{Y} 59'30		desc. node	14855 Feb 23 15:24	26° \mathbb{X} 26'21	
evening rise	14854 Mar 11 22:54	11° \mathbb{Y} 44'55			14855 Feb 25 14:03	0° \mathbb{Y}	
	14854 Mar 22 20:26	0° \mathbb{B}			14855 Mar 16 09:41	0° \mathbb{B}	
	14854 Apr 13 23:04	0° \mathbb{I}		evening max el	14855 Mar 29 23:57	16° \mathbb{B} 21'27	26°29'49
evening max el	14854 Apr 16 10:15	2° \mathbb{I} 33'05	25°24'54	retrograde	14855 Apr 12 00:11	23° \mathbb{B} 44'24	
retrograde	14854 Apr 28 15:53	9° \mathbb{I} 37'47		evening set	14855 Apr 18 08:12	21° \mathbb{B} 12'16	
asc. node	14854 May 03 00:20	8° \mathbb{I} 18'54		asc. node	14855 Apr 19 21:41	19° \mathbb{B} 47'33	
evening set	14854 May 04 13:36	7° \mathbb{I} 10'26		min. Earth dist.	14855 Apr 22 09:48	17° \mathbb{B} 02'16	0.66668 AU
min. Earth dist.	14854 May 08 21:16	2° \mathbb{I} 25'19	0.67908 AU	inferior conj	14855 Apr 24 07:15	14° \mathbb{B} 45'09	1°19'32
inferior conj	14854 May 10 05:56	0° \mathbb{I} 39'48	2°03'10	minimum elong	14855 Apr 24 05:27	14° \mathbb{B} 50'36	1°18'16
minimum elong	14854 May 10 03:46	0° \mathbb{I} 46'48	2°01'43	morning rise	14855 Apr 30 03:42	9° \mathbb{B} 04'08	
	14854 May 10 18:16	30° \mathbb{R} \mathbb{B}		direct	14855 May 03 05:47	8° \mathbb{B} 10'46	
morning rise	14854 May 15 18:21	24° \mathbb{B} 47'28		morning max el	14855 May 09 16:37	11° \mathbb{B} 35'34	18°23'44
direct	14854 May 19 06:58	23° \mathbb{B} 36'06		desc. node	14855 May 22 17:17	29° \mathbb{B} 25'56	
morning max el	14854 May 26 04:58	27° \mathbb{B} 21'58	19°08'03		14855 May 23 02:01	0° \mathbb{I}	
	14854 May 28 15:37	0° \mathbb{I}		morning set	14855 May 29 23:26	10° \mathbb{I} 52'46	
desc. node	14854 Jun 04 20:23	9° \mathbb{I} 35'58			14855 Jun 11 03:00	0° \mathbb{B}	
greatest brilliancy	14854 Jun 08 03:26	14° \mathbb{I} 26'51	-0.7m	superior conj	14855 Jun 14 16:13	5° \mathbb{B} 32'43	-2°08'06
	14854 Jun 18 08:14	0° \mathbb{B}		minimum elong	14855 Jun 14 10:34	5° \mathbb{B} 10'41	2°08'52
morning set	14854 Jun 18 23:29	0° \mathbb{B} 58'47		max. Earth dist.	14855 Jun 15 06:11	6° \mathbb{B} 27'14	1.45928 AU
max. Earth dist.	14854 Jul 02 10:14	21° \mathbb{B} 52'09	1.45502 AU		14855 Jun 30 07:46	0° \mathbb{Q}	
				evening rise	14855 Jun 30 14:02	0° \mathbb{Q} 24'36	
superior conj	14854 Jul 05 07:23	26° \mathbb{B} 24'02	-2°13'16	greatest brilliancy	14855 Jul 10 01:29	15° \mathbb{Q} 12'56	-0.8m
minimum elong	14854 Jul 05 09:25	26° \mathbb{B} 32'04	2°14'10	asc. node	14855 Jul 16 20:28	25° \mathbb{Q} 16'27	
	14854 Jul 07 14:01	0° \mathbb{Q}			14855 Jul 20 11:40	0° \mathbb{M}	
evening rise	14854 Jul 20 01:15	20° \mathbb{Q} 05'46		evening max el	14855 Jul 22 19:51	2° \mathbb{M} 34'10	18°52'25
	14854 Jul 26 02:46	0° \mathbb{M}		retrograde	14855 Jul 29 12:37	6° \mathbb{M} 14'04	
asc. node	14854 Jul 29 23:44	6° \mathbb{M} 11'30		evening set	14855 Aug 01 21:34	5° \mathbb{M} 08'29	
evening max el	14854 Aug 08 08:21	18° \mathbb{M} 48'19	18°19'10		14855 Aug 06 23:30	30° \mathbb{R} \mathbb{Q}	
retrograde	14854 Aug 14 17:24	22° \mathbb{M} 11'58					
evening set	14854 Aug 17 17:14	21° \mathbb{M} 22'38					

inferior conj	14855 Aug 07 10:37	29° Ω 24'58	2°46'07	evening max el	14856 Jul 05 02:23	16° Ω 24'16	19°42'05
minimum elong	14855 Aug 07 12:30	29° Ω 18'59	2°45'10	retrograde	14856 Jul 12 10:51	20° Ω 32'35	
min. Earth dist.	14855 Aug 09 04:06	27° Ω 14'10	0.66315 AU	evening set	14856 Jul 16 05:31	19° Ω 09'50	
morning rise	14855 Aug 13 02:37	22° Ω 59'31		inferior conj	14856 Jul 21 13:32	13° Ω 13'21	3°04'30
desc. node	14855 Aug 18 15:24	20° Ω 23'02		minimum elong	14856 Jul 21 14:33	13° Ω 09'57	3°03'36
direct	14855 Aug 19 08:22	20° Ω 21'09		min. Earth dist.	14856 Jul 22 16:52	11° Ω 41'58	0.67683 AU
morning max el	14855 Sep 01 07:45	28° Ω 03'20	26°26'52	morning rise	14856 Jul 26 23:06	6° Ω 48'21	
	14855 Sep 03 04:14	0° \mathbb{M}		direct	14856 Aug 01 18:41	4° Ω 15'49	
	14855 Sep 24 21:56	0° $\underline{\Omega}$		desc. node	14856 Aug 04 12:51	4° Ω 44'57	
morning set	14855 Oct 07 04:57	21° $\underline{\Omega}$ 25'40		morning max el	14856 Aug 13 18:41	11° Ω 27'23	25°08'21
max. Earth dist.	14855 Oct 11 02:55	28° $\underline{\Omega}$ 57'20	1.34558 AU		14856 Aug 28 15:05	0° \mathbb{M}	
	14855 Oct 11 15:37	0° \mathbb{M}			14856 Sep 16 14:27	0° $\underline{\Omega}$	
asc. node	14855 Oct 12 22:23	2° \mathbb{M} 33'16		morning set	14856 Sep 18 15:16	3° $\underline{\Omega}$ 35'18	
				max. Earth dist.	14856 Sep 22 04:34	10° $\underline{\Omega}$ 03'01	1.36657 AU
superior conj	14855 Oct 16 04:56	9° \mathbb{M} 13'34	0°30'01	superior conj	14856 Sep 28 17:42	22° $\underline{\Omega}$ 35'47	-0°00'30
minimum elong	14855 Oct 16 03:22	9° \mathbb{M} 05'27	0°30'17	minimum elong	14856 Sep 28 17:43	22° $\underline{\Omega}$ 35'50	0°00'12
evening rise	14855 Oct 23 15:58	24° \mathbb{M} 52'56		behind sun begin	14856 Sep 28 11:17	22° $\underline{\Omega}$ 04'07	
	14855 Oct 26 03:19	0° \mathbb{M}		behind sun end	14856 Sep 29 00:08	23° $\underline{\Omega}$ 07'37	
evening max el	14855 Nov 11 21:20	26° \mathbb{M} 36'09	21°00'26	asc. node	14856 Sep 28 19:01	22° $\underline{\Omega}$ 42'15	
desc. node	14855 Nov 14 11:52	28° \mathbb{M} 54'06			14856 Oct 02 10:25	0° \mathbb{M}	
	14855 Nov 16 01:07	0° \mathbb{M}		evening rise	14856 Oct 06 21:26	9° \mathbb{M} 04'05	
retrograde	14855 Nov 23 13:02	2° \mathbb{M} 23'21			14856 Oct 18 05:44	0° \mathbb{M}	
evening set	14855 Nov 26 02:58	2° \mathbb{M} 07'32		evening max el	14856 Oct 24 04:22	7° \mathbb{M} 33'43	19°43'42
	14855 Dec 01 18:57	30° \mathbb{M} 31		desc. node	14856 Oct 31 09:09	12° \mathbb{M} 10'39	
inferior conj	14855 Dec 04 23:32	28° \mathbb{M} 14'55	-5°29'12	retrograde	14856 Nov 03 04:51	12° \mathbb{M} 33'50	
minimum elong	14855 Dec 04 15:11	28° \mathbb{M} 26'47	5°26'41	evening set	14856 Nov 05 03:44	12° \mathbb{M} 23'18	
min. Earth dist.	14855 Dec 05 18:01	27° \mathbb{M} 48'38	0.54483 AU	inferior conj	14856 Nov 13 22:01	8° \mathbb{M} 21'13	-4°06'09
morning rise	14855 Dec 13 03:41	24° \mathbb{M} 22'37		minimum elong	14856 Nov 13 12:18	8° \mathbb{M} 36'21	4°02'10
direct	14855 Dec 17 07:24	23° \mathbb{M} 45'33		min. Earth dist.	14856 Nov 16 02:18	6° \mathbb{M} 59'44	0.55223 AU
	14855 Dec 30 06:32	0° \mathbb{M}		morning rise	14856 Nov 21 19:13	4° \mathbb{M} 04'40	
morning max el	14855 Dec 30 08:52	0° \mathbb{M} 05'31	22°59'06	direct	14856 Nov 26 21:50	3° \mathbb{M} 06'51	
asc. node	14856 Jan 08 22:23	12° \mathbb{M} 02'43		morning max el	14856 Dec 10 18:02	10° \mathbb{M} 01'15	24°48'16
	14856 Jan 18 20:50	0° \approx		asc. node	14856 Dec 25 19:35	0° \mathbb{M} 20'19	
morning set	14856 Jan 22 02:50	6° \approx 46'59			14856 Dec 25 14:51	0° \mathbb{M}	
superior conj	14856 Jan 29 01:16	21° \approx 43'47	1°28'22	morning set	14857 Jan 05 14:47	21° \mathbb{M} 29'45	
minimum elong	14856 Jan 29 03:05	21° \approx 53'32	1°28'54		14857 Jan 09 12:14	0° \approx	
max. Earth dist.	14856 Feb 01 08:41	28° \approx 44'03	1.33455 AU	superior conj	14857 Jan 12 09:12	6° \approx 20'17	1°36'10
	14856 Feb 01 23:18	0° \mathbb{M}		minimum elong	14857 Jan 12 10:02	6° \approx 24'51	1°37'00
evening rise	14856 Feb 06 00:02	8° \mathbb{M} 08'47		max. Earth dist.	14857 Jan 14 09:03	10° \approx 41'58	1.32158 AU
desc. node	14856 Feb 10 11:58	16° \mathbb{M} 43'08		evening rise	14857 Jan 19 17:40	22° \approx 01'57	
	14856 Feb 18 03:03	0° \mathbb{Y}			14857 Jan 23 17:56	0° \mathbb{M}	
evening max el	14856 Mar 11 13:22	29° \mathbb{Y} 54'49	27°15'30	desc. node	14857 Jan 27 08:35	6° \mathbb{M} 44'53	
	14856 Mar 11 15:31	0° \mathbb{M}			14857 Feb 10 23:13	0° \mathbb{Y}	
retrograde	14856 Mar 25 02:33	7° \mathbb{M} 25'07		evening max el	14857 Feb 22 01:11	13° \mathbb{Y} 02'16	27°34'50
evening set	14856 Mar 31 18:30	4° \mathbb{M} 54'21		retrograde	14857 Mar 07 21:53	20° \mathbb{Y} 30'19	
min. Earth dist.	14856 Apr 04 15:26	1° \mathbb{M} 16'52	0.65029 AU	evening set	14857 Mar 14 18:04	18° \mathbb{Y} 08'24	
asc. node	14856 Apr 05 19:07	0° \mathbb{M} 01'06		min. Earth dist.	14857 Mar 18 12:28	14° \mathbb{Y} 58'56	0.63068 AU
	14856 Apr 05 19:30	30° \mathbb{M} 31		inferior conj	14857 Mar 21 08:55	12° \mathbb{Y} 09'15	-0°44'50
inferior conj	14856 Apr 07 01:12	28° \mathbb{Y} 37'20	0°23'41	minimum elong	14857 Mar 21 10:23	12° \mathbb{Y} 05'36	0°44'21
minimum elong	14856 Apr 07 00:33	28° \mathbb{Y} 39'08	0°23'02	asc. node	14857 Mar 23 16:33	9° \mathbb{Y} 56'27	
morning rise	14856 Apr 13 08:26	23° \mathbb{Y} 09'28		morning rise	14857 Mar 28 05:22	6° \mathbb{Y} 56'54	
direct	14856 Apr 16 01:02	22° \mathbb{Y} 31'17		direct	14857 Mar 30 13:54	6° \mathbb{Y} 30'26	
morning max el	14856 Apr 22 08:44	25° \mathbb{Y} 47'40	17°56'17	morning max el	14857 Apr 06 02:29	9° \mathbb{Y} 49'49	17°46'12
	14856 Apr 26 00:02	0° \mathbb{M}			14857 Apr 19 16:56	0° \mathbb{M}	
desc. node	14856 May 08 14:05	19° \mathbb{M} 34'10		morning set	14857 Apr 22 08:13	4° \mathbb{M} 33'23	
morning set	14856 May 10 03:00	22° \mathbb{M} 06'31		desc. node	14857 Apr 25 10:48	9° \mathbb{M} 55'19	
	14856 May 14 22:15	0° \mathbb{M}		superior conj	14857 May 04 15:29	25° \mathbb{M} 25'21	-1°08'35
superior conj	14856 May 24 06:17	15° \mathbb{M} 01'30	-1°44'11	minimum elong	14857 May 04 08:51	24° \mathbb{M} 58'00	1°08'27
minimum elong	14856 May 23 21:23	14° \mathbb{M} 26'13	1°44'17		14857 May 07 10:43	0° \mathbb{M}	
max. Earth dist.	14856 May 28 02:10	21° \mathbb{M} 03'37	1.45602 AU	max. Earth dist.	14857 May 10 20:05	5° \mathbb{M} 27'11	1.44573 AU
	14856 Jun 02 19:51	0° \mathbb{M}		evening rise	14857 May 19 17:48	19° \mathbb{M} 22'48	
evening rise	14856 Jun 09 06:49	9° \mathbb{M} 57'06			14857 May 26 17:53	0° \mathbb{M}	
	14856 Jun 22 13:11	0° Ω			14857 Jun 17 20:48	0° Ω	
greatest brilliancy	14856 Jun 23 09:24	1° Ω 14'04	-0.6m	evening max el	14857 Jun 18 03:01	0° Ω 15'42	20°46'02
asc. node	14856 Jul 02 17:18	13° Ω 49'08					

asc. node	14857 Jun 19 14:12	1°♎38'49		evening max el	14858 May 31 22:13	14°♊07'52	22°00'49
retrograde	14857 Jun 26 09:49	5°♎02'07		asc. node	14858 Jun 06 11:11	18°♊31'54	
evening set	14857 Jun 30 14:56	3°♎22'06		retrograde	14858 Jun 10 07:47	19°♊37'53	
	14857 Jul 03 19:21	30°♎		evening set	14858 Jun 15 00:03	17°♊41'22	
inferior conj	14857 Jul 05 20:47	27°♊13'59	3°10'19	inferior conj	14858 Jun 20 06:13	11°♊23'14	3°05'01
minimum elong	14857 Jul 05 20:48	27°♊13'55	3°09'23	minimum elong	14858 Jun 20 05:19	11°♊26'25	3°03'56
min. Earth dist.	14857 Jul 06 10:23	26°♊26'58	0.68593 AU	min. Earth dist.	14858 Jun 20 06:33	11°♊22'05	0.69018 AU
morning rise	14857 Jul 11 02:23	20°♊53'09		morning rise	14858 Jun 25 10:24	5°♊08'45	
direct	14857 Jul 16 10:15	18°♊33'13		direct	14858 Jun 30 05:48	3°♊06'14	
desc. node	14857 Jul 22 10:15	20°♊50'36		desc. node	14858 Jul 09 07:33	8°♊15'23	
morning max el	14857 Jul 27 05:15	24°♊59'52	23°40'10	morning max el	14858 Jul 09 17:49	8°♊40'49	22°11'37
	14857 Jul 31 17:40	0°♎			14858 Jul 26 09:08	0°♎	
	14857 Aug 22 02:04	0°♎		morning set	14858 Aug 11 19:29	25°♎04'37	
morning set	14857 Aug 31 05:18	14°♎50'50			14858 Aug 14 20:06	0°♎	
max. Earth dist.	14857 Sep 04 02:29	21°♎31'45	1.39015 AU	max. Earth dist.	14858 Aug 17 03:43	3°♎50'35	1.41359 AU
	14857 Sep 08 20:03	0°♎					
superior conj	14857 Sep 11 17:12	5°♎20'11	-0°35'00	superior conj	14858 Aug 24 23:10	17°♎17'35	-1°10'57
minimum elong	14857 Sep 11 19:44	5°♎32'05	0°34'34	minimum elong	14858 Aug 25 04:44	17°♎42'13	1°10'27
asc. node	14857 Sep 15 15:34	12°♎49'12			14858 Aug 31 23:14	0°♎	
evening rise	14857 Sep 20 20:20	22°♎56'12		asc. node	14858 Sep 02 12:06	2°♎51'01	
	14857 Sep 24 12:10	0°♎		evening rise	14858 Sep 04 09:17	6°♎21'16	
evening max el	14857 Oct 07 01:06	19°♎20'25	18°48'55		14858 Sep 18 15:44	0°♎	
retrograde	14857 Oct 15 12:37	23°♎36'41		evening max el	14858 Sep 20 07:53	1°♎49'52	18°15'35
evening set	14857 Oct 17 10:04	23°♎24'42		retrograde	14858 Sep 27 15:54	5°♎33'59	
desc. node	14857 Oct 18 06:31	23°♎11'52		evening set	14858 Sep 29 18:33	5°♎16'03	
inferior conj	14857 Oct 25 14:43	19°♎03'58	-2°20'20	desc. node	14858 Oct 05 03:58	2°♎14'34	
minimum elong	14857 Oct 25 08:55	19°♎14'26	2°17'22	inferior conj	14858 Oct 07 05:16	0°♎33'49	-0°39'08
min. Earth dist.	14857 Oct 28 15:24	16°♎53'31	0.56766 AU	minimum elong	14858 Oct 07 03:50	0°♎36'50	0°38'08
morning rise	14857 Nov 02 04:39	14°♎11'51			14858 Oct 07 21:12	30°♎	
direct	14857 Nov 08 01:45	12°♎48'39		min. Earth dist.	14858 Oct 10 11:54	27°♎48'57	0.58833 AU
morning max el	14857 Nov 22 06:19	20°♎09'17	26°24'13	morning rise	14858 Oct 14 09:43	25°♎05'41	
	14857 Nov 30 17:01	0°♎		direct	14858 Oct 20 19:11	23°♎15'53	
asc. node	14857 Dec 12 16:39	19°♎15'14			14858 Nov 03 02:29	0°♎	
	14857 Dec 18 04:16	0°♎		morning max el	14858 Nov 04 02:24	0°♎56'50	27°30'23
morning set	14857 Dec 21 01:26	6°♎04'22			14858 Nov 24 22:01	0°♎	
				asc. node	14858 Nov 29 13:38	8°♎37'36	
superior conj	14857 Dec 27 19:53	21°♎00'57	1°37'50	morning set	14858 Dec 05 09:02	20°♎26'35	
minimum elong	14857 Dec 27 19:38	20°♎59'35	1°38'48		14858 Dec 09 18:23	0°♎	
max. Earth dist.	14857 Dec 28 14:57	22°♎47'14	1.31363 AU	superior conj	14858 Dec 12 07:24	5°♎40'24	1°33'32
	14857 Dec 31 21:24	0°♎		minimum elong	14858 Dec 12 06:10	5°♎33'31	1°34'28
evening rise	14858 Jan 03 18:48	6°♎12'05		max. Earth dist.	14858 Dec 11 23:06	4°♎53'56	1.31088 AU
desc. node	14858 Jan 14 05:16	26°♎24'29		evening rise	14858 Dec 19 01:08	20°♎33'37	
	14858 Jan 16 07:25	0°♎			14858 Dec 23 14:16	0°♎	
evening max el	14858 Feb 04 09:02	25°♎30'24	27°21'57	desc. node	14859 Jan 01 02:02	15°♎33'36	
	14858 Feb 09 23:39	0°♎			14859 Jan 10 23:06	0°♎	
retrograde	14858 Feb 18 08:41	2°♎49'50		evening max el	14859 Jan 17 10:04	7°♎08'24	26°34'05
evening set	14858 Feb 25 03:54	0°♎44'23		retrograde	14859 Jan 31 09:23	14°♎16'57	
	14858 Feb 26 07:15	30°♎		evening set	14859 Feb 06 20:32	12°♎34'38	
min. Earth dist.	14858 Feb 28 23:23	27°♎56'11	0.60899 AU	min. Earth dist.	14859 Feb 10 23:40	9°♎57'18	0.58696 AU
inferior conj	14858 Mar 04 02:55	25°♎11'20	-2°05'03	inferior conj	14859 Feb 14 03:33	7°♎33'38	-3°32'11
minimum elong	14858 Mar 04 07:27	25°♎01'24	2°03'03	minimum elong	14859 Feb 14 11:22	7°♎18'47	3°28'59
asc. node	14858 Mar 10 14:00	20°♎38'39		morning rise	14859 Feb 22 05:24	3°♎00'58	
morning rise	14858 Mar 11 14:14	20°♎17'23		direct	14859 Feb 24 05:22	2°♎46'58	
direct	14858 Mar 13 16:47	19°♎58'56		asc. node	14859 Feb 25 11:29	2°♎52'42	
morning max el	14858 Mar 20 18:34	23°♎32'01	17°54'18	morning max el	14859 Mar 04 05:22	6°♎44'13	18°21'58
	14858 Mar 25 22:22	0°♎			14859 Mar 18 23:58	0°♎	
morning set	14858 Apr 05 09:04	17°♎54'48		morning set	14859 Mar 19 23:52	1°♎53'35	
desc. node	14858 Apr 12 07:24	0°♎24'24					
	14858 Apr 12 01:54	0°♎		superior conj	14859 Mar 29 07:15	19°♎23'23	0°07'04
superior conj	14858 Apr 16 00:27	6°♎54'39	-0°29'34	minimum elong	14859 Mar 29 07:45	19°♎25'41	0°06'45
minimum elong	14858 Apr 15 21:48	6°♎43'11	0°29'40	behind sun begin	14859 Mar 29 01:05	18°♎55'13	
max. Earth dist.	14858 Apr 23 10:27	19°♎24'46	1.42937 AU	behind sun end	14859 Mar 29 14:24	19°♎56'04	
evening rise	14858 Apr 29 14:53	29°♎21'18		desc. node	14859 Mar 30 03:55	20°♎57'30	
	14858 Apr 30 00:43	0°♎			14859 Apr 04 06:13	0°♎	
	14858 May 20 08:38	0°♎		max. Earth dist.	14859 Apr 05 20:22	2°♎44'12	1.40869 AU
				evening rise	14859 Apr 10 07:12	10°♎11'52	

	14859 Apr 22 23:53	0°♄			14860 Apr 15 22:04	0°♄	
evening max el	14859 May 14 13:30	28°♄00'26	23°21'29	evening max el	14860 Apr 26 03:03	11°♄54'06	24°41'39
	14859 May 16 16:28	0°♄		retrograde	14860 May 07 19:35	18°♄43'53	
asc. node	14859 May 24 08:18	4°♄10'55		asc. node	14860 May 10 05:32	18°♄18'48	
retrograde	14859 May 25 03:25	4°♄13'43		evening set	14860 May 13 10:54	16°♄21'09	
evening set	14859 May 30 07:13	2°♄02'33		min. Earth dist.	14860 May 17 22:33	11°♄15'20	0.68422 AU
	14859 Jun 01 07:20	30°♄		inferior conj	14860 May 18 23:56	9°♄50'44	2°23'08
min. Earth dist.	14859 Jun 04 03:16	26°♄20'09	0.68957 AU	minimum elong	14860 May 18 21:50	9°♄57'45	2°21'42
inferior conj	14859 Jun 04 15:53	25°♄36'36	2°49'17	morning rise	14860 May 24 09:00	3°♄52'46	
minimum elong	14859 Jun 04 14:14	25°♄42'19	2°48'00	direct	14860 May 28 03:58	2°♄30'26	
morning rise	14859 Jun 09 21:12	19°♄29'53		morning max el	14860 Jun 04 12:14	6°♄34'36	19°40'57
direct	14859 Jun 14 04:08	17°♄47'15		desc. node	14860 Jun 12 01:45	15°♄43'08	
morning max el	14859 Jun 22 11:28	22°♄32'05	20°50'08	greatest brilliancy	14860 Jun 17 07:20	23°♄08'39	-0.6m
desc. node	14859 Jun 26 04:42	26°♄38'00			14860 Jun 21 22:20	0°♄	
	14859 Jun 28 21:33	0°♄		morning set	14860 Jun 30 13:29	13°♄06'58	
	14859 Jul 19 15:18	0°♄			14860 Jul 11 10:11	0°♄	
morning set	14859 Jul 22 10:35	4°♄19'50		max. Earth dist.	14860 Jul 12 00:52	0°♄57'57	1.44924 AU
max. Earth dist.	14859 Jul 30 11:22	17°♄03'05	1.43404 AU				
				superior conj	14860 Jul 16 15:53	8°♄19'43	-2°07'08
superior conj	14859 Aug 06 07:19	28°♄17'59	-1°43'52	minimum elong	14860 Jul 16 21:29	8°♄42'14	2°07'43
minimum elong	14859 Aug 06 14:51	28°♄49'38	1°43'42		14860 Jul 29 20:02	0°♄	
	14859 Aug 07 07:33	0°♄		evening rise	14860 Jul 30 10:56	1°♄02'38	
evening rise	14859 Aug 18 07:53	19°♄07'40		asc. node	14860 Aug 06 05:16	12°♄22'08	
asc. node	14859 Aug 20 08:39	22°♄43'26		evening max el	14860 Aug 17 11:07	28°♄17'28	18°07'50
	14859 Aug 24 12:40	0°♄			14860 Aug 19 10:51	0°♄	
evening max el	14859 Sep 03 20:28	14°♄51'52	18°02'18	retrograde	14860 Aug 23 19:55	1°♄38'05	
retrograde	14859 Sep 10 11:51	18°♄17'27		evening set	14860 Aug 26 14:34	0°♄57'32	
evening set	14859 Sep 12 22:03	17°♄49'50			14860 Aug 28 04:41	30°♄	
inferior conj	14859 Sep 19 15:45	12°♄47'40	0°44'00	inferior conj	14860 Sep 01 18:21	25°♄37'55	1°46'07
minimum elong	14859 Sep 19 17:04	12°♄44'29	0°43'38	minimum elong	14860 Sep 01 20:41	25°♄31'29	1°45'12
desc. node	14859 Sep 22 01:27	10°♄26'54		min. Earth dist.	14860 Sep 04 09:42	22°♄44'42	0.63353 AU
min. Earth dist.	14859 Sep 22 17:48	9°♄48'21	0.61117 AU	desc. node	14860 Sep 07 22:58	19°♄26'52	
morning rise	14859 Sep 26 09:11	6°♄51'08		morning rise	14860 Sep 08 00:47	19°♄23'25	
direct	14859 Oct 03 00:40	4°♄37'28		direct	14860 Sep 14 16:20	16°♄52'43	
morning max el	14859 Oct 17 06:08	12°♄32'58	27°58'13	morning max el	14860 Sep 28 14:52	24°♄53'23	27°47'26
	14859 Oct 31 03:13	0°♄			14860 Oct 03 06:50	0°♄	
asc. node	14859 Nov 16 10:29	28°♄19'18			14860 Oct 23 14:14	0°♄	
	14859 Nov 17 06:37	0°♄		morning set	14860 Nov 02 07:01	18°♄13'22	
morning set	14859 Nov 19 11:39	4°♄31'22		asc. node	14860 Nov 02 07:15	18°♄14'32	
max. Earth dist.	14859 Nov 25 05:32	16°♄52'01	1.31347 AU	max. Earth dist.	14860 Nov 07 06:22	28°♄32'34	1.32164 AU
					14860 Nov 07 22:43	0°♄	
superior conj	14859 Nov 26 17:55	20°♄13'22	1°23'20				
minimum elong	14859 Nov 26 15:57	20°♄02'24	1°24'05	superior conj	14860 Nov 10 01:31	4°♄34'41	1°07'13
	14859 Dec 01 03:33	0°♄		minimum elong	14860 Nov 09 23:12	4°♄22'05	1°07'44
evening rise	14859 Dec 03 10:40	5°♄01'21		evening rise	14860 Nov 16 21:36	19°♄30'47	
	14859 Dec 16 10:04	0°♄			14860 Nov 21 22:31	0°♄	
desc. node	14859 Dec 18 22:56	4°♄00'45		desc. node	14860 Dec 04 19:58	21°♄29'59	
evening max el	14859 Dec 30 02:31	17°♄53'26	25°14'41	evening max el	14860 Dec 10 12:40	27°♄59'15	23°35'17
retrograde	14860 Jan 12 22:39	24°♄50'27			14860 Dec 12 18:59	0°♄	
evening set	14860 Jan 18 16:10	23°♄36'12		retrograde	14860 Dec 23 22:51	4°♄39'05	
min. Earth dist.	14860 Jan 23 14:44	20°♄54'20	0.56693 AU	evening set	14860 Dec 28 12:30	3°♄53'47	
inferior conj	14860 Jan 26 07:46	19°♄07'24	-4°54'22	min. Earth dist.	14861 Jan 03 23:33	0°♄48'29	0.55193 AU
minimum elong	14860 Jan 26 16:50	18°♄52'28	4°51'24		14861 Jan 05 08:35	30°♄	
morning rise	14860 Feb 03 20:06	14°♄56'42		inferior conj	14861 Jan 05 15:29	29°♄49'50	-5°50'13
direct	14860 Feb 05 23:20	14°♄43'29		minimum elong	14861 Jan 05 20:23	29°♄42'38	5°48'48
asc. node	14860 Feb 12 08:55	16°♄51'13		morning rise	14861 Jan 14 05:53	25°♄56'26	
morning max el	14860 Feb 15 06:51	19°♄15'15	19°11'11	direct	14861 Jan 16 21:48	25°♄39'02	
	14860 Feb 23 06:57	0°♄			14861 Jan 26 19:51	0°♄	
morning set	14860 Mar 03 00:18	16°♄17'02		morning max el	14861 Jan 27 18:59	0°♄53'16	20°23'30
	14860 Mar 09 22:37	0°♄		asc. node	14861 Jan 29 06:19	2°♄23'54	
					14861 Feb 14 20:21	0°♄	
superior conj	14860 Mar 11 07:38	2°♄39'55	0°38'16	morning set	14861 Feb 15 06:56	0°♄54'17	
minimum elong	14860 Mar 11 09:49	2°♄50'27	0°37'58				
desc. node	14860 Mar 16 00:26	11°♄31'25		superior conj	14861 Feb 22 21:06	16°♄30'28	1°02'59
max. Earth dist.	14860 Mar 18 02:50	15°♄20'48	1.38600 AU	minimum elong	14861 Feb 22 23:44	16°♄43'49	1°02'57
evening rise	14860 Mar 21 20:47	21°♄57'39		max. Earth dist.	14861 Feb 28 09:53	27°♄23'48	1.36376 AU
	14860 Mar 26 15:11	0°♄			14861 Mar 01 18:52	0°♄	

desc. node	14861 Mar 02 20:57	2°Υ01'46		minimum elong	14862 Feb 06 22:15	0°✠56'55	1°21'19
evening rise	14861 Mar 04 05:19	4°Υ30'30		max. Earth dist.	14862 Feb 10 22:34	9°✠14'25	1.34415 AU
	14861 Mar 19 13:42	0°♁		evening rise	14862 Feb 15 05:20	17°✠41'04	
evening max el	14861 Apr 08 16:35	25°♁46'13	25°54'23	desc. node	14862 Feb 17 17:31	22°✠24'42	
	14861 Apr 13 15:16	0°♈			14862 Feb 21 22:46	0°Υ	
retrograde	14861 Apr 21 07:11	3°♈00'50			14862 Mar 13 20:14	0°♁	
evening set	14861 Apr 27 09:20	0°♈30'50		evening max el	14862 Mar 22 06:29	9°♁29'55	26°52'06
asc. node	14861 Apr 27 02:51	0°♈44'04		retrograde	14862 Apr 04 13:02	16°♁56'54	
	14861 Apr 27 23:26	30°♁♁		evening set	14862 Apr 11 00:39	14°♁24'52	
min. Earth dist.	14861 May 01 14:14	26°♁00'40	0.67431 AU	asc. node	14862 Apr 14 00:15	11°♁35'22	
inferior conj	14861 May 03 04:21	24°♁00'39	1°46'07	min. Earth dist.	14862 Apr 15 00:12	10°♁28'48	0.66016 AU
minimum elong	14861 May 03 02:16	24°♁07'15	1°44'42	inferior conj	14862 Apr 17 02:52	8°♁01'08	0°57'23
morning rise	14861 May 08 19:51	18°♁12'46		minimum elong	14862 Apr 17 01:27	8°♁05'18	0°56'20
direct	14861 May 12 03:47	17°♁09'27		morning rise	14862 Apr 23 03:33	2°♁25'07	
morning max el	14861 May 18 20:12	20°♁45'08	18°47'04	direct	14862 Apr 26 01:28	1°♁38'30	
	14861 May 26 07:25	0°♈		morning max el	14862 May 02 09:57	4°♁58'20	18°09'53
desc. node	14861 May 29 22:42	5°♈19'00		desc. node	14862 May 16 19:33	25°♁17'19	
greatest brilliancy	14861 Jun 01 19:36	9°♈39'52	-0.8m		14862 May 19 17:58	0°♈	
morning set	14861 Jun 10 00:31	22°♈21'44		morning set	14862 May 21 11:59	2°♈49'04	
	14861 Jun 14 22:17	0°♁					
max. Earth dist.	14861 Jun 24 18:47	15°♁21'22	1.45775 AU	superior conj	14862 Jun 05 14:35	26°♈49'12	-1°59'55
				minimum elong	14862 Jun 05 06:45	26°♈18'29	2°00'24
superior conj	14861 Jun 26 05:42	17°♁37'48	-2°13'35	max. Earth dist.	14862 Jun 07 15:09	29°♈59'04	1.45886 AU
minimum elong	14861 Jun 26 04:22	17°♁32'35	2°14'34		14862 Jun 07 15:23	0°♁	
	14861 Jul 04 02:23	0°♈		evening rise	14862 Jun 21 16:55	21°♁51'02	
evening rise	14861 Jul 11 13:54	11°♈55'45			14862 Jun 26 23:21	0°♈	
	14861 Jul 22 23:08	0°♈		greatest brilliancy	14862 Jul 03 08:23	9°♈44'16	-0.7m
asc. node	14861 Jul 24 01:58	1°♈41'22		asc. node	14862 Jul 10 22:44	20°♈33'36	
evening max el	14861 Aug 01 00:36	11°♈58'18	18°31'18	evening max el	14862 Jul 15 10:16	25°♈46'45	19°11'43
retrograde	14861 Aug 07 11:57	15°♈27'11		retrograde	14862 Jul 22 08:38	29°♈36'54	
evening set	14861 Aug 10 15:35	14°♈31'13		evening set	14862 Jul 25 21:44	28°♈23'57	
inferior conj	14861 Aug 16 09:01	8°♈56'10	2°28'59	inferior conj	14862 Jul 31 08:16	22°♈34'54	2°55'33
minimum elong	14861 Aug 16 11:15	8°♈49'23	2°28'00	minimum elong	14862 Jul 31 09:49	22°♈29'53	2°54'38
min. Earth dist.	14861 Aug 18 10:49	6°♈26'09	0.65340 AU	min. Earth dist.	14862 Aug 01 19:42	20°♈40'09	0.66957 AU
morning rise	14861 Aug 22 05:44	2°♈32'51		morning rise	14862 Aug 05 21:16	16°♈09'23	
desc. node	14861 Aug 25 20:29	0°♈23'56		direct	14862 Aug 11 23:05	13°♈32'32	
	14861 Aug 27 10:30	30°♁♈		desc. node	14862 Aug 12 17:58	13°♈34'53	
direct	14861 Aug 28 16:19	29°♈54'26		morning max el	14862 Aug 24 12:59	21°♈02'48	25°55'13
	14861 Aug 29 22:51	0°♈			14862 Sep 01 07:09	0°♈	
morning max el	14861 Sep 11 01:50	7°♈47'21	27°03'42		14862 Sep 21 12:30	0°♈	
	14861 Sep 28 08:05	0°♈		morning set	14862 Sep 29 12:10	14°♈01'17	
	14861 Oct 15 22:23	0°♈		max. Earth dist.	14862 Oct 03 04:56	20°♈58'07	1.35410 AU
morning set	14861 Oct 16 16:22	1°♈26'25		asc. node	14862 Oct 07 00:34	28°♈26'36	
asc. node	14861 Oct 20 03:57	8°♈18'36			14862 Oct 07 19:13	0°♈	
max. Earth dist.	14861 Oct 20 22:30	9°♈52'29	1.33536 AU				
				superior conj	14862 Oct 08 22:39	2°♈18'34	0°17'41
superior conj	14861 Oct 25 04:00	18°♈39'03	0°45'15	minimum elong	14862 Oct 08 21:38	2°♈13'25	0°17'56
minimum elong	14861 Oct 25 01:56	18°♈28'09	0°45'34	evening rise	14862 Oct 16 16:00	18°♈16'14	
	14861 Oct 30 11:29	0°♈			14862 Oct 22 12:51	0°♈	
evening rise	14861 Nov 01 08:05	3°♈57'48		evening max el	14862 Nov 03 23:18	18°♈29'40	20°25'07
	14861 Nov 15 10:57	0°♁		desc. node	14862 Nov 08 14:21	22°♈08'25	
desc. node	14861 Nov 21 17:06	7°♁41'09		retrograde	14862 Nov 14 22:18	23°♈56'47	
evening max el	14861 Nov 22 00:38	7°♁59'50	21°53'35	evening set	14862 Nov 17 04:07	23°♈44'08	
retrograde	14861 Dec 04 11:33	14°♁09'36		inferior conj	14862 Nov 26 01:24	19°♈48'53	-4°58'45
evening set	14861 Dec 07 17:04	13°♁46'19		minimum elong	14862 Nov 25 15:31	20°♈03'19	4°55'22
inferior conj	14861 Dec 16 09:03	9°♁54'11	-5°54'36	min. Earth dist.	14862 Nov 27 11:30	18°♈59'02	0.54694 AU
minimum elong	14861 Dec 16 04:55	9°♁59'58	5°53'16	morning rise	14862 Dec 04 02:31	15°♈48'49	
min. Earth dist.	14861 Dec 16 05:26	9°♁59'15	0.54481 AU	direct	14862 Dec 08 16:41	15°♈03'30	
morning rise	14861 Dec 24 17:36	6°♁06'40		morning max el	14862 Dec 22 03:10	21°♈38'20	23°45'57
direct	14861 Dec 28 07:36	5°♁38'23			14862 Dec 29 07:51	0°♁	
morning max el	14862 Jan 09 16:18	11°♁35'51	21°57'41	asc. node	14863 Jan 03 00:51	7°♁03'31	
asc. node	14862 Jan 16 03:38	19°♁13'56		morning set	14863 Jan 15 05:05	0°♁22'29	
	14862 Jan 22 19:56	0°♁			14863 Jan 15 00:53	0°♁	
morning set	14862 Jan 30 17:14	15°♁38'08					
	14862 Feb 06 11:26	0°♈		superior conj	14863 Jan 22 01:16	15°♁14'57	1°32'26
				minimum elong	14863 Jan 22 02:42	15°♁22'40	1°33'07
superior conj	14862 Feb 06 19:58	0°♈44'59	1°20'59	max. Earth dist.	14863 Jan 24 18:57	21°♁07'59	1.32848 AU

	14863 Jan 29 01:25	0° H		morning max el	14863 Dec 03 12:52	1° X 35'15	25°31'57
evening rise	14863 Jan 29 17:23	1° H 20'18		asc. node	14863 Dec 20 21:58	25° X 38'04	
desc. node	14863 Feb 04 14:08	12° H 35'36			14863 Dec 23 07:00	0° Z	
	14863 Feb 14 21:41	0° Y		morning set	14863 Dec 30 16:40	15° Z 02'15	
evening max el	14863 Mar 04 19:37	22° Y 54'01	27°27'23				
	14863 Mar 15 16:09	0° B		superior conj	14864 Jan 06 10:35	29° Z 53'36	1°37'37
retrograde	14863 Mar 18 12:18	0° B 23'27		minimum elong	14864 Jan 06 10:58	29° Z 55'41	1°38'31
	14863 Mar 21 05:47	30° R Y			14864 Jan 06 11:44	0° \approx	
evening set	14863 Mar 25 06:41	27° Y 55'42		max. Earth dist.	14864 Jan 07 22:06	3° \approx 09'40	1.31755 AU
min. Earth dist.	14863 Mar 29 02:18	24° Y 30'50	0.64229 AU	evening rise	14864 Jan 13 14:27	15° \approx 20'52	
inferior conj	14863 Mar 31 16:51	21° Y 45'36	-0°03'51		14864 Jan 21 02:00	0° H	
minimum elong	14863 Mar 31 16:58	21° Y 45'17	0°04'04	desc. node	14864 Jan 22 10:46	2° H 28'42	
transit middle	14863 Mar 31 16:58	21° Y 45'17	0°04'04		14864 Feb 09 20:58	0° Y	
transit begin	14863 Mar 31 13:58	21° Y 53'15		evening max el	14864 Feb 15 05:53	5° Y 45'24	27°33'31
transit end	14863 Mar 31 19:58	21° Y 37'19		retrograde	14864 Feb 29 04:02	13° Y 10'26	
asc. node	14863 Mar 31 21:40	21° Y 32'49		evening set	14864 Mar 07 00:46	10° Y 54'16	
morning rise	14863 Apr 07 05:24	16° Y 23'56		min. Earth dist.	14864 Mar 10 18:54	7° Y 55'17	0.62159 AU
direct	14863 Apr 09 18:31	15° Y 51'00		inferior conj	14864 Mar 13 19:08	5° Y 05'32	-1°17'38
morning max el	14863 Apr 16 03:06	19° Y 07'01	17°49'53	minimum elong	14864 Mar 13 21:49	4° Y 59'13	1°16'31
	14863 Apr 24 07:07	0° B		asc. node	14864 Mar 17 19:08	1° Y 40'18	
morning set	14863 May 03 03:10	14° B 36'28		morning rise	14864 Mar 20 21:48	0° Y 00'59	
desc. node	14863 May 03 16:18	15° B 31'43			14864 Mar 20 23:00	30° R H	
	14863 May 12 09:17	0° II		direct	14864 Mar 23 03:33	29° H 38'20	
					14864 Mar 25 07:25	0° Y	
superior conj	14863 May 16 11:38	6° II 38'39	-1°29'59	morning max el	14864 Mar 29 20:36	3° Y 01'58	17°47'28
minimum elong	14863 May 16 03:14	6° II 04'50	1°29'55	morning set	14864 Apr 14 17:26	27° Y 28'27	
max. Earth dist.	14863 May 21 11:09	14° II 34'25	1.45248 AU		14864 Apr 16 03:44	0° B	
	14863 May 31 09:25	0° E		desc. node	14864 Apr 19 12:56	5° B 56'33	
evening rise	14863 Jun 01 05:19	1° E 16'14					
	14863 Jun 20 16:25	0° Ω		superior conj	14864 Apr 26 06:53	17° B 30'31	-0°52'02
asc. node	14863 Jun 27 19:36	8° Ω 49'58		minimum elong	14864 Apr 26 01:56	17° B 09'42	0°51'59
evening max el	14863 Jun 28 14:23	9° Ω 38'13	20°07'38	max. Earth dist.	14864 May 03 03:53	28° B 49'05	1.43935 AU
retrograde	14863 Jul 06 07:27	14° Ω 01'31			14864 May 03 21:31	0° II	
evening set	14863 Jul 10 06:35	12° Ω 31'08		evening rise	14864 May 10 18:52	10° II 51'33	
inferior conj	14863 Jul 15 13:19	6° Ω 29'24	3°08'22		14864 May 23 12:24	0° E	
minimum elong	14863 Jul 15 13:55	6° Ω 27'22	3°07'29	evening max el	14864 Jun 10 12:27	23° E 29'27	21°16'42
min. Earth dist.	14863 Jul 16 10:39	5° Ω 16'51	0.68131 AU	asc. node	14864 Jun 13 16:34	26° E 17'33	
morning rise	14863 Jul 20 20:55	0° Ω 06'00		retrograde	14864 Jun 19 06:19	28° E 34'32	
	14863 Jul 20 23:38	30° R E		evening set	14864 Jun 23 16:05	26° E 47'14	
direct	14863 Jul 26 11:37	27° E 38'24		inferior conj	14864 Jun 28 21:45	20° E 34'22	3°09'22
desc. node	14863 Jul 30 15:23	28° E 44'32		minimum elong	14864 Jun 28 21:22	20° E 35'42	3°08'23
	14863 Aug 01 17:56	0° Ω		min. Earth dist.	14864 Jun 29 05:35	20° E 07'04	0.68830 AU
morning max el	14863 Aug 06 23:44	4° Ω 31'41	24°31'30	morning rise	14864 Jul 04 02:26	14° E 15'55	
	14863 Aug 26 14:21	0° M		direct	14864 Jul 09 04:55	12° E 03'11	
morning set	14863 Sep 11 14:22	25° M 49'06		desc. node	14864 Jul 16 12:42	15° E 26'40	
	14863 Sep 13 23:15	0° E		morning max el	14864 Jul 19 11:00	18° E 08'29	23°02'05
max. Earth dist.	14863 Sep 15 04:40	2° E 12'10	1.37652 AU		14864 Jul 29 08:58	0° Ω	
					14864 Aug 18 16:25	0° M	
superior conj	14863 Sep 22 06:14	15° E 25'44	-0°14'46	morning set	14864 Aug 22 18:39	6° M 39'39	
minimum elong	14863 Sep 22 07:12	15° E 30'28	0°14'25	max. Earth dist.	14864 Aug 27 03:20	14° M 00'20	1.40031 AU
behind sun begin	14863 Sep 22 04:08	15° E 15'38					
behind sun end	14863 Sep 22 10:16	15° E 45'19		superior conj	14864 Sep 03 22:48	27° M 51'17	-0°50'18
asc. node	14863 Sep 23 21:09	18° E 35'09		minimum elong	14864 Sep 04 02:37	28° M 08'46	0°49'48
	14863 Sep 29 14:57	0° M			14864 Sep 05 02:47	0° E	
evening rise	14863 Sep 30 19:02	2° M 20'26		asc. node	14864 Sep 09 17:43	8° E 40'33	
evening max el	14863 Oct 17 12:19	29° M 47'35	19°17'33	evening rise	14864 Sep 13 14:12	16° E 02'33	
	14863 Oct 17 17:19	0° X			14864 Sep 21 03:11	0° M	
desc. node	14863 Oct 26 11:39	4° X 28'03		evening max el	14864 Sep 29 13:48	11° M 53'44	18°32'09
retrograde	14863 Oct 26 20:16	4° X 28'27		retrograde	14864 Oct 07 12:33	15° M 54'59	
evening set	14863 Oct 28 17:17	4° X 17'54		evening set	14864 Oct 09 11:32	15° M 41'06	
inferior conj	14863 Nov 06 06:42	0° X 08'07	-3°22'05	desc. node	14864 Oct 12 09:02	14° M 34'21	
minimum elong	14863 Nov 05 22:19	0° X 21'59	3°18'16	inferior conj	14864 Oct 17 08:44	11° M 11'25	-1°35'44
	14863 Nov 06 11:35	30° R M		minimum elong	14864 Oct 17 04:55	11° M 18'47	1°33'36
min. Earth dist.	14863 Nov 08 21:18	28° M 24'46	0.55799 AU	min. Earth dist.	14864 Oct 20 13:34	8° M 43'48	0.57596 AU
morning rise	14863 Nov 14 01:00	25° M 37'08		morning rise	14864 Oct 24 18:50	6° M 02'58	
direct	14863 Nov 19 11:53	24° M 29'18		direct	14864 Oct 30 21:49	4° M 28'19	
	14863 Dec 01 18:43	0° X		morning max el	14864 Nov 14 04:30	11° M 59'14	26°56'45

	14864 Nov 28 06:09	0°♊		min. Earth dist.	14865 Oct 02 14:05	20°♊07'06	0.59796 AU
asc. node	14864 Dec 06 18:59	14°♊45'57		morning rise	14865 Oct 06 08:03	17°♊19'39	
morning set	14864 Dec 14 02:16	29°♊32'50		direct	14865 Oct 12 21:04	15°♊18'39	
	14864 Dec 14 07:20	0°♋		morning max el	14865 Oct 27 03:53	23°♊07'05	27°47'00
					14865 Nov 02 07:46	0°♌	
superior conj	14864 Dec 20 21:53	14°♋35'08	1°36'44		14865 Nov 21 10:25	0°♊	
minimum elong	14864 Dec 20 21:12	14°♋31'19	1°37'42	asc. node	14865 Nov 23 15:54	4°♊17'28	
max. Earth dist.	14864 Dec 21 05:17	15°♋16'31	1.31175 AU	morning set	14865 Nov 28 08:00	13°♊48'26	
evening rise	14864 Dec 27 18:03	29°♋36'55		max. Earth dist.	14865 Dec 04 13:00	27°♊20'08	1.31129 AU
	14864 Dec 27 22:24	0°♌					
desc. node	14865 Jan 08 07:30	21°♌56'56		superior conj	14865 Dec 05 09:14	29°♊12'58	1°29'56
	14865 Jan 13 05:59	0°♍		minimum elong	14865 Dec 05 07:39	29°♊04'07	1°30'48
evening max el	14865 Jan 27 10:56	17°♍52'58	27°05'50		14865 Dec 05 17:39	0°♋	
retrograde	14865 Feb 10 11:06	25°♍08'56		evening rise	14865 Dec 12 02:00	14°♋02'02	
evening set	14865 Feb 17 03:49	23°♍12'21			14865 Dec 19 23:14	0°♌	
min. Earth dist.	14865 Feb 21 01:19	20°♍30'21	0.59947 AU	desc. node	14865 Dec 26 04:20	10°♌49'57	
inferior conj	14865 Feb 24 06:12	17°♍52'08	-2°41'40	evening max el	14866 Jan 09 08:30	29°♌08'38	26°03'45
minimum elong	14865 Feb 24 12:11	17°♍39'46	2°39'04		14866 Jan 10 06:46	0°♍	
morning rise	14865 Mar 03 23:57	13°♍07'17		retrograde	14866 Jan 23 07:22	6°♍12'32	
asc. node	14865 Mar 04 16:34	12°♍58'19		evening set	14866 Jan 29 11:57	4°♍42'06	
direct	14865 Mar 06 00:43	12°♍51'18		min. Earth dist.	14866 Feb 02 21:44	2°♍04'35	0.57800 AU
morning max el	14865 Mar 13 11:01	16°♍33'31	18°03'37	inferior conj	14866 Feb 05 22:25	29°♌54'58	-4°08'42
	14865 Mar 22 21:41	0°♎		minimum elong	14866 Feb 06 07:12	29°♌39'15	4°05'23
morning set	14865 Mar 29 00:50	11°♎07'33			14866 Feb 05 19:37	30°♎	
desc. node	14865 Apr 06 09:31	26°♎27'57		morning rise	14866 Feb 14 05:28	25°♌31'28	
				direct	14866 Feb 16 05:46	25°♌18'21	
superior conj	14865 Apr 08 01:38	29°♎26'41	-0°13'32	asc. node	14866 Feb 19 14:01	25°♌56'36	
minimum elong	14865 Apr 08 00:29	29°♎21'37	0°13'45	morning max el	14866 Feb 24 18:21	29°♌29'38	18°40'06
behind sun begin	14865 Apr 07 20:29	29°♎03'50			14866 Feb 25 06:26	0°♍	
behind sun end	14865 Apr 08 04:30	29°♎39'22		morning set	14866 Mar 12 20:13	25°♍18'12	
	14865 Apr 08 09:10	0°♎			14866 Mar 15 06:16	0°♎	
max. Earth dist.	14865 Apr 15 15:45	12°♎29'15	1.42093 AU				
evening rise	14865 Apr 20 23:27	21°♎10'49		superior conj	14866 Mar 21 16:27	12°♎16'57	0°21'03
	14865 Apr 26 14:18	0°♏		minimum elong	14866 Mar 21 17:50	12°♎23'27	0°20'42
	14865 May 17 18:28	0°♐		desc. node	14866 Mar 24 06:03	17°♎01'46	
evening max el	14865 May 24 05:37	7°♐21'12	22°34'46	max. Earth dist.	14866 Mar 28 23:37	25°♎29'05	1.39916 AU
asc. node	14865 May 31 13:37	12°♐41'08			14866 Mar 31 14:29	0°♑	
retrograde	14865 Jun 03 03:33	13°♐10'40		evening rise	14866 Apr 02 00:57	2°♑25'38	
evening set	14865 Jun 08 00:34	11°♐07'48			14866 Apr 19 20:34	0°♒	
inferior conj	14865 Jun 13 07:32	4°♐45'52	2°59'38	evening max el	14866 May 06 20:05	21°♒15'00	23°56'11
minimum elong	14865 Jun 13 06:17	4°♐50'15	2°58'27	retrograde	14866 May 17 21:48	27°♒44'42	
min. Earth dist.	14865 Jun 13 02:22	5°♐03'52	0.69047 AU	asc. node	14866 May 18 10:47	27°♒43'25	
	14865 Jun 17 00:25	30°♒		evening set	14866 May 23 06:27	25°♒28'28	
morning rise	14865 Jun 18 11:51	28°♒34'17		min. Earth dist.	14866 May 27 22:48	20°♒01'32	0.68784 AU
direct	14865 Jun 23 01:52	26°♒39'59		inferior conj	14866 May 28 16:47	19°♒00'17	2°39'31
	14865 Jun 30 00:38	0°♓		minimum elong	14866 Jun 28 14:53	19°♒06'45	2°38'09
morning max el	14865 Jul 02 01:20	1°♓53'14	21°35'39	morning rise	14866 Jun 02 23:20	12°♓57'00	
desc. node	14865 Jul 03 09:56	3°♓17'58		direct	14866 Jun 07 01:10	11°♓22'49	
	14865 Jul 23 05:29	0°♑		morning max el	14866 Jun 14 21:44	15°♓48'54	20°18'57
morning set	14865 Aug 02 22:27	16°♑26'55		desc. node	14866 Jun 20 07:04	22°♓00'18	
max. Earth dist.	14865 Aug 09 06:28	26°♑39'58	1.42277 AU		14866 Jun 26 04:55	0°♒	
	14865 Aug 11 06:47	0°♑		morning set	14866 Jul 13 06:19	25°♒24'32	
					14866 Jul 16 05:26	0°♓	
superior conj	14865 Aug 16 19:58	9°♑25'28	-1°25'39	max. Earth dist.	14866 Jul 22 16:50	10°♓12'43	1.44124 AU
minimum elong	14865 Aug 17 02:38	9°♑54'20	1°25'13				
evening rise	14865 Aug 27 21:39	29°♑12'36		superior conj	14866 Jul 28 18:08	20°♓01'23	-1°55'21
asc. node	14865 Aug 27 14:16	28°♑38'58		minimum elong	14866 Jul 29 01:30	20°♓31'42	1°55'29
	14865 Aug 28 08:03	0°♒			14866 Aug 03 17:37	0°♑	
evening max el	14865 Sep 12 23:38	24°♒38'54	18°07'37	evening rise	14866 Aug 10 12:36	11°♑39'01	
retrograde	14865 Sep 19 23:15	28°♒13'11		asc. node	14866 Aug 14 10:52	18°♑26'36	
evening set	14865 Sep 22 04:57	27°♒51'36			14866 Aug 21 11:08	0°♓	
inferior conj	14865 Sep 29 08:11	23°♒00'58	-0°01'19	evening max el	14866 Aug 27 13:40	7°♒53'08	18°02'28
minimum elong	14865 Sep 29 08:09	23°♒01'02	0°01'01	retrograde	14866 Sep 03 00:52	11°♒14'37	
transit middle	14865 Sep 29 08:09	23°♒01'02	0°01'01	evening set	14866 Sep 05 14:44	10°♒41'42	
transit begin	14865 Sep 29 04:47	23°♒08'35		inferior conj	14866 Sep 12 02:05	5°♒31'50	1°12'49
transit end	14865 Sep 29 11:30	22°♒53'29		minimum elong	14866 Sep 12 04:00	5°♒26'53	1°12'09
desc. node	14865 Sep 29 06:31	23°♒04'43		min. Earth dist.	14866 Sep 15 00:06	2°♒32'58	0.62091 AU

desc. node	14866 Sep 16 04:01	1°♌26'40		minimum elong	14867 Aug 26 12:40	18°♍27'56	2°05'29
	14866 Sep 17 20:53	30°♍♍		min. Earth dist.	14867 Aug 28 19:54	15°♍50'04	0.64235 AU
morning rise	14866 Sep 18 14:47	29°♍26'47		morning rise	14867 Sep 01 12:22	12°♍15'41	
direct	14866 Sep 25 07:08	27°♍04'54		desc. node	14867 Sep 03 01:33	11°♍10'43	
	14866 Oct 03 09:51	0°♌		direct	14867 Sep 08 02:14	9°♍40'56	
morning max el	14866 Oct 09 09:57	5°♌03'03	27°58'05	morning max el	14867 Sep 21 20:03	17°♍39'25	27°32'31
	14866 Oct 28 04:21	0°♍			14867 Oct 02 04:18	0°♌	
asc. node	14866 Nov 10 12:44	24°♍06'00			14867 Oct 21 01:17	0°♍	
morning set	14866 Nov 12 07:51	27°♍44'31		morning set	14867 Oct 26 23:20	11°♍15'04	
	14866 Nov 13 10:04	0°♎		asc. node	14867 Oct 28 09:29	14°♍05'37	
max. Earth dist.	14866 Nov 17 17:37	9°♎12'28	1.31635 AU	max. Earth dist.	14867 Oct 31 15:18	20°♍45'29	1.32688 AU
superior conj	14866 Nov 19 18:48	13°♎42'10	1°17'13	superior conj	14867 Nov 04 00:30	27°♍56'56	0°58'37
minimum elong	14866 Nov 19 16:37	13°♎30'09	1°17'53	minimum elong	14867 Nov 03 22:12	27°♍44'36	0°59'02
evening rise	14866 Nov 26 12:25	28°♎31'45			14867 Nov 04 23:18	0°♎	
	14866 Nov 27 04:48	0°♏		evening rise	14867 Nov 10 23:24	13°♎01'01	
desc. node	14866 Dec 13 01:17	28°♏54'48			14867 Nov 19 10:42	0°♏	
	14866 Dec 13 19:37	0°♐		desc. node	14867 Nov 29 22:22	15°♏53'56	
evening max el	14866 Dec 21 21:55	9°♐35'00	24°33'48	evening max el	14867 Dec 03 07:31	19°♏33'37	22°51'09
retrograde	14867 Jan 04 14:38	16°♐24'44		retrograde	14867 Dec 16 09:18	26°♏02'40	
evening set	14867 Jan 09 21:34	15°♐23'13		evening set	14867 Dec 20 09:27	25°♏27'43	
min. Earth dist.	14867 Jan 15 09:41	12°♐33'50	0.55985 AU	min. Earth dist.	14867 Dec 27 16:29	22°♏06'56	0.54786 AU
inferior conj	14867 Jan 17 17:39	11°♐06'45	-5°22'49	inferior conj	14867 Dec 28 18:07	21°♏30'29	-5°59'28
minimum elong	14867 Jan 18 01:46	10°♐54'06	5°20'27	minimum elong	14867 Dec 28 19:25	21°♏28'39	5°58'28
morning rise	14867 Jan 26 08:00	7°♐04'02		morning rise	14868 Jan 06 06:45	17°♏41'55	
direct	14867 Jan 28 15:35	6°♐49'36		direct	14868 Jan 09 07:19	17°♏20'47	
asc. node	14867 Feb 06 11:26	10°♐36'48		morning max el	14868 Jan 20 20:12	22°♏53'02	21°01'12
morning max el	14867 Feb 07 14:26	11°♐38'40	19°39'01	asc. node	14868 Jan 24 08:47	26°♏44'58	
	14867 Feb 19 23:40	0°♑			14868 Jan 26 19:40	0°♐	
morning set	14867 Feb 24 23:38	9°♑48'44		morning set	14868 Feb 09 08:09	24°♐30'31	
					14868 Feb 11 23:12	0°♑	
superior conj	14867 Mar 04 22:52	25°♑49'06	0°49'35	superior conj	14868 Feb 16 16:48	9°♑51'57	1°11'26
minimum elong	14867 Mar 05 01:22	26°♑01'26	0°49'22	minimum elong	14868 Feb 16 19:21	10°♑05'07	1°11'32
	14867 Mar 07 02:21	0°♒		max. Earth dist.	14868 Feb 21 15:24	19°♑48'14	1.35500 AU
desc. node	14867 Mar 11 02:34	7°♒34'33		evening rise	14868 Feb 25 14:34	27°♑23'03	
max. Earth dist.	14867 Mar 11 06:11	7°♒51'14	1.37640 AU	desc. node	14868 Feb 25 23:07	28°♑02'47	
evening rise	14867 Mar 14 22:58	14°♒32'27			14868 Feb 27 00:33	0°♒	
	14867 Mar 24 03:50	0°♓			14868 Mar 16 12:05	0°♓	
	14867 Apr 14 15:02	0°♔		evening max el	14868 Mar 31 23:15	18°♓58'45	26°21'07
evening max el	14867 Apr 19 09:38	5°♔09'00	25°14'03	retrograde	14868 Apr 13 21:10	26°♓20'06	
retrograde	14867 May 01 11:56	12°♔10'05		evening set	14868 Apr 20 03:45	23°♓48'13	
asc. node	14867 May 05 08:03	11°♔08'09		asc. node	14868 Apr 21 05:23	22°♓51'32	
evening set	14867 May 07 08:05	9°♔43'41		min. Earth dist.	14868 Apr 24 06:07	19°♓33'08	0.66881 AU
min. Earth dist.	14867 May 11 16:44	4°♔53'22	0.68056 AU	inferior conj	14868 Apr 26 01:43	17°♓20'03	1°26'56
inferior conj	14867 May 12 23:32	3°♔13'02	2°08'49	minimum elong	14868 Apr 25 23:49	17°♓25'52	1°25'37
minimum elong	14867 May 12 21:22	3°♔20'06	2°07'22	morning rise	14868 May 01 20:49	11°♓37'17	
	14867 May 15 13:42	30°♓		direct	14868 May 05 00:22	10°♓41'28	
morning rise	14867 May 18 11:00	27°♓19'19		morning max el	14868 May 11 12:25	14°♓08'40	18°29'14
direct	14867 May 22 01:15	26°♓05'08			14868 May 23 07:48	0°♔	
morning max el	14867 May 29 01:37	29°♓55'11	19°16'06	desc. node	14868 May 24 00:59	1°♔06'10	
	14867 May 29 03:35	0°♕		morning set	14868 Jun 01 06:16	13°♔59'12	
desc. node	14867 Jun 07 04:05	11°♕19'33			14868 Jun 11 11:06	0°♕	
greatest brilliancy	14867 Jun 10 19:42	16°♕38'49	-0.7m	superior conj	14868 Jun 17 03:05	8°♕50'35	-2°10'12
	14867 Jun 19 15:19	0°♖		minimum elong	14868 Jun 16 22:27	8°♕32'34	2°11'02
morning set	14867 Jun 22 10:04	4°♖16'22		max. Earth dist.	14868 Jun 17 04:28	8°♕56'01	1.45913 AU
max. Earth dist.	14867 Jul 05 09:05	24°♖23'53	1.45374 AU		14868 Jun 30 15:24	0°♎	
superior conj	14867 Jul 08 17:30	29°♖40'55	-2°12'16	evening rise	14868 Jul 02 22:09	3°♎35'45	
minimum elong	14867 Jul 08 20:38	29°♖53'17	2°13'07	greatest brilliancy	14868 Jul 11 14:09	17°♎13'22	-0.8m
	14867 Jul 08 22:19	0°♏		asc. node	14868 Jul 18 04:16	27°♎06'41	
evening rise	14867 Jul 23 05:47	23°♏08'30			14868 Jul 20 06:41	0°♏	
	14867 Jul 27 09:44	0°♐		evening max el	14868 Jul 24 16:12	5°♏10'17	18°46'25
asc. node	14867 Aug 01 07:32	7°♏57'49		retrograde	14868 Jul 31 07:22	8°♏47'05	
evening max el	14867 Aug 11 04:10	21°♏25'58	18°15'40	evening set	14868 Aug 03 14:53	7°♏44'04	
retrograde	14867 Aug 17 12:54	24°♏48'32		inferior conj	14868 Aug 09 04:58	2°♏02'42	2°42'03
evening set	14867 Aug 20 11:22	24°♏01'33		minimum elong	14868 Aug 09 06:58	1°♏56'27	2°41'07
inferior conj	14867 Aug 26 10:16	18°♏34'51	2°06'27				

	14868 Aug 10 20:14	30° κ 8 Ω		retrograde	14869 Jul 15 05:13	23° Ω 03'32	
min. Earth dist.	14868 Aug 11 00:38	29° Ω 46'31	0.66073 AU	evening set	14869 Jul 18 22:24	21° Ω 43'25	
morning rise	14868 Aug 14 22:06	25° Ω 37'30		inferior conj	14869 Jul 24 06:59	15° Ω 48'53	3°02'32
desc. node	14868 Aug 19 23:03	23° Ω 04'44		minimum elong	14869 Jul 24 08:09	15° Ω 45'02	3°01'38
direct	14868 Aug 21 05:09	22° Ω 58'49		min. Earth dist.	14869 Jul 25 12:27	14° Ω 11'09	0.67509 AU
	14868 Sep 02 13:33	0° η		morning rise	14869 Jul 29 17:22	9° Ω 23'37	
morning max el	14868 Sep 03 07:30	0° η 44'36	26°37'06	direct	14869 Aug 04 14:40	6° Ω 49'37	
	14868 Sep 25 04:34	0° $\underline{\Omega}$		desc. node	14869 Aug 06 20:29	7° Ω 08'53	
morning set	14868 Oct 09 03:24	24° $\underline{\Omega}$ 13'09		morning max el	14869 Aug 16 18:27	14° Ω 06'40	25°20'52
	14868 Oct 12 03:24	0° \mathbb{M}			14869 Aug 29 17:25	0° η	
max. Earth dist.	14868 Oct 13 03:20	1° \mathbb{M} 58'03	1.34273 AU		14869 Sep 17 23:48	0° $\underline{\Omega}$	
asc. node	14868 Oct 14 06:09	4° \mathbb{M} 11'54		morning set	14869 Sep 21 16:17	6° $\underline{\Omega}$ 29'47	
				max. Earth dist.	14869 Sep 25 05:54	13° $\underline{\Omega}$ 02'16	1.36320 AU
superior conj	14868 Oct 17 23:58	11° \mathbb{M} 51'24	0°34'13	asc. node	14869 Oct 01 02:45	24° $\underline{\Omega}$ 20'54	
minimum elong	14868 Oct 17 22:15	11° \mathbb{M} 42'25	0°34'29				
evening rise	14868 Oct 25 09:02	27° \mathbb{M} 24'58		superior conj	14869 Oct 01 14:22	25° $\underline{\Omega}$ 18'32	0°04'28
	14868 Oct 26 14:42	0° \mathcal{A}		minimum elong	14869 Oct 01 14:04	25° $\underline{\Omega}$ 17'04	0°04'44
evening max el	14868 Nov 13 22:59	29° \mathcal{A} 42'40	21°13'42	behind sun begin	14869 Oct 01 07:57	24° $\underline{\Omega}$ 46'41	
	14868 Nov 14 06:05	0° \mathcal{B}		behind sun end	14869 Oct 01 20:11	25° $\underline{\Omega}$ 47'30	
desc. node	14868 Nov 15 19:33	1° \mathcal{B} 24'23			14869 Oct 03 22:25	0° \mathbb{M}	
retrograde	14868 Nov 25 20:10	5° \mathcal{B} 36'15		evening rise	14869 Oct 09 15:11	11° \mathbb{M} 38'14	
evening set	14868 Nov 28 13:38	5° \mathcal{B} 18'55			14869 Oct 19 07:30	0° \mathcal{A}	
inferior conj	14868 Dec 07 09:21	1° \mathcal{B} 26'52	-5°37'46	evening max el	14869 Oct 27 03:50	10° \mathcal{A} 33'02	19°53'48
minimum elong	14868 Dec 07 01:53	1° \mathcal{B} 37'23	5°35'37	desc. node	14869 Nov 02 16:49	15° \mathcal{A} 00'27	
min. Earth dist.	14868 Dec 07 22:11	1° \mathcal{B} 08'43	0.54448 AU	retrograde	14869 Nov 06 10:07	15° \mathcal{A} 39'59	
	14868 Dec 09 23:52	30° \mathcal{R} \mathcal{A}		evening set	14869 Nov 08 10:20	15° \mathcal{A} 29'07	
morning rise	14868 Dec 15 14:35	27° \mathcal{A} 36'23		inferior conj	14869 Nov 17 05:49	11° \mathcal{A} 29'17	-4°20'58
direct	14868 Dec 19 14:41	27° \mathcal{A} 01'49		minimum elong	14869 Nov 16 19:51	11° \mathcal{A} 44'32	4°17'02
	14868 Dec 28 11:09	0° \mathcal{B}		min. Earth dist.	14869 Nov 19 05:51	10° \mathcal{A} 15'51	0.55058 AU
morning max el	14869 Jan 01 12:21	3° \mathcal{B} 16'27	22°42'52	morning rise	14869 Nov 25 04:00	7° \mathcal{A} 17'31	
asc. node	14869 Jan 10 06:04	14° \mathcal{B} 02'35		direct	14869 Nov 30 03:36	6° \mathcal{A} 23'00	
	14869 Jan 19 07:36	0° \approx		morning max el	14869 Dec 13 21:33	13° \mathcal{A} 12'38	24°32'20
morning set	14869 Jan 23 19:20	9° \approx 15'35			14869 Dec 26 19:17	0° \mathcal{B}	
				asc. node	14869 Dec 28 03:15	2° \mathcal{B} 13'18	
superior conj	14869 Jan 30 18:45	24° \approx 14'36	1°26'37	morning set	14870 Jan 08 07:16	23° \mathcal{B} 58'47	
minimum elong	14869 Jan 30 20:42	24° \approx 25'00	1°27'06		14870 Jan 11 01:44	0° \approx	
	14869 Feb 02 12:09	0° \mathcal{H}					
max. Earth dist.	14869 Feb 03 07:01	1° \mathcal{H} 37'58	1.33689 AU	superior conj	14870 Jan 15 02:02	8° \approx 49'30	1°35'22
evening rise	14869 Feb 07 20:05	10° \mathcal{H} 47'10		minimum elong	14870 Jan 15 03:01	8° \approx 54'56	1°36'10
desc. node	14869 Feb 11 19:40	18° \mathcal{H} 21'29		max. Earth dist.	14870 Jan 17 06:21	13° \approx 34'30	1.32325 AU
	14869 Feb 18 10:31	0° Υ		evening rise	14870 Jan 22 12:20	24° \approx 36'56	
	14869 Mar 11 23:54	0° \mathcal{B}			14870 Jan 25 05:05	0° \mathcal{H}	
evening max el	14869 Mar 14 12:47	2° \mathcal{B} 35'12	27°10'11	desc. node	14870 Jan 29 16:17	8° \mathcal{H} 25'54	
retrograde	14869 Mar 28 00:33	10° \mathcal{B} 05'13			14870 Feb 11 23:30	0° Υ	
evening set	14869 Apr 03 15:25	7° \mathcal{B} 33'54		evening max el	14870 Feb 25 01:02	15° Υ 47'25	27°33'53
min. Earth dist.	14869 Apr 07 12:57	3° \mathcal{B} 51'39	0.65298 AU	retrograde	14870 Mar 10 20:53	23° Υ 15'55	
asc. node	14869 Apr 08 02:47	3° \mathcal{B} 13'31		evening set	14870 Mar 17 16:42	20° Υ 52'24	
inferior conj	14869 Apr 09 20:56	1° \mathcal{B} 14'46	0°32'58	min. Earth dist.	14870 Mar 21 11:23	17° Υ 39'01	0.63378 AU
minimum elong	14869 Apr 09 20:02	1° \mathcal{B} 17'15	0°32'13	inferior conj	14870 Mar 24 06:21	14° Υ 50'07	-0°33'39
	14869 Apr 10 23:54	30° \mathcal{R} Υ		minimum elong	14870 Mar 24 07:25	14° Υ 47'23	0°33'22
morning rise	14869 Apr 16 02:22	25° Υ 44'41		asc. node	14870 Mar 26 00:12	13° Υ 06'54	
direct	14869 Apr 18 20:17	25° Υ 04'28		morning rise	14870 Mar 31 00:40	9° Υ 35'08	
morning max el	14869 Apr 25 03:59	28° Υ 21'29	17°59'13	direct	14870 Apr 02 10:20	9° Υ 07'06	
	14869 Apr 26 17:19	0° \mathcal{B}		morning max el	14870 Apr 08 21:37	12° Υ 25'18	17°46'32
desc. node	14869 May 10 21:46	21° \mathcal{B} 12'04			14870 Apr 21 00:56	0° \mathcal{B}	
morning set	14869 May 13 05:41	25° \mathcal{B} 01'09		morning set	14870 Apr 25 07:24	7° \mathcal{B} 18'20	
	14869 May 16 06:46	0° \mathbb{I}		desc. node	14870 Apr 27 18:27	11° \mathcal{B} 31'29	
superior conj	14869 May 27 15:20	18° \mathbb{I} 13'56	-1°48'45	superior conj	14870 May 07 21:06	28° \mathcal{B} 28'11	-1°14'21
minimum elong	14869 May 27 06:30	17° \mathbb{I} 39'04	1°48'57	minimum elong	14870 May 07 13:55	27° \mathcal{B} 58'47	1°14'13
max. Earth dist.	14869 May 31 00:25	23° \mathbb{I} 32'40	1.45701 AU		14870 May 08 19:36	0° \mathbb{I}	
	14869 Jun 04 03:46	0° \mathcal{E}		max. Earth dist.	14870 May 13 18:55	7° \mathbb{I} 59'51	1.44770 AU
evening rise	14869 Jun 12 17:10	13° \mathcal{E} 13'04		evening rise	14870 May 23 03:56	22° \mathbb{I} 37'23	
	14869 Jun 23 17:48	0° Ω			14870 May 28 00:21	0° \mathcal{E}	
greatest brilliancy	14869 Jun 26 06:17	3° Ω 44'20	-0.7m		14870 Jun 18 09:38	0° Ω	
asc. node	14869 Jul 05 01:03	15° Ω 45'05		evening max el	14870 Jun 21 01:07	2° Ω 52'07	20°35'43
evening max el	14869 Jul 07 23:34	19° Ω 00'18	19°33'45	asc. node	14870 Jun 21 21:56	3° Ω 42'27	

retrograde	14870 Jun 29 04:07	7°Ω32'07		asc. node	14871 Jun 08 18:56	20°Ω45'37	
evening set	14870 Jul 03 07:42	5°Ω54'34		retrograde	14871 Jun 13 02:24	22°Ω07'57	
	14870 Jul 08 10:16	30°κΩ		evening set	14871 Jun 17 17:00	20°Ω13'40	
inferior conj	14870 Jul 08 13:42	29°Ω48'11	3°10'10	inferior conj	14871 Jun 22 22:58	13°Ω56'50	3°06'30
minimum elong	14870 Jul 08 13:53	29°Ω47'34	3°09'14	minimum elong	14871 Jun 22 22:12	13°Ω59'31	3°05'27
min. Earth dist.	14870 Jul 09 05:19	28°Ω54'26	0.68491 AU	min. Earth dist.	14871 Jun 23 01:12	13°Ω49'01	0.68988 AU
morning rise	14870 Jul 13 19:46	23°Ω26'39		morning rise	14871 Jun 28 03:13	7°Ω41'22	
direct	14870 Jul 19 05:28	21°Ω04'33		direct	14871 Jul 03 00:27	5°Ω36'10	
desc. node	14870 Jul 24 17:51	23°Ω00'50		desc. node	14871 Jul 11 15:07	10°Ω15'27	
morning max el	14870 Jul 30 04:53	27°Ω38'07	23°53'32	morning max el	14871 Jul 12 17:05	11°Ω18'33	22°24'31
	14870 Aug 01 10:20	0°Ω			14871 Jul 27 12:53	0°Ω	
	14870 Aug 23 08:49	0°κ		morning set	14871 Aug 15 03:25	28°Ω17'24	
morning set	14870 Sep 03 09:32	17°κ53'46			14871 Aug 16 04:39	0°κ	
max. Earth dist.	14870 Sep 07 04:04	24°κ26'24	1.38662 AU	max. Earth dist.	14871 Aug 20 04:46	6°κ38'18	1.41028 AU
	14870 Sep 10 06:33	0°Ω					
superior conj	14870 Sep 14 16:03	8°Ω09'08	-0°29'37	superior conj	14871 Aug 28 00:55	20°κ14'17	-1°05'35
minimum elong	14870 Sep 14 18:09	8°Ω19'05	0°29'12	minimum elong	14871 Aug 28 06:02	20°κ37'10	1°05'04
asc. node	14870 Sep 17 23:19	14°Ω28'31			14871 Sep 02 09:32	0°Ω	
evening rise	14870 Sep 23 15:13	25°Ω33'39		asc. node	14871 Sep 04 19:53	4°Ω31'43	
	14870 Sep 25 21:48	0°κ		evening rise	14871 Sep 07 05:57	9°Ω03'45	
evening max el	14870 Oct 09 22:38	22°κ12'13	18°55'39		14871 Sep 19 08:50	0°κ	
retrograde	14870 Oct 18 15:06	26°κ34'30		evening max el	14871 Sep 23 04:09	4°κ35'43	18°19'10
evening set	14870 Oct 20 12:15	26°κ23'00		retrograde	14871 Sep 30 15:39	8°κ23'57	
desc. node	14870 Oct 20 14:11	26°κ22'00		evening set	14871 Oct 02 17:14	8°κ07'12	
inferior conj	14870 Oct 28 19:20	22°κ05'09	-2°36'31	desc. node	14871 Oct 07 11:36	5°κ39'32	
minimum elong	14870 Oct 28 12:49	22°κ16'38	2°33'16	inferior conj	14871 Oct 10 06:39	3°κ28'03	-0°53'24
min. Earth dist.	14870 Oct 31 17:51	20°κ01'24	0.56496 AU	minimum elong	14871 Oct 10 04:39	3°κ32'10	0°52'08
morning rise	14870 Nov 05 10:28	17°κ18'44		min. Earth dist.	14871 Oct 13 13:08	0°κ47'02	0.58505 AU
direct	14870 Nov 11 05:09	15°κ59'38			14871 Oct 14 13:45	30°κΩ	
morning max el	14870 Nov 25 08:53	23°κ16'22	26°11'34	morning rise	14871 Oct 17 12:37	28°Ω04'42	
	14870 Dec 01 10:13	0°κ		direct	14871 Oct 23 20:32	26°Ω18'51	
asc. node	14870 Dec 15 00:19	21°κ03'09			14871 Nov 02 12:10	0°κ	
	14870 Dec 19 15:37	0°Ω		morning max el	14871 Nov 07 03:52	3°κ57'23	27°22'57
morning set	14870 Dec 23 18:13	8°Ω34'53			14871 Nov 26 04:57	0°κ	
				asc. node	14871 Dec 01 21:18	10°κ21'50	
superior conj	14870 Dec 30 12:24	23°Ω29'46	1°37'57	morning set	14871 Dec 08 02:25	22°κ59'21	
minimum elong	14870 Dec 30 12:19	23°Ω29'19	1°38'55		14871 Dec 11 07:57	0°Ω	
max. Earth dist.	14870 Dec 31 11:42	25°Ω39'25	1.31449 AU	superior conj	14871 Dec 14 23:55	8°Ω09'45	1°34'34
	14871 Jan 02 10:53	0°≈		minimum elong	14871 Dec 14 22:50	8°Ω03'38	1°35'31
evening rise	14871 Jan 06 12:28	8°≈44'50		max. Earth dist.	14871 Dec 14 19:45	7°Ω46'23	1.31090 AU
desc. node	14871 Jan 16 13:00	28°≈09'39		evening rise	14871 Dec 21 18:09	23°Ω04'56	
	14871 Jan 17 14:15	0°κ			14871 Dec 25 01:30	0°≈	
evening max el	14871 Feb 07 09:42	28°κ22'33	27°26'06	desc. node	14872 Jan 03 09:47	17°≈24'15	
	14871 Feb 09 04:41	0°κ			14872 Jan 11 17:16	0°κ	
retrograde	14871 Feb 21 08:58	5°κ43'16		evening max el	14872 Jan 20 11:48	10°κ08'15	26°43'27
evening set	14871 Feb 28 04:49	3°κ34'51		retrograde	14872 Feb 03 11:21	17°κ18'56	
min. Earth dist.	14871 Mar 03 23:47	0°κ44'12	0.61230 AU	evening set	14872 Feb 10 00:18	15°κ32'37	
	14871 Mar 04 20:06	30°κκ		min. Earth dist.	14872 Feb 14 01:34	12°κ54'40	0.59012 AU
inferior conj	14871 Mar 07 02:39	27°κ57'38	-1°52'14	inferior conj	14872 Feb 17 06:06	10°κ26'38	-3°18'55
minimum elong	14871 Mar 07 06:41	27°κ48'38	1°50'29	minimum elong	14872 Feb 17 13:29	10°κ12'19	3°15'51
asc. node	14871 Mar 12 21:39	23°κ38'48		morning rise	14872 Feb 25 05:57	5°κ50'54	
morning rise	14871 Mar 14 11:42	23°κ00'47		direct	14872 Feb 27 05:58	5°κ36'31	
direct	14871 Mar 16 15:03	22°κ41'19		asc. node	14872 Feb 27 19:07	5°κ37'38	
morning max el	14871 Mar 23 14:12	26°κ11'31	17°51'55	morning max el	14872 Mar 06 02:06	9°κ29'24	18°16'36
	14871 Mar 26 20:50	0°κ			14872 Mar 19 09:54	0°κ	
morning set	14871 Apr 08 05:44	20°κ33'16		morning set	14872 Mar 21 18:49	4°κ27'42	
	14871 Apr 13 12:00	0°κ					
desc. node	14871 Apr 14 15:04	1°κ59'58		superior conj	14872 Mar 31 06:28	22°κ09'38	0°01'47
				minimum elong	14872 Mar 31 06:35	22°κ10'09	0°01'29
superior conj	14871 Apr 19 02:35	9°κ48'26	-0°35'27	behind sun begin	14872 Mar 30 23:11	21°κ36'35	
minimum elong	14871 Apr 18 23:21	9°κ34'32	0°35'29	behind sun end	14872 Mar 31 13:58	22°κ43'37	
max. Earth dist.	14871 Apr 26 10:13	22°κ03'40	1.43213 AU	desc. node	14872 Mar 31 11:38	22°κ33'04	
	14871 May 01 08:46	0°κ			14872 Apr 04 16:13	0°κ	
evening rise	14871 May 02 22:46	2°κ29'40		max. Earth dist.	14872 Apr 07 20:42	5°κ29'12	1.41194 AU
	14871 May 21 11:00	0°Ω		evening rise	14872 Apr 12 11:59	13°κ12'14	
evening max el	14871 Jun 03 21:04	16°Ω44'33	21°49'06		14872 Apr 23 05:44	0°κ	

	14872 May 15 22:09	0°☿		evening max el	14873 Apr 29 02:26	14°♊30'37	24°30'01
evening max el	14872 May 16 12:44	0°☿36'53	23°09'15	retrograde	14873 May 10 15:22	21°♊15'42	
asc. node	14872 May 25 16:03	6°☿37'13		asc. node	14873 May 12 13:15	20°♊59'54	
retrograde	14872 May 26 22:34	6°☿44'22		evening set	14873 May 16 04:55	18°♊54'35	
evening set	14872 Jun 01 00:37	4°☿35'11		min. Earth dist.	14873 May 20 17:44	13°♊43'13	0.68532 AU
	14872 Jun 05 00:47	30°♋♊		inferior conj	14873 May 21 17:13	12°♊24'30	2°27'48
inferior conj	14872 Jun 06 08:46	28°♊10'06	2°52'21	minimum elong	14873 May 21 15:09	12°♊31'25	2°26'24
minimum elong	14872 Jun 06 07:13	28°♊15'30	2°51'06	morning rise	14873 May 27 01:32	6°♊25'03	
min. Earth dist.	14872 Jun 05 22:03	28°♊47'12	0.68998 AU	direct	14873 May 30 22:15	4°♊59'40	
morning rise	14872 Jun 11 13:45	22°♊02'04		morning max el	14873 Jun 07 09:30	9°♊09'16	19°50'15
direct	14872 Jun 15 22:27	20°♊16'29		desc. node	14873 Jun 14 09:24	17°♊30'02	
morning max el	14872 Jun 24 09:54	25°♊08'33	21°01'33		14873 Jun 23 03:40	0°☿	
desc. node	14872 Jun 27 12:18	28°♊30'31		morning set	14873 Jul 04 01:08	16°☿28'34	
	14872 Jun 28 18:20	0°☿			14873 Jul 12 18:09	0°♊	
	14872 Jul 19 22:09	0°♊		max. Earth dist.	14873 Jul 14 23:40	3°♊31'05	1.44738 AU
morning set	14872 Jul 24 21:38	7°♊40'41					
max. Earth dist.	14872 Aug 01 11:10	19°♊42'24	1.43128 AU	superior conj	14873 Jul 20 00:32	11°♊34'05	-2°04'32
	14872 Aug 07 16:41	0°♎		minimum elong	14873 Jul 20 06:48	11°♊59'20	2°05'01
					14873 Jul 31 04:25	0°♎	
superior conj	14872 Aug 08 12:33	1°♎23'50	-1°39'20	evening rise	14873 Aug 02 13:19	4°♎00'28	
minimum elong	14872 Aug 08 19:58	1°♎55'13	1°39'05	asc. node	14873 Aug 08 13:07	14°♎07'35	
evening rise	14872 Aug 20 07:02	21°♎57'07			14873 Aug 19 08:48	0°♎	
asc. node	14872 Aug 21 16:30	24°♎26'19		evening max el	14873 Aug 20 06:47	0°♎57'10	18°05'55
	14872 Aug 24 19:50	0°♎		retrograde	14873 Aug 26 15:55	4°♎17'33	
evening max el	14872 Sep 05 16:10	17°♎34'04	18°03'04	evening set	14873 Aug 29 09:18	3°♎39'05	
retrograde	14872 Sep 12 09:26	21°♎01'34			14873 Sep 03 01:48	30°♋♎	
evening set	14872 Sep 14 18:22	20°♎35'42		inferior conj	14873 Sep 04 14:56	28°♎22'03	1°37'55
inferior conj	14872 Sep 21 14:28	15°♎36'29	0°32'44	minimum elong	14873 Sep 04 17:13	28°♎15'55	1°37'05
minimum elong	14872 Sep 21 15:29	15°♎34'05	0°32'31	min. Earth dist.	14873 Sep 07 08:11	25°♎26'43	0.63032 AU
desc. node	14872 Sep 23 09:03	13°♎54'13		desc. node	14873 Sep 10 06:34	22°♎41'44	
min. Earth dist.	14872 Sep 24 17:45	12°♎37'49	0.60774 AU	morning rise	14873 Sep 10 22:58	22°♎09'45	
morning rise	14872 Sep 28 09:33	9°♎43'28		direct	14873 Sep 17 14:57	19°♎40'55	
direct	14872 Oct 05 00:34	7°♎32'48		morning max el	14873 Oct 01 14:43	27°♎41'26	27°51'17
morning max el	14872 Oct 19 06:38	15°♎27'04	27°56'35		14873 Oct 03 19:41	0°♎	
	14872 Oct 31 03:52	0°♎			14873 Oct 24 21:59	0°♎	
asc. node	14872 Nov 17 18:13	0°♏01'36		asc. node	14873 Nov 04 15:01	19°♎55'30	
	14872 Nov 17 17:53	0°♏		morning set	14873 Nov 05 02:32	20°♎53'38	
morning set	14872 Nov 21 05:57	7°♏07'41			14873 Nov 09 11:38	0°♏	
max. Earth dist.	14872 Nov 27 02:39	19°♏46'29	1.31269 AU	max. Earth dist.	14873 Nov 10 04:30	1°♏30'09	1.32008 AU
superior conj	14872 Nov 28 10:46	22°♏44'41	1°25'16	superior conj	14873 Nov 12 18:56	7°♏08'25	1°10'04
minimum elong	14872 Nov 28 08:53	22°♏34'13	1°26'03	minimum elong	14873 Nov 12 16:38	6°♏55'52	1°10'36
	14872 Dec 01 16:57	0°♏		evening rise	14873 Nov 19 14:13	22°♏02'16	
evening rise	14872 Dec 05 03:23	7°♏32'31			14873 Nov 23 09:01	0°♏	
	14872 Dec 16 14:43	0°♏		desc. node	14873 Dec 07 03:41	23°♏38'14	
desc. node	14872 Dec 20 06:41	5°♏58'56			14873 Dec 12 11:40	0°♏	
evening max el	14873 Jan 01 05:30	21°♏00'58	25°28'11	evening max el	14873 Dec 13 16:21	1°♏11'29	23°50'42
retrograde	14873 Jan 15 02:38	28°♏00'13		retrograde	14873 Dec 27 04:42	7°♏54'05	
evening set	14873 Jan 20 23:18	26°♏41'42		evening set	14873 Dec 31 22:58	7°♏04'50	
min. Earth dist.	14873 Jan 25 18:00	24°♏01'30	0.56961 AU	min. Earth dist.	14874 Jan 07 03:37	4°♏04'12	0.55375 AU
inferior conj	14873 Jan 28 13:29	22°♏08'12	-4°43'05	inferior conj	14874 Jan 09 00:03	2°♏58'04	-5°44'33
minimum elong	14873 Jan 28 22:38	21°♏52'48	4°39'56	minimum elong	14874 Jan 09 05:59	2°♏49'13	5°42'55
morning rise	14873 Feb 06 00:42	17°♏54'21			14874 Jan 14 14:09	30°♋♏	
direct	14873 Feb 08 02:50	17°♏41'21		morning rise	14874 Jan 17 14:43	29°♏02'24	
asc. node	14873 Feb 13 16:33	19°♏20'31		direct	14874 Jan 20 04:07	28°♏45'58	
morning max el	14873 Feb 17 05:17	22°♏07'39	19°02'26		14874 Jan 25 10:02	0°♏	
	14873 Feb 23 09:50	0°♏		morning max el	14874 Jan 30 19:33	3°♏53'48	20°11'14
morning set	14873 Mar 05 18:04	18°♏48'14		asc. node	14874 Jan 31 13:57	4°♏39'45	
	14873 Mar 11 10:21	0°♏		morning set	14874 Feb 16 07:47	0°♏	
					14874 Feb 17 23:56	3°♏23'49	
superior conj	14873 Mar 14 04:32	5°♏19'54	0°33'55				
minimum elong	14873 Mar 14 06:33	5°♏29'32	0°33'35	superior conj	14874 Feb 25 16:16	19°♏05'48	0°59'40
desc. node	14873 Mar 18 08:13	13°♏07'21		minimum elong	14874 Feb 25 18:54	19°♏19'01	0°59'33
max. Earth dist.	14873 Mar 21 03:13	18°♏10'53	1.38940 AU		14874 Mar 03 06:08	0°♏	
evening rise	14873 Mar 24 22:30	24°♏50'18		max. Earth dist.	14874 Mar 03 09:55	0°♏17'56	1.36697 AU
	14873 Mar 27 23:51	0°♏		desc. node	14874 Mar 05 04:45	3°♏38'31	
	14873 Apr 16 22:28	0°♊		evening rise	14874 Mar 07 04:24	7°♏16'42	

	14874 Mar 20 19:21	0°♄			14875 Feb 23 08:06	0°♅	
evening max el	14874 Apr 11 16:02	28°♄23'49	25°44'24		14875 Mar 14 18:15	0°♄	
	14874 Apr 13 08:53	0°♄		evening max el	14875 Mar 25 05:54	12°♄09'24	26°44'48
retrograde	14874 Apr 24 03:39	5°♄35'14		retrograde	14875 Apr 07 10:18	19°♄35'02	
asc. node	14874 Apr 29 10:32	3°♄41'04		evening set	14875 Apr 13 20:44	17°♄02'53	
evening set	14874 Apr 30 04:15	3°♄06'07		asc. node	14875 Apr 16 07:53	14°♄44'50	
	14874 May 03 04:54	30°♄		min. Earth dist.	14875 Apr 17 20:58	13°♄02'01	0.66251 AU
min. Earth dist.	14874 May 04 10:07	28°♄30'42	0.67605 AU	inferior conj	14875 Apr 19 21:49	10°♄37'54	1°05'36
inferior conj	14874 May 05 22:18	26°♄35'40	1°52'30	minimum elong	14875 Apr 19 20:15	10°♄42'34	1°04'28
minimum elong	14874 May 05 20:10	26°♄42'27	1°51'04	morning rise	14875 Apr 25 20:57	5°♄00'04	
morning rise	14874 May 11 12:39	20°♄46'08		direct	14875 Apr 28 20:21	4°♄11'06	
direct	14874 May 14 22:13	19°♄40'00		morning max el	14875 May 05 05:26	7°♄32'20	18°14'24
morning max el	14874 May 21 16:25	23°♄19'01	18°54'03	desc. node	14875 May 19 03:14	26°♄57'35	
	14874 May 27 07:37	0°♄			14875 May 21 01:04	0°♄	
desc. node	14874 Jun 01 06:23	7°♄02'09		morning set	14875 May 24 17:05	5°♄51'50	
greatest brilliancy	14874 Jun 04 03:51	11°♄22'28	-0.8m		14875 Jun 08 23:16	0°♄	
morning set	14874 Jun 13 09:45	25°♄36'18					
	14874 Jun 16 05:44	0°♄		superior conj	14875 Jun 09 01:01	0°♄06'50	-2°03'12
max. Earth dist.	14874 Jun 27 17:21	17°♄52'39	1.45697 AU	minimum elong	14875 Jun 08 17:49	29°♄38'44	2°03'48
				max. Earth dist.	14875 Jun 10 13:44	2°♄30'16	1.45918 AU
superior conj	14874 Jun 29 16:32	20°♄57'21	-2°13'55	evening rise	14875 Jun 25 02:21	25°♄06'43	
minimum elong	14874 Jun 29 16:25	20°♄56'55	2°14'52		14875 Jun 28 05:48	0°♄	
	14874 Jul 05 10:15	0°♄		greatest brilliancy	14875 Jul 06 00:05	11°♄57'27	-0.8m
evening rise	14874 Jul 14 20:03	15°♄03'30		asc. node	14875 Jul 13 06:31	22°♄27'21	
	14874 Jul 24 03:24	0°♄		evening max el	14875 Jul 18 06:59	28°♄24'14	19°04'35
asc. node	14874 Jul 26 09:47	3°♄30'23			14875 Jul 20 01:33	0°♄	
evening max el	14874 Aug 03 20:39	14°♄36'36	18°26'42	retrograde	14875 Jul 25 03:10	2°♄10'29	
retrograde	14874 Aug 10 06:59	18°♄03'16		evening set	14875 Jul 28 14:50	1°♄00'04	
evening set	14874 Aug 13 09:17	17°♄09'38			14875 Jul 29 21:30	30°♄	
inferior conj	14874 Aug 19 04:02	11°♄36'43	2°23'32	inferior conj	14875 Aug 03 02:11	25°♄12'53	2°52'25
minimum elong	14874 Aug 19 06:21	11°♄29'49	2°22'34	minimum elong	14875 Aug 03 03:52	25°♄07'29	2°51'30
min. Earth dist.	14874 Aug 21 07:54	9°♄02'33	0.65068 AU	min. Earth dist.	14875 Aug 04 15:42	23°♄12'25	0.66745 AU
morning rise	14874 Aug 25 02:07	5°♄14'22		morning rise	14875 Aug 08 16:12	18°♄47'19	
desc. node	14874 Aug 28 04:04	3°♄18'59		direct	14875 Aug 14 19:25	16°♄09'51	
direct	14874 Aug 31 13:43	2°♄36'38		desc. node	14875 Aug 15 01:32	16°♄10'06	
morning max el	14874 Sep 14 01:28	10°♄31'08	27°11'59	morning max el	14875 Aug 27 12:45	23°♄44'22	26°06'36
	14874 Sep 29 11:20	0°♄			14875 Sep 02 03:01	0°♄	
	14874 Oct 17 09:05	0°♄			14875 Sep 22 20:15	0°♄	
morning set	14874 Oct 19 13:32	4°♄11'13		morning set	14875 Oct 02 11:35	16°♄52'17	
asc. node	14874 Oct 22 11:44	9°♄58'39		max. Earth dist.	14875 Oct 06 06:00	24°♄00'26	1.35106 AU
max. Earth dist.	14874 Oct 23 22:05	12°♄53'11	1.33303 AU	asc. node	14875 Oct 09 08:22	0°♄06'19	
					14875 Oct 09 07:06	0°♄	
superior conj	14874 Oct 27 22:18	21°♄15'37	0°48'58				
minimum elong	14874 Oct 27 20:09	21°♄04'13	0°49'18	superior conj	14875 Oct 11 18:16	4°♄59'07	0°22'12
	14874 Nov 01 00:07	0°♄		minimum elong	14875 Oct 11 17:02	4°♄52'48	0°22'27
evening rise	14874 Nov 04 00:51	6°♄29'56		evening rise	14875 Oct 19 09:17	20°♄50'01	
	14874 Nov 16 10:08	0°♄			14875 Oct 23 21:45	0°♄	
desc. node	14874 Nov 24 00:47	10°♄02'32		evening max el	14875 Nov 06 23:54	21°♄33'33	20°37'02
evening max el	14874 Nov 25 03:21	11°♄10'09	22°08'08	desc. node	14875 Nov 10 21:58	24°♄47'08	
retrograde	14874 Dec 07 18:25	17°♄25'07		retrograde	14875 Nov 18 04:50	27°♄07'56	
evening set	14874 Dec 11 04:42	16°♄59'07		evening set	14875 Nov 20 13:12	26°♄54'21	
inferior conj	14874 Dec 19 18:57	13°♄06'15	-5°57'53	inferior conj	14875 Nov 29 10:30	23°♄00'14	-5°10'35
minimum elong	14874 Dec 19 16:12	13°♄10'06	5°56'44	minimum elong	14875 Nov 29 00:59	23°♄13'58	5°07'28
min. Earth dist.	14874 Dec 19 09:31	13°♄19'27	0.54534 AU	min. Earth dist.	14875 Nov 30 15:16	22°♄18'39	0.54599 AU
morning rise	14874 Dec 28 04:39	9°♄19'01		morning rise	14875 Dec 07 12:39	19°♄03'23	
direct	14874 Dec 31 15:08	8°♄52'45		direct	14875 Dec 11 23:13	18°♄21'07	
morning max el	14875 Jan 12 18:51	14°♄43'40	21°42'31	morning max el	14875 Dec 25 06:48	24°♄50'49	23°29'35
asc. node	14875 Jan 18 11:16	21°♄19'05			14875 Dec 29 23:58	0°♄	
	14875 Jan 24 02:05	0°♄		asc. node	14876 Jan 05 08:30	9°♄00'56	
morning set	14875 Feb 02 09:47	18°♄07'04			14876 Jan 16 13:03	0°♄	
	14875 Feb 08 00:24	0°♄		morning set	14876 Jan 17 21:31	2°♄52'10	
superior conj	14875 Feb 09 13:53	3°♄17'09	1°18'41	superior conj	14876 Jan 24 18:24	17°♄45'46	1°31'06
minimum elong	14875 Feb 09 16:15	3°♄29'30	1°18'57	minimum elong	14876 Jan 24 19:58	17°♄54'15	1°31'44
max. Earth dist.	14875 Feb 13 21:39	12°♄09'44	1.34684 AU	max. Earth dist.	14876 Jan 27 16:54	24°♄02'46	1.33049 AU
evening rise	14875 Feb 18 02:18	20°♄22'03			14876 Jan 30 13:37	0°♄	
desc. node	14875 Feb 20 01:18	24°♄02'50		evening rise	14876 Feb 01 12:44	3°♄57'48	

desc. node	14876 Feb 06 21:52	14° H 16'07		morning set	14877 Jan 01 09:15	17° Z 32'57	
	14876 Feb 16 02:40	0° Y			14877 Jan 07 01:17	0° a	
evening max el	14876 Mar 06 19:08	25° Y 37'06	27°23'48				
	14876 Mar 12 01:32	0° B		superior conj	14877 Jan 08 03:15	2° a 23'41	1°37'12
retrograde	14876 Mar 20 10:37	3° B 06'58		minimum elong	14877 Jan 08 03:47	2° a 26'39	1°38'06
evening set	14876 Mar 27 04:16	0° B 37'56		max. Earth dist.	14877 Jan 09 19:04	6° a 02'49	1.31882 AU
	14876 Mar 27 23:43	30° R Y		evening rise	14877 Jan 15 08:37	17° a 55'41	
min. Earth dist.	14876 Mar 31 00:17	27° Y 08'51	0.64516 AU		14877 Jan 21 11:35	0° H	
asc. node	14876 Apr 02 05:17	24° Y 46'46		desc. node	14877 Jan 23 18:30	4° H 12'18	
inferior conj	14876 Apr 02 13:14	24° Y 25'18	0°06'18		14877 Feb 09 13:46	0° Y	
minimum elong	14876 Apr 02 13:03	24° Y 25'46	0°05'55	evening max el	14877 Feb 17 05:53	8° Y 33'54	27°34'41
transit middle	14876 Apr 02 13:03	24° Y 25'46	0°05'55	retrograde	14877 Mar 03 03:40	16° Y 00'22	
transit begin	14876 Apr 02 10:12	24° Y 33'29		evening set	14877 Mar 10 00:20	13° Y 41'58	
transit end	14876 Apr 02 15:55	24° Y 18'04		min. Earth dist.	14877 Mar 13 18:26	10° Y 39'30	0.62480 AU
morning rise	14876 Apr 08 23:52	19° Y 01'28		inferior conj	14877 Mar 16 17:28	7° Y 49'22	-1°05'40
direct	14876 Apr 11 14:12	18° Y 26'45		minimum elong	14877 Mar 16 19:42	7° Y 44'00	1°04'47
morning max el	14876 Apr 17 22:17	21° Y 42'34	17°51'47	asc. node	14877 Mar 20 02:44	4° Y 48'09	
	14876 Apr 24 10:25	0° B		morning rise	14877 Mar 23 17:57	2° Y 42'05	
desc. node	14876 May 04 23:59	17° B 09'55		direct	14877 Mar 26 00:36	2° Y 18'13	
morning set	14876 May 05 04:16	17° B 27'46		morning max el	14877 Apr 01 15:56	5° Y 40'08	17°46'39
	14876 May 12 17:51	0° II		morning set	14877 Apr 17 15:26	0° B 10'59	
					14877 Apr 17 12:56	0° B	
superior conj	14876 May 18 19:23	9° II 48'31	-1°35'14	desc. node	14877 Apr 21 20:39	7° B 33'18	
minimum elong	14876 May 18 10:42	9° II 13'48	1°35'14				
max. Earth dist.	14876 May 23 09:51	17° II 06'36	1.45388 AU	superior conj	14877 Apr 29 11:02	20° B 30'17	-0°57'59
	14876 May 31 16:40	0° B		minimum elong	14877 Apr 29 05:28	20° B 07'04	0°57'53
evening rise	14876 Jun 03 15:57	4° B 33'39			14877 May 05 06:00	0° II	
greatest brilliancy	14876 Jun 18 11:56	26° B 48'00	-0.6m	max. Earth dist.	14877 May 06 02:49	1° II 23'45	1.44168 AU
	14876 Jun 20 17:36	0° Q		evening rise	14877 May 14 04:13	14° II 04'25	
asc. node	14876 Jun 29 03:21	10° Q 49'43			14877 May 24 17:30	0° B	
evening max el	14876 Jun 30 11:55	12° Q 15'10	19°58'20	evening max el	14877 Jun 13 10:51	26° B 06'28	21°05'46
retrograde	14876 Jul 08 01:51	16° Q 33'03		asc. node	14877 Jun 16 00:17	28° B 25'34	
evening set	14876 Jul 11 23:24	15° Q 05'21			14877 Jun 18 07:44	0° Q	
inferior conj	14876 Jul 17 06:31	9° Q 05'19	3°07'14	retrograde	14877 Jun 22 00:50	1° Q 05'05	
minimum elong	14876 Jul 17 07:16	9° Q 02'48	3°06'20		14877 Jun 25 11:10	30° R B	
min. Earth dist.	14876 Jul 18 05:56	7° Q 46'09	0.67986 AU	evening set	14877 Jun 26 08:56	29° B 20'20	
morning rise	14876 Jul 22 14:46	2° Q 41'15		inferior conj	14877 Jul 01 14:37	23° B 09'05	3°09'57
direct	14876 Jul 28 07:10	0° Q 11'53		minimum elong	14877 Jul 01 14:22	23° B 09'55	3°08'58
desc. node	14876 Jul 31 22:57	1° Q 03'09		min. Earth dist.	14877 Jul 02 00:29	22° B 34'47	0.68755 AU
morning max el	14876 Aug 08 23:36	7° Q 11'53	24°44'30	morning rise	14877 Jul 06 19:34	16° B 49'40	
	14876 Aug 26 18:51	0° P		direct	14877 Jul 11 23:55	14° B 34'19	
morning set	14876 Sep 13 16:42	28° P 47'52		desc. node	14877 Jul 18 20:18	17° B 32'48	
	14876 Sep 14 09:03	0° Q		morning max el	14877 Jul 22 10:36	20° B 47'24	23°15'24
max. Earth dist.	14876 Sep 17 06:19	5° Q 11'00	1.37301 AU		14877 Jul 30 08:14	0° Q	
					14877 Aug 19 23:55	0° P	
superior conj	14876 Sep 24 03:44	18° Q 11'33	-0°09'37	morning set	14877 Aug 26 00:32	9° P 47'55	
minimum elong	14876 Sep 24 04:20	18° Q 14'32	0°09'17	max. Earth dist.	14877 Aug 30 04:33	16° P 52'05	1.39677 AU
behind sun begin	14876 Sep 23 22:51	17° Q 47'50					
behind sun end	14876 Sep 24 09:49	18° Q 41'17		superior conj	14877 Sep 06 22:52	0° Q 44'22	-0°44'50
asc. node	14876 Sep 25 04:57	20° Q 14'59		minimum elong	14877 Sep 07 02:13	0° Q 59'51	0°44'20
	14876 Sep 30 02:16	0° M			14877 Sep 06 13:14	0° Q	
evening rise	14876 Oct 02 13:13	4° M 56'40		asc. node	14877 Sep 12 01:32	10° Q 21'18	
	14876 Oct 17 00:19	0° J		evening rise	14877 Sep 16 09:49	18° Q 42'54	
evening max el	14876 Oct 19 10:49	2° J 44'04	19°26'12		14877 Sep 22 09:34	0° M	
desc. node	14876 Oct 27 19:16	7° J 27'09		evening max el	14877 Oct 02 10:48	14° M 44'05	18°37'34
retrograde	14876 Oct 29 00:32	7° J 31'39		retrograde	14877 Oct 10 13:48	18° M 50'17	
evening set	14876 Oct 30 21:53	7° J 21'15		evening set	14877 Oct 12 12:08	18° M 37'10	
inferior conj	14876 Nov 08 13:12	3° J 14'20	-3°38'02	desc. node	14877 Oct 14 16:40	17° M 52'55	
minimum elong	14876 Nov 08 04:16	3° J 28'48	3°34'06	inferior conj	14877 Oct 20 12:00	14° M 10'43	-1°51'23
min. Earth dist.	14876 Nov 11 00:29	1° J 38'27	0.55579 AU	minimum elong	14877 Oct 20 07:30	14° M 19'12	1°48'58
	14876 Nov 13 19:13	30° R M		min. Earth dist.	14877 Oct 23 15:44	11° M 48'41	0.57298 AU
morning rise	14876 Nov 16 08:30	28° M 48'33		morning rise	14877 Oct 27 23:28	9° M 07'54	
direct	14876 Nov 21 16:34	27° M 44'18		direct	14877 Nov 03 00:34	7° M 37'09	
	14876 Nov 29 10:37	0° J		morning max el	14877 Nov 17 06:36	15° M 04'42	26°46'01
morning max el	14876 Dec 05 16:11	4° J 46'34	25°17'07		14877 Nov 29 07:17	0° J	
asc. node	14876 Dec 22 05:39	27° J 29'35		asc. node	14877 Dec 09 02:42	16° J 33'00	
	14876 Dec 23 15:08	0° Z			14877 Dec 15 19:49	0° Z	

morning set	14877 Dec 16 19:16	2°30'45"8		morning max el	14878 Oct 30 04:50	26°05'11"	27°41'57"
					14878 Nov 02 21:08	0°11'11"	
superior conj	14877 Dec 23 14:24	17°30'51"	1°37'15"		14878 Nov 22 19:36	0°11'11"	
minimum elong	14877 Dec 23 13:52	17°30'20"4	1°38'13"	asc. node	14878 Nov 25 23:40	6°11'01"19	
max. Earth dist.	14877 Dec 24 01:49	18°30'08"49	1.31229 AU	morning set	14878 Dec 01 01:44	16°11'22"50	
	14877 Dec 29 11:07	0°11'11"			14878 Dec 07 07:22	0°11'11"	
evening rise	14877 Dec 30 11:26	2°11'09"44		max. Earth dist.	14878 Dec 07 09:48	0°11'13"37	1.31106 AU
desc. node	14878 Jan 10 15:15	23°11'44"40					
	14878 Jan 14 09:17	0°11'11"		superior conj	14878 Dec 08 01:53	1°11'43"28	1°31'21"
evening max el	14878 Jan 30 12:00	20°11'48"45	27°12'13"	minimum elong	14878 Dec 08 00:25	1°11'35"17	1°32'14"
retrograde	14878 Feb 13 12:09	28°11'06"05		evening rise	14878 Dec 14 18:54	16°11'33"43	
evening set	14878 Feb 20 05:50	26°11'06"20			14878 Dec 21 08:29	0°11'11"	
min. Earth dist.	14878 Feb 24 02:30	23°11'22"20	0.60279 AU	desc. node	14878 Dec 28 12:05	12°11'43"32	
inferior conj	14878 Feb 27 07:03	20°11'41"25	-2°28'31"		14879 Jan 10 06:12	0°11'11"	
minimum elong	14878 Feb 27 12:31	20°11'29"52	2°26'07"	evening max el	14879 Jan 12 10:55	2°11'12"27	26°15'00"
morning rise	14878 Mar 06 22:34	15°11'15"18		retrograde	14879 Jan 26 10:00	9°11'17"49	
asc. node	14878 Mar 07 00:12	15°11'52"14		evening set	14879 Feb 01 17:03	7°11'43"14	
direct	14878 Mar 08 23:51	15°11'36"33		min. Earth dist.	14879 Feb 06 00:18	5°11'06"05	0.58105 AU
morning max el	14878 Mar 16 07:01	19°11'15"27	17°59'55"	inferior conj	14879 Feb 09 02:18	2°11'51"21	-3°55'55"
	14878 Mar 24 03:44	0°11'11"		minimum elong	14879 Feb 09 10:48	2°11'35"50	3°52'36"
morning set	14878 Mar 31 20:39	13°11'04"35"8			14879 Feb 13 08:53	30°11'11"	
desc. node	14878 Apr 08 17:15	28°11'03"44		morning rise	14879 Feb 17 07:38	28°11'24"34	
	14878 Apr 09 19:22	0°11'11"		direct	14879 Feb 19 07:40	28°11'11"14	
				asc. node	14879 Feb 21 21:39	28°11'34"33	
superior conj	14878 Apr 11 02:23	2°11'16"54	-0°19'12"		14879 Feb 24 20:40	0°11'11"	
minimum elong	14878 Apr 11 00:44	2°11'09"38	0°19'21"	morning max el	14879 Feb 27 15:40	2°11'17"26	18°33'19"
max. Earth dist.	14878 Apr 18 15:29	15°11'09"42	1.42395 AU	morning set	14879 Mar 15 14:36	27°11'51"04	
evening rise	14878 Apr 24 06:00	24°11'15"52			14879 Mar 16 17:20	0°11'11"	
	14878 Apr 27 21:34	0°11'11"		superior conj	14879 Mar 24 14:33	15°11'00"12	0°16'10"
	14878 May 18 16:42	0°11'11"		minimum elong	14879 Mar 24 15:39	15°11'05"18	0°15'48"
evening max el	14878 May 27 04:45	9°11'58"20	22°22'52"	behind sun begin	14879 Mar 24 14:48	15°11'01"18	
asc. node	14878 Jun 02 21:20	14°11'59"58		behind sun end	14879 Mar 24 16:31	15°11'09"18	
retrograde	14878 Jun 05 22:21	15°11'54"00		desc. node	14879 Mar 26 13:50	18°11'37"37	
evening set	14878 Jun 10 17:42	13°11'40"22		max. Earth dist.	14879 Apr 01 00:14	28°11'17"17	1.40252 AU
inferior conj	14878 Jun 16 00:20	7°11'19"47	3°01'46"		14879 Apr 02 00:03	0°11'11"	
minimum elong	14878 Jun 15 23:13	7°11'23"44	3°00'38"	evening rise	14879 Apr 05 04:23	5°11'22"42	
min. Earth dist.	14878 Jun 15 21:07	7°11'31"02	0.69045 AU		14879 Apr 21 00:45	0°11'11"	
morning rise	14878 Jun 21 04:33	1°11'50"70"6		evening max el	14879 May 09 19:31	23°11'51"59	23°44'04"
	14878 Jun 22 18:42	30°11'11"11"			14879 May 18 18:11	0°11'11"	
direct	14878 Jun 25 20:28	29°11'09"50		retrograde	14879 May 20 17:05	0°11'55"55	
	14878 Jun 29 03:54	0°11'11"		asc. node	14879 May 20 18:29	0°11'55"55	
morning max el	14878 Jul 05 00:13	4°11'30"28	21°48'04"		14879 May 22 13:52	30°11'11"11"	
desc. node	14878 Jul 05 17:33	5°11'14"46		evening set	14879 May 26 00:04	28°11'01"22	
	14878 Jul 24 10:49	0°11'11"		min. Earth dist.	14879 May 30 17:42	22°11'29"04	0.68856 AU
morning set	14878 Aug 06 07:56	19°11'44"13		inferior conj	14879 May 31 09:47	21°11'33"59	2°43'13"
max. Earth dist.	14878 Aug 12 06:58	29°11'24"21	1.41963 AU	minimum elong	14879 May 31 07:58	21°11'40"12	2°41'54"
	14878 Aug 12 15:35	0°11'11"		morning rise	14879 Jun 05 15:51	15°11'29"30	
superior conj	14878 Aug 19 23:13	12°11'16"56	-1°20'29"	direct	14879 Jun 09 19:29	13°11'52"18	
minimum elong	14878 Aug 20 05:32	12°11'15"42"8	1°20'02"	morning max el	14879 Jun 17 19:39	18°11'24"36	20°29'36"
asc. node	14878 Aug 29 22:06	0°11'21"03		desc. node	14879 Jun 22 14:42	23°11'50"16	
	14878 Aug 29 17:31	0°11'11"			14879 Jun 27 06:56	0°11'11"	
evening rise	14878 Aug 30 19:19	1°11'58"27		morning set	14879 Jul 16 18:03	28°11'47"06	
evening max el	14878 Sep 15 19:42	27°11'24"09	18°10'00"		14879 Jul 17 12:54	0°11'11"	
	14878 Sep 19 04:03	0°11'11"		max. Earth dist.	14879 Jul 25 16:31	12°11'50"35	1.43886 AU
retrograde	14878 Sep 22 21:58	1°11'01"27		superior conj	14879 Aug 01 00:55	23°11'11"19	-1°51'30"
evening set	14878 Sep 25 02:36	0°11'11"41"12		minimum elong	14879 Aug 01 08:26	23°11'42"30	1°51'31"
	14878 Sep 26 19:01	30°11'11"11"			14879 Aug 05 02:36	0°11'11"	
desc. node	14878 Oct 01 14:07	26°11'33"23		evening rise	14879 Aug 13 13:03	14°11'13"02	
inferior conj	14878 Oct 02 08:26	25°11'53"28	-0°14'25"	asc. node	14879 Aug 16 18:43	20°11'10"29	
minimum elong	14878 Oct 02 07:56	25°11'54"33	0°13'53"		14879 Aug 22 14:12	0°11'11"	
transit middle	14878 Oct 02 07:56	25°11'54"33	0°13'53"	evening max el	14879 Aug 30 09:19	10°11'34"09	18°02'01"
transit begin	14878 Oct 02 06:11	25°11'58"23		retrograde	14879 Sep 05 21:45	13°11'56"47	
transit end	14878 Oct 02 09:41	25°11'50"43		evening set	14879 Sep 08 10:20	13°11'25"46	
min. Earth dist.	14878 Oct 05 14:47	23°11'22"21	0.59461 AU	inferior conj	14879 Sep 14 23:49	8°11'18"25	1°02'53"
morning rise	14878 Oct 09 09:55	20°11'16"39		minimum elong	14879 Sep 15 01:33	8°11'14"02	1°02'19"
direct	14878 Oct 15 21:55	18°11'19"27					


































































































































min. Earth dist.	14879 Sep 17 23:18	5° Ω 19'07	0.61754 AU	inferior conj	14880 Aug 28 06:07	21° \mathbb{M} 17'02	1°59'30
desc. node	14879 Sep 18 11:36	4° Ω 49'55		minimum elong	14880 Aug 28 08:31	21° \mathbb{M} 10'14	1°58'33
morning rise	14879 Sep 21 14:10	2° Ω 16'10		min. Earth dist.	14880 Aug 30 17:47	18° \mathbb{M} 28'57	0.63928 AU
	14879 Sep 27 06:42	30° \mathbb{R} \mathbb{M}		morning rise	14880 Sep 03 09:42	14° \mathbb{M} 59'15	
direct	14879 Sep 28 06:20	29° \mathbb{M} 57'04		desc. node	14880 Sep 04 09:05	14° \mathbb{M} 16'55	
	14879 Sep 29 06:16	0° Ω		direct	14880 Sep 10 00:11	12° \mathbb{M} 25'46	
morning max el	14879 Oct 12 10:08	7° Ω 54'14	27°58'54	morning max el	14880 Sep 23 19:53	20° \mathbb{M} 25'27	27°38'28
	14879 Oct 29 08:53	0° \mathbb{M}			14880 Oct 02 02:03	0° Ω	
asc. node	14879 Nov 12 20:32	25° \mathbb{M} 47'35			14880 Oct 21 10:35	0° \mathbb{M}	
	14879 Nov 14 22:20	0° \mathbb{A}		morning set	14880 Oct 28 19:32	13° \mathbb{M} 57'04	
morning set	14879 Nov 15 02:37	0° \mathbb{A} 22'00		asc. node	14880 Oct 29 17:18	15° \mathbb{M} 46'04	
max. Earth dist.	14879 Nov 20 15:11	12° \mathbb{A} 08'18	1.31525 AU	max. Earth dist.	14880 Nov 02 14:08	23° \mathbb{M} 44'46	1.32490 AU
superior conj	14879 Nov 22 11:50	16° \mathbb{A} 14'00	1°19'33	superior conj	14880 Nov 05 18:14	0° \mathbb{A} 31'26	1°01'51
minimum elong	14879 Nov 22 09:43	16° \mathbb{A} 02'18	1°20'14	minimum elong	14880 Nov 05 15:56	0° \mathbb{A} 18'56	1°02'17
	14879 Nov 28 17:28	0° \mathbb{B}			14880 Nov 05 12:25	0° \mathbb{A}	
evening rise	14879 Nov 29 05:04	1° \mathbb{B} 02'48		evening rise	14880 Nov 12 16:04	15° \mathbb{A} 32'30	
	14879 Dec 14 17:50	0° \approx			14880 Nov 19 18:22	0° \mathbb{B}	
desc. node	14879 Dec 15 09:01	0° \approx 56'29		desc. node	14880 Dec 01 06:02	18° \mathbb{B} 07'04	
evening max el	14879 Dec 25 01:18	12° \approx 44'43	24°48'24	evening max el	14880 Dec 05 10:54	22° \mathbb{B} 45'24	23°06'33
retrograde	14880 Jan 07 19:16	19° \approx 37'02		retrograde	14880 Dec 18 15:56	29° \mathbb{B} 18'39	
evening set	14880 Jan 13 06:10	18° \approx 31'03		evening set	14880 Dec 22 20:54	28° \mathbb{B} 40'12	
min. Earth dist.	14880 Jan 18 13:11	15° \approx 44'44	0.56219 AU	min. Earth dist.	14880 Dec 29 20:37	25° \mathbb{B} 25'12	0.54912 AU
inferior conj	14880 Jan 21 00:38	14° \approx 10'33	-5°13'24	inferior conj	14880 Dec 31 03:32	24° \mathbb{B} 40'49	-5°57'22
minimum elong	14880 Jan 21 09:13	13° \approx 56'56	5°10'48	minimum elong	14880 Dec 31 06:11	24° \mathbb{B} 37'00	5°56'17
morning rise	14880 Jan 29 14:30	10° \approx 05'13		morning rise	14881 Jan 08 16:58	20° \mathbb{B} 50'52	
direct	14880 Jan 31 20:22	9° \approx 51'19		direct	14881 Jan 11 14:16	20° \mathbb{B} 31'14	
asc. node	14880 Feb 08 19:05	12° \approx 59'51		morning max el	14881 Jan 22 21:46	25° \mathbb{B} 57'09	20°47'32
morning max el	14880 Feb 10 13:42	14° \approx 34'07	19°28'51	asc. node	14881 Jan 25 16:27	28° \mathbb{B} 55'52	
	14880 Feb 21 07:55	0° \mathbb{H}			14881 Jan 26 13:31	0° \approx	
morning set	14880 Feb 27 17:02	12° \mathbb{H} 19'14		morning set	14881 Feb 11 00:54	26° \approx 59'25	
					14881 Feb 12 11:41	0° \mathbb{H}	
superior conj	14880 Mar 06 18:57	28° \mathbb{H} 26'59	0°45'40	superior conj	14881 Feb 18 11:22	12° \mathbb{H} 25'42	1°08'32
minimum elong	14880 Mar 06 21:22	28° \mathbb{H} 38'46	0°45'24	minimum elong	14881 Feb 18 13:59	12° \mathbb{H} 39'00	1°08'35
	14880 Mar 07 14:04	0° \mathbb{Y}		max. Earth dist.	14881 Feb 23 15:00	22° \mathbb{H} 42'34	1.35801 AU
desc. node	14880 Mar 12 10:22	9° \mathbb{Y} 10'47		desc. node	14881 Feb 27 06:54	29° \mathbb{H} 39'48	
max. Earth dist.	14880 Mar 13 06:43	10° \mathbb{Y} 44'17	1.37972 AU		14881 Feb 27 11:16	0° \mathbb{Y}	
evening rise	14880 Mar 16 23:29	17° \mathbb{Y} 22'05		evening rise	14881 Feb 27 12:40	0° \mathbb{Y} 06'30	
	14880 Mar 24 11:29	0° \mathbb{B}			14881 Mar 17 15:33	0° \mathbb{B}	
	14880 Apr 14 10:06	0° \mathbb{I}		evening max el	14881 Apr 03 22:30	21° \mathbb{B} 35'56	26°12'05
evening max el	14880 Apr 21 08:59	7° \mathbb{I} 45'39	25°02'52	retrograde	14881 Apr 16 18:01	28° \mathbb{B} 55'22	
retrograde	14880 May 03 07:55	14° \mathbb{I} 42'59		evening set	14881 Apr 22 23:05	26° \mathbb{B} 23'56	
asc. node	14880 May 06 15:42	13° \mathbb{I} 56'08		asc. node	14881 Apr 23 13:00	25° \mathbb{B} 53'58	
evening set	14880 May 09 02:26	12° \mathbb{I} 17'43		min. Earth dist.	14881 Apr 27 02:17	22° \mathbb{B} 03'40	0.67084 AU
min. Earth dist.	14880 May 13 12:05	7° \mathbb{I} 22'04	0.68196 AU	inferior conj	14881 Apr 28 19:59	19° \mathbb{B} 54'52	1°34'04
inferior conj	14880 May 14 17:01	5° \mathbb{I} 47'02	2°14'10	minimum elong	14881 Apr 28 18:00	20° \mathbb{B} 01'01	1°32'43
minimum elong	14880 May 14 14:51	5° \mathbb{I} 54'08	2°12'44	morning rise	14881 May 04 13:47	14° \mathbb{B} 10'18	
	14880 May 19 23:04	30° \mathbb{R} \mathbb{B}		direct	14881 May 07 18:48	13° \mathbb{B} 11'58	
morning rise	14880 May 20 03:35	29° \mathbb{B} 51'54		morning max el	14881 May 14 08:16	16° \mathbb{B} 41'56	18°35'05
direct	14880 May 23 19:29	28° \mathbb{B} 34'55			14881 May 24 12:30	0° \mathbb{I}	
	14880 May 27 22:01	0° \mathbb{I}		desc. node	14881 May 26 08:40	2° \mathbb{I} 47'19	
morning max el	14880 May 30 22:27	2° \mathbb{I} 29'33	19°24'28	morning set	14881 Jun 04 13:40	17° \mathbb{I} 07'38	
desc. node	14880 Jun 08 11:44	13° \mathbb{I} 04'31			14881 Jun 12 19:02	0° \mathbb{G}	
greatest brilliancy	14880 Jun 12 14:00	18° \mathbb{I} 59'02	-0.7m	max. Earth dist.	14881 Jun 20 02:39	11° \mathbb{G} 24'58	1.45881 AU
	14880 Jun 19 21:53	0° \mathbb{G}		superior conj	14881 Jun 20 13:58	12° \mathbb{G} 09'07	-2°11'49
morning set	14880 Jun 24 21:02	7° \mathbb{G} 35'50		minimum elong	14881 Jun 20 10:28	11° \mathbb{G} 55'27	2°12'44
max. Earth dist.	14880 Jul 07 07:51	26° \mathbb{G} 56'11	1.45232 AU		14881 Jul 01 23:07	0° \mathbb{Q}	
	14880 Jul 09 06:28	0° \mathbb{Q}		evening rise	14881 Jul 06 05:43	6° \mathbb{Q} 46'02	
superior conj	14880 Jul 11 03:18	2° \mathbb{Q} 57'43	-2°10'50	greatest brilliancy	14881 Jul 14 00:37	19° \mathbb{Q} 05'41	-0.8m
minimum elong	14880 Jul 11 07:25	3° \mathbb{Q} 14'05	2°11'35	asc. node	14881 Jul 20 12:00	28° \mathbb{Q} 56'40	
evening rise	14880 Jul 25 09:44	26° \mathbb{Q} 10'19			14881 Jul 21 05:40	0° \mathbb{M}	
	14880 Jul 27 17:06	0° \mathbb{M}		evening max el	14881 Jul 27 12:24	7° \mathbb{M} 47'00	18°40'49
asc. node	14880 Aug 02 15:20	9° \mathbb{M} 44'18		retrograde	14881 Aug 03 02:07	11° \mathbb{M} 20'50	
evening max el	14880 Aug 12 23:52	24° \mathbb{M} 04'16	18°12'35	evening set	14881 Aug 06 08:14	10° \mathbb{M} 20'22	
retrograde	14880 Aug 19 08:30	27° \mathbb{M} 26'00		inferior conj	14881 Aug 11 23:25	4° \mathbb{M} 41'13	2°37'41
evening set	14880 Aug 22 05:35	26° \mathbb{M} 41'20					

minimum elong	14881 Aug 12 01:31	4° \mathbb{M} 34'43	2°36'43	evening set	14882 Jul 21 15:19	24° Ω 17'34	
min. Earth dist.	14881 Aug 13 21:16	2° \mathbb{M} 19'53	0.65822 AU	inferior conj	14882 Jul 27 00:31	18° Ω 25'01	3°00'17
	14881 Aug 15 22:20	30° \mathbb{R} Ω		minimum elong	14882 Jul 27 01:50	18° Ω 20'43	2°59'22
morning rise	14881 Aug 17 17:46	28° Ω 16'29		min. Earth dist.	14882 Jul 28 08:05	16° Ω 41'07	0.67328 AU
desc. node	14881 Aug 22 06:35	25° Ω 49'58		morning rise	14882 Aug 01 11:47	11° Ω 59'34	
direct	14881 Aug 24 02:07	25° Ω 37'39		direct	14882 Aug 07 10:44	9° Ω 24'21	
	14881 Sep 02 13:27	0° \mathbb{M}		desc. node	14882 Aug 09 04:02	9° Ω 35'41	
morning max el	14881 Sep 06 07:10	3° \mathbb{M} 26'31	26°46'53	morning max el	14882 Aug 19 18:07	16° Ω 46'15	25°33'06
	14881 Sep 26 10:23	0° \mathbb{L}			14882 Aug 30 18:26	0° \mathbb{M}	
morning set	14881 Oct 12 01:27	27° \mathbb{L} 00'02			14882 Sep 19 08:49	0° \mathbb{L}	
	14881 Oct 13 14:52	0° \mathbb{L}		morning set	14882 Sep 24 16:48	9° \mathbb{L} 22'53	
max. Earth dist.	14881 Oct 16 03:26	4° \mathbb{M} 58'39	1.34000 AU	max. Earth dist.	14882 Sep 28 07:09	16° \mathbb{L} 02'05	1.35996 AU
asc. node	14881 Oct 16 13:57	5° \mathbb{M} 51'21		asc. node	14882 Oct 03 10:34	25° \mathbb{L} 59'55	
superior conj	14881 Oct 20 18:46	14° \mathbb{M} 28'59	0°38'17	superior conj	14882 Oct 04 10:41	28° \mathbb{L} 00'20	0°09'16
minimum elong	14881 Oct 20 16:54	14° \mathbb{M} 19'13	0°38'34	minimum elong	14882 Oct 04 10:07	27° \mathbb{L} 57'28	0°09'33
evening rise	14881 Oct 28 01:58	29° \mathbb{M} 57'02		behind sun begin	14882 Oct 04 05:02	27° \mathbb{L} 31'59	
	14881 Oct 28 02:32	0° \mathbb{X}		behind sun end	14882 Oct 04 15:13	28° \mathbb{L} 23'00	
	14881 Nov 14 10:05	0° \mathbb{Z}			14882 Oct 05 10:29	0° \mathbb{M}	
evening max el	14881 Nov 17 00:56	2° \mathbb{Z} 50'33	21°27'25	evening rise	14882 Oct 12 08:46	14° \mathbb{M} 11'52	
desc. node	14881 Nov 18 03:10	3° \mathbb{Z} 52'21			14882 Oct 20 12:14	0° \mathbb{X}	
retrograde	14881 Nov 29 03:17	8° \mathbb{Z} 50'05		evening max el	14882 Oct 30 03:33	13° \mathbb{X} 33'02	20°04'20
evening set	14881 Dec 02 00:39	8° \mathbb{Z} 30'57		desc. node	14882 Nov 05 00:24	17° \mathbb{X} 46'43	
inferior conj	14881 Dec 10 19:16	4° \mathbb{Z} 39'10	-5°45'03	retrograde	14882 Nov 09 15:38	18° \mathbb{X} 46'55	
minimum elong	14881 Dec 10 12:52	4° \mathbb{Z} 48'09	5°43'13	evening set	14882 Nov 11 17:33	18° \mathbb{X} 35'34	
min. Earth dist.	14881 Dec 11 02:23	4° \mathbb{Z} 29'09	0.54439 AU	inferior conj	14882 Nov 20 13:56	14° \mathbb{X} 37'39	-4°35'06
morning rise	14881 Dec 19 01:38	0° \mathbb{Z} 50'04		minimum elong	14882 Nov 20 03:50	14° \mathbb{X} 52'48	4°31'18
direct	14881 Dec 22 22:10	0° \mathbb{Z} 17'48		min. Earth dist.	14882 Nov 22 09:23	13° \mathbb{X} 32'21	0.54912 AU
morning max el	14882 Jan 04 15:35	6° \mathbb{Z} 26'43	22°26'45	morning rise	14882 Nov 28 13:07	10° \mathbb{X} 30'20	
asc. node	14882 Jan 12 13:44	16° \mathbb{Z} 03'52		direct	14882 Dec 03 09:34	9° \mathbb{X} 39'05	
	14882 Jan 20 17:27	0° \mathbb{A}		morning max el	14882 Dec 17 01:04	16° \mathbb{X} 23'40	24°16'17
morning set	14882 Jan 26 11:47	11° \mathbb{A} 43'56			14882 Dec 27 21:33	0° \mathbb{Z}	
superior conj	14882 Feb 02 12:17	26° \mathbb{A} 45'28	1°24'43	asc. node	14882 Dec 30 10:57	4° \mathbb{Z} 07'11	
minimum elong	14882 Feb 02 14:21	26° \mathbb{A} 56'28	1°25'09	morning set	14883 Jan 10 23:44	26° \mathbb{Z} 27'28	
	14882 Feb 04 01:07	0° \mathbb{H}			14883 Jan 12 15:03	0° \mathbb{A}	
max. Earth dist.	14882 Feb 06 05:27	4° \mathbb{H} 31'48	1.33937 AU	superior conj	14883 Jan 17 18:55	11° \mathbb{A} 18'38	1°34'26
evening rise	14882 Feb 10 16:19	13° \mathbb{H} 25'57		minimum elong	14883 Jan 17 20:04	11° \mathbb{A} 24'54	1°35'12
desc. node	14882 Feb 14 03:27	19° \mathbb{H} 59'57		max. Earth dist.	14883 Jan 20 03:50	16° \mathbb{A} 27'17	1.32498 AU
	14882 Feb 19 18:38	0° \mathbb{Y}		evening rise	14883 Jan 25 07:09	27° \mathbb{A} 12'08	
	14882 Mar 12 13:59	0° \mathbb{B}			14883 Jan 26 16:39	0° \mathbb{H}	
evening max el	14882 Mar 17 12:10	5° \mathbb{B} 14'59	27°04'21	desc. node	14883 Feb 01 00:03	10° \mathbb{H} 06'39	
retrograde	14882 Mar 30 22:19	12° \mathbb{B} 44'16			14883 Feb 13 01:32	0° \mathbb{Y}	
evening set	14882 Apr 06 12:04	10° \mathbb{B} 12'38		evening max el	14883 Feb 28 00:52	18° \mathbb{Y} 31'55	27°32'15
asc. node	14882 Apr 10 10:22	6° \mathbb{B} 25'17		retrograde	14883 Mar 13 19:41	26° \mathbb{Y} 00'41	
min. Earth dist.	14882 Apr 10 10:17	6° \mathbb{B} 25'32	0.65555 AU	evening set	14883 Mar 20 15:04	23° \mathbb{Y} 35'37	
inferior conj	14882 Apr 12 16:24	3° \mathbb{B} 51'38	0°42'01	min. Earth dist.	14883 Mar 24 10:04	20° \mathbb{Y} 18'17	0.63682 AU
minimum elong	14882 Apr 12 15:18	3° \mathbb{B} 54'46	0°41'07	inferior conj	14883 Mar 27 03:31	17° \mathbb{Y} 30'26	-0°22'42
	14882 Apr 16 09:47	30° \mathbb{R} \mathbb{Y}		minimum elong	14883 Mar 27 04:14	17° \mathbb{Y} 28'35	0°22'37
morning rise	14882 Apr 18 20:07	28° \mathbb{Y} 19'24		asc. node	14883 Mar 28 07:50	16° \mathbb{Y} 18'36	
direct	14882 Apr 21 15:23	27° \mathbb{Y} 37'02		morning rise	14883 Apr 02 19:45	12° \mathbb{Y} 12'57	
	14882 Apr 26 23:07	0° \mathbb{B}		direct	14883 Apr 05 06:37	11° \mathbb{Y} 43'15	
morning max el	14882 Apr 27 23:14	0° \mathbb{B} 54'52	18°02'35	morning max el	14883 Apr 11 16:46	15° \mathbb{Y} 00'27	17°47'20
desc. node	14882 May 13 05:30	22° \mathbb{B} 50'41			14883 Apr 22 08:09	0° \mathbb{B}	
morning set	14882 May 16 08:56	27° \mathbb{B} 57'38		morning set	14883 Apr 28 07:06	10° \mathbb{B} 04'43	
	14882 May 17 15:01	0° \mathbb{I}		desc. node	14883 Apr 30 02:13	13° \mathbb{B} 08'21	
superior conj	14882 May 31 00:45	21° \mathbb{I} 27'44	-1°53'02		14883 May 10 04:33	0° \mathbb{I}	
minimum elong	14882 May 30 16:08	20° \mathbb{I} 53'49	1°53'20	superior conj	14883 May 11 03:19	1° \mathbb{I} 32'42	-1°20'03
max. Earth dist.	14882 Jun 02 22:42	26° \mathbb{I} 02'03	1.45781 AU	minimum elong	14883 May 10 19:38	1° \mathbb{I} 01'28	1°19'55
	14882 Jun 05 11:41	0° \mathbb{E}		max. Earth dist.	14883 May 16 17:53	10° \mathbb{I} 32'39	1.44952 AU
evening rise	14882 Jun 16 03:21	16° \mathbb{E} 29'13		evening rise	14883 May 26 14:20	25° \mathbb{I} 52'50	
	14882 Jun 24 23:06	0° \mathbb{L}			14883 May 29 07:10	0° \mathbb{E}	
greatest brilliancy	14882 Jun 29 01:32	6° \mathbb{L} 09'17	-0.7m		14883 Jun 19 04:07	0° \mathbb{L}	
asc. node	14882 Jul 07 08:46	17° \mathbb{L} 40'20		evening max el	14883 Jun 23 23:09	5° \mathbb{L} 28'41	20°25'37
evening max el	14882 Jul 10 20:38	21° \mathbb{L} 36'48	19°25'42	asc. node	14883 Jun 24 05:38	5° \mathbb{L} 44'45	
retrograde	14882 Jul 17 23:34	25° \mathbb{L} 35'08		retrograde	14883 Jul 01 22:29	10° \mathbb{L} 02'32	

evening set	14883 Jul 06 00:32	8°♎27'27		retrograde	14884 Jun 14 21:03	24°♊37'30	
inferior conj	14883 Jul 11 06:44	2°♎22'41	3°09'44	evening set	14884 Jun 19 09:58	22°♊45'33	
minimum elong	14883 Jul 11 07:04	2°♎21'34	3°08'49	inferior conj	14884 Jun 24 15:47	16°♊30'01	3°07'43
min. Earth dist.	14883 Jul 12 00:20	1°♎22'21	0.68378 AU	minimum elong	14884 Jun 24 15:09	16°♊32'14	3°06'42
	14883 Jul 13 00:47	30°♋♊		min. Earth dist.	14884 Jun 24 19:57	16°♊15'28	0.68946 AU
morning rise	14883 Jul 16 13:17	26°♊00'31		morning rise	14884 Jun 29 20:09	10°♊13'30	
direct	14883 Jul 22 00:46	23°♊36'24		direct	14884 Jul 04 19:11	8°♊05'42	
desc. node	14883 Jul 27 01:27	25°♊13'07		desc. node	14884 Jul 12 22:46	12°♊16'31	
	14883 Aug 01 21:56	0°♎		morning max el	14884 Jul 14 16:31	13°♊56'04	22°37'31
morning max el	14883 Aug 02 04:39	0°♎16'52	24°06'52		14884 Jul 27 15:58	0°♎	
	14883 Aug 24 15:04	0°♎			14884 Aug 16 13:07	0°♎	
morning set	14883 Sep 06 13:17	20°♎55'23		morning set	14884 Aug 17 10:51	1°♎28'23	
max. Earth dist.	14883 Sep 10 05:53	27°♎22'39	1.38312 AU	max. Earth dist.	14884 Aug 22 05:51	9°♎26'13	1.40687 AU
	14883 Sep 11 16:59	0°♊					
superior conj	14883 Sep 17 14:34	10°♊57'00	-0°24'15	superior conj	14884 Aug 30 02:13	23°♎09'20	-1°00'09
minimum elong	14883 Sep 17 16:15	11°♊05'02	0°23'52	minimum elong	14884 Aug 30 06:53	23°♎30'21	0°59'39
asc. node	14883 Sep 20 07:08	16°♊07'54			14884 Sep 02 20:05	0°♊	
evening rise	14883 Sep 26 09:57	28°♊10'32		asc. node	14884 Sep 06 03:42	6°♊11'48	
	14883 Sep 27 08:10	0°♎		evening rise	14884 Sep 09 02:20	11°♊45'07	
evening max el	14883 Oct 12 20:24	25°♎04'38	19°02'49		14884 Sep 19 08:11	0°♎	
retrograde	14883 Oct 21 18:03	29°♎33'13		evening max el	14884 Sep 25 00:36	7°♎22'09	18°23'15
desc. node	14883 Oct 22 21:44	29°♎28'57		retrograde	14884 Oct 02 15:52	11°♎14'45	
evening set	14883 Oct 23 15:01	29°♎22'07		evening set	14884 Oct 04 16:25	10°♎59'08	
inferior conj	14883 Nov 01 00:26	25°♎07'07	-2°52'44	desc. node	14884 Oct 08 19:10	9°♎03'02	
minimum elong	14883 Oct 31 17:13	25°♎19'33	2°49'15	inferior conj	14884 Oct 12 08:33	6°♎23'12	-1°08'10
min. Earth dist.	14883 Nov 03 20:28	23°♎10'18	0.56239 AU	minimum elong	14884 Oct 12 05:57	6°♎28'28	1°06'35
morning rise	14883 Nov 08 16:42	20°♎26'15		min. Earth dist.	14884 Oct 15 14:41	3°♎46'29	0.58181 AU
direct	14883 Nov 14 08:49	19°♎11'11		morning rise	14884 Oct 19 15:59	1°♎04'53	
morning max el	14883 Nov 28 11:43	26°♎24'09	25°58'23		14884 Oct 22 03:59	30°♋♊	
	14883 Dec 01 22:13	0°♋		direct	14884 Oct 25 22:17	29°♊22'55	
asc. node	14883 Dec 17 08:05	22°♋51'51			14884 Oct 29 18:29	0°♎	
	14883 Dec 21 02:22	0°♋		morning max el	14884 Nov 09 05:34	6°♎59'00	27°14'38
morning set	14883 Dec 26 11:00	11°♋05'10			14884 Nov 26 10:48	0°♋	
				asc. node	14884 Dec 03 05:06	12°♋06'46	
superior conj	14884 Jan 02 05:00	25°♋58'32	1°37'57	morning set	14884 Dec 09 19:43	25°♋31'37	
minimum elong	14884 Jan 02 05:05	25°♋59'00	1°38'54		14884 Dec 11 21:23	0°♋	
max. Earth dist.	14884 Jan 03 08:35	28°♋31'41	1.31541 AU	superior conj	14884 Dec 16 16:28	10°♋38'52	1°35'29
	14884 Jan 04 00:34	0°♋		minimum elong	14884 Dec 16 15:31	10°♋33'34	1°36'26
evening rise	14884 Jan 09 06:18	11°♋17'47		max. Earth dist.	14884 Dec 16 16:22	10°♋38'20	1.31104 AU
desc. node	14884 Jan 18 20:44	29°♋53'58		evening rise	14884 Dec 23 11:18	25°♋36'08	
	14884 Jan 18 22:05	0°♋			14884 Dec 25 13:23	0°♋	
	14884 Feb 09 04:17	0°♋		desc. node	14885 Jan 04 17:30	19°♋13'21	
evening max el	14884 Feb 10 10:13	1°♋13'29	27°29'28		14885 Jan 11 14:58	0°♋	
retrograde	14884 Feb 24 09:03	8°♋35'39		evening max el	14885 Jan 22 13:19	13°♋06'25	26°52'02
evening set	14884 Mar 02 05:24	6°♋24'22		retrograde	14885 Feb 05 13:10	20°♋19'13	
min. Earth dist.	14884 Mar 05 23:59	3°♋31'03	0.61558 AU	evening set	14885 Feb 12 03:37	18°♋29'07	
inferior conj	14884 Mar 09 02:04	0°♋43'02	-1°39'39	min. Earth dist.	14885 Feb 16 03:19	15°♋50'07	0.59333 AU
minimum elong	14884 Mar 09 05:36	0°♋34'59	1°38'07	inferior conj	14885 Feb 19 08:14	13°♋18'05	-3°05'39
	14884 Mar 09 21:06	30°♋♋		minimum elong	14885 Feb 19 15:08	13°♋04'23	3°02'43
asc. node	14884 Mar 14 05:18	26°♋41'06		morning rise	14885 Feb 27 06:01	8°♋39'15	
morning rise	14884 Mar 16 08:52	25°♋43'25		direct	14885 Mar 01 06:11	8°♋24'24	
direct	14884 Mar 18 13:02	25°♋22'53		asc. node	14885 Mar 01 02:47	8°♋24'28	
morning max el	14884 Mar 25 09:48	28°♋50'25	17°49'57	morning max el	14885 Mar 08 22:41	12°♋13'17	18°11'39
	14884 Mar 26 12:28	0°♋			14885 Mar 20 19:17	0°♋	
morning set	14884 Apr 10 02:47	23°♋12'26		morning set	14885 Mar 24 14:00	7°♋01'43	
	14884 Apr 13 22:03	0°♋		desc. node	14885 Apr 02 19:27	24°♋08'20	
desc. node	14884 Apr 15 22:52	3°♋35'50					
				superior conj	14885 Apr 03 06:05	24°♋56'16	-0°03'38
superior conj	14884 Apr 21 05:18	12°♋43'28	-0°41'22	minimum elong	14885 Apr 03 05:47	24°♋54'53	0°03'55
minimum elong	14884 Apr 21 01:28	12°♋27'07	0°41'22	behind sun begin	14885 Apr 02 22:25	24°♋21'44	
max. Earth dist.	14884 Apr 28 09:54	24°♋41'18	1.43480 AU	behind sun end	14885 Apr 03 13:09	25°♋27'57	
	14884 May 01 17:08	0°♋			14885 Apr 06 02:27	0°♋	
evening rise	14884 May 05 07:07	5°♋38'50		max. Earth dist.	14885 Apr 10 20:48	8°♋11'55	1.41515 AU
	14884 May 21 14:29	0°♋		evening rise	14885 Apr 15 17:14	16°♋13'06	
evening max el	14884 Jun 05 19:49	19°♋20'35	21°37'34		14885 Apr 24 12:16	0°♋	
asc. node	14884 Jun 10 02:38	22°♋56'58			14885 May 16 11:47	0°♋	

evening max el	14885 May 19 11:56	3°☿12'39	22°57'07			14886 Apr 18 00:26	0°♊	
asc. node	14885 May 27 23:44	9°☿00'34		evening max el	14886 May 02 01:51	17°♊06'28	24°18'18	
retrograde	14885 May 29 17:39	9°☿14'05		retrograde	14886 May 13 11:01	23°♊46'28		
evening set	14885 Jun 03 17:57	7°☿07'01		asc. node	14886 May 14 20:55	23°♊37'48		
min. Earth dist.	14885 Jun 08 16:51	1°☿13'25	0.69026 AU	evening set	14886 May 18 22:49	21°♊27'01		
inferior conj	14885 Jun 09 01:38	0°☿42'55	2°55'09	min. Earth dist.	14886 May 23 12:51	16°♊10'09	0.68630 AU	
minimum elong	14885 Jun 09 00:11	0°☿47'57	2°53'57	inferior conj	14886 May 24 10:23	14°♊57'30	2°32'14	
	14885 Jun 09 14:02	30°♋♊		minimum elong	14886 May 24 08:22	15°♊04'16	2°30'51	
morning rise	14885 Jun 14 06:20	24°♊33'33		morning rise	14886 May 29 18:02	8°♊56'35		
direct	14885 Jun 18 16:51	22°♊44'58		direct	14886 Jun 02 16:31	7°♊28'07		
morning max el	14885 Jun 27 08:27	27°♊44'23	21°13'12	morning max el	14886 Jun 10 06:53	11°♊43'20	19°59'57	
	14885 Jun 29 11:38	0°☿		desc. node	14886 Jun 16 17:06	19°♊17'12		
desc. node	14885 Jun 29 19:59	0°☿23'30			14886 Jun 24 08:30	0°☿		
	14885 Jul 21 04:53	0°♊		morning set	14886 Jul 07 12:57	19°☿50'10		
morning set	14885 Jul 28 08:19	11°♊00'00			14886 Jul 14 02:11	0°♊		
max. Earth dist.	14885 Aug 04 11:02	22°♊21'48	1.42838 AU	max. Earth dist.	14886 Jul 17 22:43	6°♊04'52	1.44537 AU	
	14885 Aug 09 01:55	0°♎						
superior conj	14885 Aug 11 17:16	4°♎27'49	-1°34'36	superior conj	14886 Jul 23 08:47	14°♊46'56	-2°01'35	
minimum elong	14885 Aug 12 00:29	4°♎58'34	1°34'17	minimum elong	14886 Jul 23 15:33	15°♊14'26	2°01'55	
evening rise	14885 Aug 23 05:47	24°♎44'52		evening rise	14886 Aug 01 13:11	0°♎		
asc. node	14885 Aug 24 00:17	26°♎07'59		asc. node	14886 Aug 05 15:10	6°♎56'22		
	14885 Aug 26 04:02	0°♎			14886 Aug 10 20:52	15°♎51'32		
evening max el	14885 Sep 08 11:58	20°♎16'29	18°04'17	evening max el	14886 Aug 19 23:35	0°♎		
retrograde	14885 Sep 15 07:16	23°♎46'08		retrograde	14886 Aug 23 02:26	3°♎36'35	18°04'21	
evening set	14885 Sep 17 15:02	23°♎21'51		evening set	14886 Aug 29 12:05	6°♎56'58		
inferior conj	14885 Sep 24 13:35	18°♎25'40	0°20'57	inferior conj	14886 Sep 01 04:13	6°♎20'30		
minimum elong	14885 Sep 24 14:15	18°♎24'06	0°20'55	minimum elong	14886 Sep 07 11:47	1°♎06'00	1°29'21	
desc. node	14885 Sep 25 16:38	17°♎21'59			14886 Sep 07 13:58	1°♎00'13	1°28'32	
min. Earth dist.	14885 Sep 27 17:58	15°♎28'11	0.60431 AU	min. Earth dist.	14886 Sep 08 12:30	30°♋♎		
morning rise	14885 Oct 01 10:20	12°♎36'29		desc. node	14886 Sep 10 06:48	28°♎09'02	0.62708 AU	
direct	14885 Oct 08 00:46	10°♎29'00		morning rise	14886 Sep 12 14:09	25°♎58'21		
morning max el	14885 Oct 22 07:14	18°♎21'34	27°54'01	direct	14886 Sep 13 21:26	24°♎56'05		
	14885 Nov 01 02:32	0°♎			14886 Sep 20 13:44	22°♎29'27		
	14885 Nov 19 04:49	0°♎		morning max el	14886 Oct 04 02:42	0°♎		
asc. node	14885 Nov 20 01:59	1°♎43'50			14886 Oct 04 14:35	0°♎29'19	27°54'22	
morning set	14885 Nov 24 00:03	9°♎42'41		asc. node	14886 Oct 26 05:09	0°♎		
max. Earth dist.	14885 Nov 29 23:36	22°♎39'46	1.31209 AU	morning set	14886 Oct 26 05:09	21°♎35'49		
					14886 Nov 06 22:47	23°♎32'09		
superior conj	14885 Dec 01 03:31	25°♎15'01	1°27'05	max. Earth dist.	14886 Nov 07 21:48	0°♎		
minimum elong	14885 Dec 01 01:45	25°♎05'05	1°27'53		14886 Nov 11 00:34	0°♎		
	14885 Dec 03 06:37	0°♎		superior conj	14886 Nov 13 02:24	4°♎26'12	1.31867 AU	
evening rise	14885 Dec 07 20:07	10°♎02'58		minimum elong	14886 Nov 15 12:12	9°♎40'44	1°12'46	
	14885 Dec 17 21:10	0°♎		evening rise	14886 Nov 15 09:56	9°♎28'19	1°13'20	
desc. node	14885 Dec 22 14:21	7°♎54'41			14886 Nov 22 06:48	24°♎32'42		
evening max el	14886 Jan 04 08:19	24°♎06'39	25°41'08	desc. node	14886 Nov 24 20:25	0°♎		
	14886 Jan 12 20:37	0°♎			14886 Dec 09 11:18	25°♎43'21		
retrograde	14886 Jan 18 06:16	1°♎07'42			14886 Dec 12 18:47	0°♎		
	14886 Jan 23 15:50	30°♋♎		evening max el	14886 Dec 16 19:57	4°♎22'12	24°05'57	
evening set	14886 Jan 24 05:50	29°♎45'01		retrograde	14886 Dec 30 10:03	11°♎07'19		
min. Earth dist.	14886 Jan 28 21:06	27°♎06'03	0.57244 AU	evening set	14887 Jan 04 08:53	10°♎13'56		
inferior conj	14886 Jan 31 18:40	25°♎06'46	-4°31'14	min. Earth dist.	14887 Jan 10 07:30	7°♎17'35	0.55573 AU	
minimum elong	14886 Feb 01 03:47	24°♎51'06	4°28'00	inferior conj	14887 Jan 12 08:09	6°♎04'07	-5°37'46	
morning rise	14886 Feb 09 04:36	20°♎49'35		minimum elong	14887 Jan 12 15:00	5°♎53'45	5°35'53	
direct	14886 Feb 11 05:49	20°♎36'40		morning rise	14887 Jan 20 22:55	2°♎06'03		
asc. node	14886 Feb 16 00:13	21°♎50'59		direct	14887 Jan 23 10:04	1°♎50'26		
morning max el	14886 Feb 20 03:22	24°♎57'40	18°54'11	asc. node	14887 Feb 02 21:36	6°♎56'28		
	14886 Feb 24 09:08	0°♎		morning max el	14887 Feb 02 19:40	6°♎51'47	19°59'31	
morning set	14886 Mar 08 11:55	21°♎18'36			14887 Feb 17 18:43	0°♎		
	14886 Mar 12 22:11	0°♎		morning set	14887 Feb 20 16:58	5°♎52'36		
superior conj	14886 Mar 17 01:40	7°♎59'28	0°29'26					
minimum elong	14886 Mar 17 03:29	8°♎08'05	0°29'05	superior conj	14887 Feb 28 11:35	21°♎40'42	0°56'11	
desc. node	14886 Mar 20 15:59	14°♎42'20		minimum elong	14887 Feb 28 14:11	21°♎53'42	0°56'02	
max. Earth dist.	14886 Mar 24 03:34	20°♎59'06	1.39280 AU		14887 Mar 04 17:45	0°♎		
evening rise	14886 Mar 28 00:36	27°♎42'57		max. Earth dist.	14887 Mar 06 10:07	3°♎11'10	1.37020 AU	
	14886 Mar 29 09:01	0°♎		desc. node	14887 Mar 07 12:30	5°♎14'12		
				evening rise	14887 Mar 10 03:48	10°♎02'49		
					14887 Mar 22 01:49	0°♎		

































































































































	14887 Apr 13 15:21	0°♂			14888 Mar 14 18:20	0°♂		
evening max el	14887 Apr 14 15:27	1°♂00'29	25°34'04	evening max el	14888 Mar 27 05:14	14°♂47'37	26°36'57	
retrograde	14887 Apr 26 23:54	8°♂08'25		retrograde	14888 Apr 09 07:26	22°♂11'53		
asc. node	14887 May 01 18:10	6°♂34'51		evening set	14888 Apr 15 16:35	19°♂39'40		
evening set	14887 May 02 22:58	5°♂40'13		asc. node	14888 Apr 17 15:32	17°♂51'59		
min. Earth dist.	14887 May 07 05:48	0°♂59'36	0.67772 AU	min. Earth dist.	14888 Apr 19 17:31	15°♂33'58	0.66480 AU	
	14887 May 08 00:27	30°♂		inferior conj	14888 Apr 21 16:34	13°♂13'30	1°13'32	
inferior conj	14887 May 08 16:05	29°♂09'39	1°58'38	minimum elong	14888 Apr 21 14:51	13°♂18'38	1°12'19	
minimum elong	14887 May 08 13:56	29°♂16'35	1°57'11	morning rise	14888 Apr 27 14:13	7°♂33'58		
morning rise	14887 May 14 05:21	23°♂18'34		direct	14888 Apr 30 15:05	6°♂42'37		
direct	14887 May 17 16:34	22°♂09'36		morning max el	14888 May 07 01:00	10°♂05'36	18°19'17	
morning max el	14887 May 24 12:44	25°♂52'08	19°01'28	desc. node	14888 May 20 10:57	28°♂37'33		
	14887 May 28 05:02	0°♂			14888 May 21 07:53	0°♂		
desc. node	14887 Jun 03 14:05	8°♂45'12		morning set	14888 May 26 22:47	8°♂55'31		
greatest brilliancy	14887 Jun 06 16:24	13°♂20'54	-0.7m		14888 Jun 09 07:21	0°♂		
morning set	14887 Jun 16 19:31	28°♂51'47						
	14887 Jun 17 13:10	0°♂		superior conj	14888 Jun 11 11:39	3°♂24'18	-2°06'05	
max. Earth dist.	14887 Jun 30 16:02	20°♂23'43	1.45604 AU	minimum elong	14888 Jun 11 05:15	2°♂59'21	2°06'46	
				max. Earth dist.	14888 Jun 12 12:17	5°♂00'25	1.45934 AU	
superior conj	14887 Jul 03 03:10	24°♂15'45	-2°13'44	evening rise	14888 Jun 27 11:21	28°♂20'33		
minimum elong	14887 Jul 03 04:16	24°♂20'04	2°14'41		14888 Jun 28 12:49	0°♂		
	14887 Jul 06 18:25	0°♂		greatest brilliancy	14888 Jul 07 14:47	14°♂06'06	-0.8m	
evening rise	14887 Jul 18 01:39	18°♂09'04		asc. node	14888 Jul 14 14:15	24°♂19'10		
	14887 Jul 25 09:01	0°♂			14888 Jul 19 04:07	0°♂		
asc. node	14887 Jul 28 17:31	5°♂17'38		evening max el	14888 Jul 20 03:33	1°♂00'48	18°57'51	
evening max el	14887 Aug 06 16:35	17°♂14'00	18°22'26	retrograde	14888 Jul 26 21:48	4°♂43'28		
retrograde	14887 Aug 13 02:07	20°♂38'52		evening set	14888 Jul 30 08:00	3°♂35'39		
evening set	14887 Aug 16 03:05	19°♂47'33			14888 Aug 03 02:28	30°♂		
inferior conj	14887 Aug 21 23:13	14°♂16'44	2°17'45	inferior conj	14888 Aug 04 20:15	27°♂50'23	2°48'58	
minimum elong	14887 Aug 22 01:35	14°♂09'46	2°16'46	minimum elong	14888 Aug 04 22:02	27°♂44'39	2°48'02	
min. Earth dist.	14887 Aug 24 05:07	11°♂38'38	0.64788 AU	min. Earth dist.	14888 Aug 06 11:53	25°♂44'18	0.66520 AU	
morning rise	14887 Aug 27 22:41	7°♂55'23		morning rise	14888 Aug 10 11:19	21°♂24'48		
desc. node	14887 Aug 30 11:39	6°♂15'58		desc. node	14888 Aug 16 09:08	18°♂47'09		
direct	14887 Sep 03 11:11	5°♂18'33		direct	14888 Aug 16 15:54	18°♂46'51		
morning max el	14887 Sep 17 01:06	13°♂14'26	27°19'42	morning max el	14888 Aug 29 12:34	26°♂25'36	26°17'40	
	14887 Sep 30 13:41	0°♂			14888 Sep 01 20:07	0°♂		
	14887 Oct 18 19:39	0°♂			14888 Sep 23 03:41	0°♂		
morning set	14887 Oct 22 10:24	6°♂54'14		morning set	14888 Oct 04 10:40	19°♂41'48		
asc. node	14887 Oct 24 19:30	11°♂37'44		max. Earth dist.	14888 Oct 08 06:56	27°♂02'18	1.34804 AU	
max. Earth dist.	14887 Oct 26 21:29	15°♂52'43	1.33077 AU		14888 Oct 09 19:02	0°♂		
				asc. node	14888 Oct 10 16:09	1°♂45'15		
superior conj	14887 Oct 30 16:24	23°♂50'36	0°52'32					
minimum elong	14887 Oct 30 14:11	23°♂38'47	0°52'55	superior conj	14888 Oct 13 13:41	7°♂38'25	0°26'36	
	14887 Nov 02 13:07	0°♂		minimum elong	14888 Oct 13 12:15	7°♂31'03	0°26'52	
evening rise	14887 Nov 06 17:34	9°♂00'59		evening rise	14888 Oct 21 02:30	23°♂22'57		
	14887 Nov 17 12:47	0°♂			14888 Oct 24 07:49	0°♂		
desc. node	14887 Nov 26 08:23	12°♂20'35		evening max el	14888 Nov 09 00:54	24°♂38'17	20°49'29	
evening max el	14887 Nov 28 06:15	14°♂20'04	22°22'59	desc. node	14888 Nov 12 05:34	27°♂22'31		
retrograde	14887 Dec 11 01:15	20°♂40'12			14888 Nov 17 16:56	0°♂		
evening set	14887 Dec 14 16:24	20°♂11'15		retrograde	14888 Nov 20 11:43	0°♂19'44		
min. Earth dist.	14887 Dec 22 13:32	16°♂38'36	0.54603 AU	evening set	14888 Nov 22 22:58	0°♂05'01		
inferior conj	14887 Dec 23 04:46	16°♂17'13	-5°59'47		14888 Nov 23 08:33	30°♂		
minimum elong	14887 Dec 23 03:27	16°♂19'05	5°58'45	inferior conj	14888 Dec 01 19:57	26°♂11'49	-5°21'20	
morning rise	14887 Dec 31 15:36	12°♂29'57		minimum elong	14888 Dec 01 11:00	26°♂24'37	5°18'33	
direct	14888 Jan 03 22:33	12°♂05'37		min. Earth dist.	14888 Dec 02 19:13	25°♂38'32	0.54525 AU	
morning max el	14888 Jan 15 21:09	17°♂50'00	21°27'42	morning rise	14888 Dec 09 23:10	22°♂17'41		
asc. node	14888 Jan 20 18:57	23°♂25'08		direct	14888 Dec 14 06:03	21°♂38'17		
	14888 Jan 25 06:17	0°♂		morning max el	14888 Dec 27 10:29	28°♂02'50	23°13'08	
morning set	14888 Feb 05 02:22	20°♂35'29			14888 Dec 29 08:56	0°♂		
	14888 Feb 09 13:23	0°♂		asc. node	14889 Jan 06 16:12	10°♂59'01		
					14889 Jan 17 00:51	0°♂		
superior conj	14888 Feb 12 07:56	5°♂49'08	1°16'13	morning set	14889 Jan 19 13:59	5°♂21'03		
minimum elong	14888 Feb 12 10:23	6°♂01'50	1°16'25					
max. Earth dist.	14888 Feb 16 20:57	15°♂04'43	1.34960 AU	superior conj	14889 Jan 26 11:38	20°♂16'11	1°29'37	
evening rise	14888 Feb 20 23:31	23°♂03'01		minimum elong	14889 Jan 26 13:21	20°♂25'24	1°30'12	
desc. node	14888 Feb 22 09:01	25°♂39'51		max. Earth dist.	14889 Jan 29 14:59	26°♂56'49	1.33264 AU	
	14888 Feb 24 17:59	0°♂			14889 Jan 31 02:11	0°♂		

evening rise	14889 Feb 03 08:20	6°  35'08			14890 Jan 08 14:56	0° 	
desc. node	14889 Feb 08 05:35	15°  55'18					
evening max el	14889 Feb 16 08:50	0° 		superior conj	14890 Jan 10 20:02	4°  53'21	1°36'41
	14889 Mar 09 18:33	28°  18'22	27°19'32	minimum elong	14890 Jan 10 20:44	4°  57'13	1°37'31
	14889 Mar 11 14:38	0° 		max. Earth dist.	14890 Jan 12 16:09	8°  55'18	1.32025 AU
retrograde	14889 Mar 23 08:48	5°  48'35		evening rise	14890 Jan 18 03:02	20°  30'24	
evening set	14889 Mar 30 01:37	3°  18'31			14890 Jan 22 21:56	0° 	
min. Earth dist.	14889 Apr 02 16:23	30° 		desc. node	14890 Jan 26 02:14	5°  54'31	
	14889 Apr 02 22:06	29°  44'59	0.64798 AU		14890 Feb 10 10:07	0° 	
	14889 Apr 04 12:56	27°  59'35		evening max el	14890 Feb 20 05:53	11°  20'54	27°35'04
inferior conj	14889 Apr 05 09:22	27°  03'26	0°16'08	retrograde	14890 Mar 06 03:11	18°  48'24	
minimum elong	14889 Apr 05 08:55	27°  04'40	0°15'35	evening set	14890 Mar 12 23:36	16°  28'04	
transit middle	14889 Apr 05 08:55	27°  04'40	0°15'35	min. Earth dist.	14890 Mar 16 17:49	13°  21'54	0.62797 AU
transit begin	14889 Apr 05 08:14	27°  06'32		inferior conj	14890 Mar 19 15:31	10°  31'48	-0°53'59
transit end	14889 Apr 05 09:36	27°  02'48		minimum elong	14890 Mar 19 17:19	10°  27'23	0°53'19
morning rise	14889 Apr 11 18:08	21°  37'27		asc. node	14890 Mar 22 10:24	7°  56'45	
direct	14889 Apr 14 09:40	21°  00'54		morning rise	14890 Mar 26 13:48	5°  21'48	
morning max el	14889 Apr 20 17:29	24°  16'51	17°54'02	direct	14890 Mar 28 21:27	4°  56'34	
desc. node	14889 Apr 25 11:23	0° 		morning max el	14890 Apr 04 11:14	8°  17'03	17°46'13
	14889 May 07 07:44	18°  47'34			14890 Apr 18 21:53	0° 	
	14889 May 08 05:51	20°  19'20		morning set	14890 Apr 20 13:52	2°  54'00	
morning set	14889 May 14 02:35	0° 		desc. node	14890 Apr 24 04:25	9°  09'46	
superior conj	14889 May 22 03:33	12°  58'37	-1°40'17	superior conj	14890 May 02 15:42	23°  30'51	-1°03'52
minimum elong	14889 May 21 18:42	12°  23'24	1°40'19	minimum elong	14890 May 02 09:32	23°  05'18	1°03'45
max. Earth dist.	14889 May 26 08:16	19°  36'40	1.45511 AU		14890 May 06 14:44	0° 	
evening rise	14889 Jun 02 00:20	0° 		max. Earth dist.	14890 May 09 01:41	3°  57'14	1.44388 AU
	14889 Jun 07 02:29	7°  49'58		evening rise	14890 May 17 13:54	17°  17'47	
	14889 Jun 21 14:41	29°  39'05	-0.6m		14890 May 25 23:17	0° 	
greatest brilliancy	14889 Jun 21 20:27	0° 		evening max el	14890 Jun 16 09:13	28°  43'15	20°55'04
	14889 Jul 01 11:04	12°  47'35			14890 Jun 17 17:29	0° 	
	14889 Jul 03 09:20	14°  51'24	19°49'27	asc. node	14890 Jun 18 08:00	0°  31'46	
retrograde	14889 Jul 10 20:17	19°  40'06		retrograde	14890 Jun 24 19:18	3°  35'17	
evening set	14889 Jul 14 16:16	17°  43'04		evening set	14890 Jun 29 01:48	1°  53'06	
inferior conj	14889 Jul 19 23:51	11°  40'55	3°05'45		14890 Jul 01 00:18	30°  48'35	
minimum elong	14889 Jul 20 00:45	11°  43'53	3°04'52	inferior conj	14890 Jul 04 07:32	25°  43'34	3°10'13
min. Earth dist.	14889 Jul 21 01:22	10°  41'58	0.67827 AU	minimum elong	14890 Jul 04 07:26	25°  43'53	3°09'17
morning rise	14889 Jul 25 08:47	5°  41'16		min. Earth dist.	14890 Jul 04 19:25	25°  02'20	0.68670 AU
direct	14889 Jul 31 02:53	2°  45'09		morning rise	14890 Jul 09 12:48	19°  23'20	
desc. node	14889 Aug 03 06:35	3°  42'31		direct	14890 Jul 14 19:03	17°  05'28	
morning max el	14889 Aug 11 23:29	9°  51'36	24°57'24	desc. node	14890 Jul 21 03:58	19°  40'17	
morning set	14889 Aug 27 22:42	0° 		morning max el	14890 Jul 25 10:14	23°  05'59	23°28'45
	14889 Sep 15 18:44	0° 			14890 Jul 31 05:37	0° 	
	14889 Sep 16 18:37	1°  45'13			14890 Aug 21 07:12	0° 	
max. Earth dist.	14889 Sep 20 07:53	8°  49'57	1.36953 AU	morning set	14890 Aug 29 05:52	12°  47'54	
superior conj				max. Earth dist.	14890 Sep 02 05:56	19°  44'49	1.39324 AU
	14889 Sep 27 00:59	20°  45'17	-0°04'31		14890 Sep 07 23:46	0° 	
	14889 Sep 27 01:15	20°  45'36	0°04'12				
behind sun begin	14889 Sep 26 18:54	20°  42'28		superior conj	14890 Sep 09 22:33	3°  46'00	-0°39'21
behind sun end	14889 Sep 27 07:35	21°  42'47		minimum elong	14890 Sep 10 01:27	3°  49'29	0°38'53
asc. node	14889 Sep 27 12:44	21°  45'10		asc. node	14890 Sep 14 09:20	12°  41'18	
evening rise	14889 Oct 01 13:58	0° 		evening rise	14890 Sep 19 05:13	21°  42'10	
	14889 Oct 05 07:18	7°  32'12			14890 Sep 23 17:32	0° 	
	14889 Oct 17 17:48	0° 		evening max el	14890 Oct 05 08:01	17°  34'53	18°43'25
evening max el	14889 Oct 22 09:43	5°  41'38	19°35'24	retrograde	14890 Oct 13 15:28	21°  46'19	
desc. node	14889 Oct 30 02:53	10°  41'22'53		evening set	14890 Oct 15 13:17	21°  43'50	
retrograde	14889 Nov 01 05:14	10°  41'35'56		desc. node	14890 Oct 17 00:16	21°  43'08'30	
evening set	14889 Nov 03 03:15	10°  41'25'32		inferior conj	14890 Oct 23 15:46	17°  43'10'30	-2°07'20
inferior conj	14889 Nov 11 20:15	6°  41'21'18	-3°53'42	minimum elong	14890 Oct 23 10:33	17°  43'20'06	2°04'35
minimum elong	14889 Nov 11 10:51	6°  41'36'13	3°49'42	min. Earth dist.	14890 Oct 26 18:01	14°  43'54'29	0.57012 AU
min. Earth dist.	14889 Nov 14 03:56	4°  41'53'03	0.55379 AU	morning rise	14890 Oct 31 04:33	12°  43'13'24	
morning rise	14889 Nov 19 16:33	2°  41'00'35		direct	14890 Nov 06 03:37	10°  43'46'39	
direct	14889 Nov 24 21:44	0° 		morning max el	14890 Nov 20 08:53	18°  43'10'31	26°34'36
morning max el	14889 Dec 08 19:39	7°  41'57'59	25°01'47		14890 Nov 30 06:06	0° 	
asc. node	14889 Dec 24 13:23	29°  41'21'28		asc. node	14890 Dec 11 10:28	18°  41'20'18	
morning set	14889 Dec 24 22:11	0° 			14890 Dec 17 08:01	0° 	
	14890 Jan 04 01:51	20°  41'02'52		morning set	14890 Dec 19 12:14	4°  41'36'19	

superior conj	14890 Dec 26 06:58	19° ♁ 34'23	1°37'38		14891 Dec 08 21:02	0° ♁	
minimum elong	14890 Dec 26 06:36	19° ♁ 32'19	1°38'36				
max. Earth dist.	14890 Dec 26 22:27	21° ♁ 00'51	1.31294 AU	superior conj	14891 Dec 10 18:30	4° ♁ 13'45	1°32'38
	14890 Dec 31 00:14	0° ♁		minimum elong	14891 Dec 10 17:10	4° ♁ 06'17	1°33'32
evening rise	14891 Jan 02 04:58	4° ♁ 42'26		max. Earth dist.	14891 Dec 10 06:35	3° ♁ 07'06	1.31089 AU
desc. node	14891 Jan 12 22:56	25° ♁ 30'55		evening rise	14891 Dec 17 11:51	19° ♁ 05'30	
	14891 Jan 15 14:13	0° ♁			14891 Dec 22 18:32	0° ♁	
evening max el	14891 Feb 02 13:00	23° ♁ 43'18	27°17'51	desc. node	14891 Dec 30 19:44	14° ♁ 35'54	
	14891 Feb 11 13:50	0° ♁			14892 Jan 10 15:22	0° ♁	
retrograde	14891 Feb 16 12:57	1° ♁ 01'49		evening max el	14892 Jan 15 13:07	5° ♁ 15'17	26°25'40
	14891 Feb 21 08:00	30° ♁		retrograde	14892 Jan 29 12:21	12° ♁ 22'22	
evening set	14891 Feb 23 07:29	28° ♁ 59'01		evening set	14892 Feb 04 21:42	10° ♁ 43'40	
min. Earth dist.	14891 Feb 27 03:28	26° ♁ 12'51	0.60608 AU	min. Earth dist.	14892 Feb 09 02:38	8° ♁ 06'34	0.58416 AU
inferior conj	14891 Mar 02 07:32	23° ♁ 29'39	-2°15'27	inferior conj	14892 Feb 12 05:45	5° ♁ 46'55	-3°42'50
minimum elong	14891 Mar 02 12:30	23° ♁ 18'58	2°13'16	minimum elong	14892 Feb 12 13:54	5° ♁ 31'43	3°39'35
asc. node	14891 Mar 09 07:54	18° ♁ 48'24		morning rise	14892 Feb 20 09:15	1° ♁ 16'58	
morning rise	14891 Mar 09 20:48	18° ♁ 38'21		direct	14892 Feb 22 09:12	1° ♁ 03'18	
direct	14891 Mar 11 22:42	18° ♁ 20'44		asc. node	14892 Feb 24 05:21	1° ♁ 15'24	
morning max el	14891 Mar 19 02:55	21° ♁ 56'27	17°56'42	morning max el	14892 Mar 01 12:47	5° ♁ 04'35	18°27'01
	14891 Mar 25 07:45	0° ♁		morning set	14892 Mar 17 09:09	0° ♁ 24'37	
morning set	14891 Apr 03 16:49	16° ♁ 21'11			14892 Mar 17 04:00	0° ♁	
desc. node	14891 Apr 11 01:01	29° ♁ 39'34					
	14891 Apr 11 05:36	0° ♁		superior conj	14892 Mar 26 13:02	17° ♁ 44'40	0°11'07
superior conj	14891 Apr 14 03:39	5° ♁ 08'24	-0°24'56	minimum elong	14892 Mar 26 13:49	17° ♁ 48'14	0°10'47
minimum elong	14891 Apr 14 01:28	4° ♁ 58'50	0°25'04	behind sun begin	14892 Mar 26 08:29	17° ♁ 23'40	
max. Earth dist.	14891 Apr 21 15:20	17° ♁ 49'58	1.42689 AU	behind sun end	14892 Mar 26 19:09	18° ♁ 12'45	
evening rise	14891 Apr 27 13:05	27° ♁ 22'14		desc. node	14892 Mar 27 21:33	20° ♁ 13'24	
	14891 Apr 29 05:10	0° ♁			14892 Apr 02 09:47	0° ♁	
	14891 May 19 16:53	0° ♁		max. Earth dist.	14892 Apr 03 00:48	1° ♁ 04'47	1.40588 AU
evening max el	14891 May 30 03:48	12° ♁ 35'20	22°10'58	evening rise	14892 Apr 07 08:16	8° ♁ 21'02	
asc. node	14891 Jun 05 05:02	17° ♁ 16'50			14892 Apr 21 05:36	0° ♁	
retrograde	14891 Jun 08 17:04	18° ♁ 11'09		evening max el	14892 May 11 18:50	26° ♁ 28'40	23°31'51
evening set	14891 Jun 13 10:45	16° ♁ 12'43			14892 May 15 18:57	0° ♁	
inferior conj	14891 Jun 18 17:07	9° ♁ 53'28	3°03'40	asc. node	14892 May 22 02:10	2° ♁ 46'03	
minimum elong	14891 Jun 18 16:07	9° ♁ 56'59	3°02'34	retrograde	14892 May 22 12:16	2° ♁ 46'50	
min. Earth dist.	14891 Jun 18 15:49	9° ♁ 58'02	0.69036 AU	evening set	14892 May 27 17:34	0° ♁ 34'01	
morning rise	14891 Jun 23 21:17	3° ♁ 39'49			14892 May 28 08:28	30° ♁	
direct	14891 Jun 28 15:05	1° ♁ 39'41		min. Earth dist.	14892 Jun 01 12:29	24° ♁ 56'18	0.68921 AU
morning max el	14891 Jul 07 23:15	7° ♁ 07'48	22°00'39	inferior conj	14892 Jun 02 02:42	24° ♁ 07'25	2°46'43
desc. node	14891 Jul 08 01:14	7° ♁ 12'47		minimum elong	14892 Jun 02 00:59	24° ♁ 13'21	2°45'25
	14891 Jul 25 15:39	0° ♁		morning rise	14892 Jun 07 08:21	18° ♁ 01'43	
morning set	14891 Aug 09 16:52	22° ♁ 59'50		direct	14892 Jun 11 13:46	16° ♁ 21'35	
	14891 Aug 14 00:19	0° ♁		morning max el	14892 Jun 19 17:41	21° ♁ 00'26	20°40'27
max. Earth dist.	14891 Aug 15 07:41	2° ♁ 09'53	1.41644 AU	desc. node	14892 Jun 23 22:23	25° ♁ 41'16	
					14892 Jun 27 07:27	0° ♁	
superior conj	14891 Aug 23 01:56	15° ♁ 26'38	-1°15'14	morning set	14892 Jul 17 20:09	0° ♁	
minimum elong	14891 Aug 23 07:51	15° ♁ 52'38	1°14'45	max. Earth dist.	14892 Jul 19 05:29	2° ♁ 08'46	
	14891 Aug 31 03:22	0° ♁			14892 Jul 27 16:09	15° ♁ 28'32	1.43634 AU
asc. node	14891 Sep 01 05:52	2° ♁ 02'21		superior conj	14892 Aug 03 07:02	26° ♁ 19'21	-1°47'24
evening rise	14891 Sep 02 16:36	4° ♁ 42'56		minimum elong	14892 Aug 03 14:37	26° ♁ 50'58	1°47'18
evening max el	14891 Sep 18 15:49	0° ♁ 09'30	18°12'47		14892 Aug 05 11:38	0° ♁	
	14891 Sep 18 12:02	0° ♁		evening rise	14892 Aug 15 12:57	17° ♁ 23'23	
retrograde	14891 Sep 25 21:03	3° ♁ 50'17		asc. node	14892 Aug 18 02:26	21° ♁ 53'30	
evening set	14891 Sep 28 00:36	3° ♁ 31'19			14892 Aug 22 19:16	0° ♁	
desc. node	14891 Oct 03 21:43	0° ♁ 01'00		evening max el	14892 Sep 01 04:53	13° ♁ 15'13	18°02'01
	14891 Oct 03 22:12	30° ♁		retrograde	14892 Sep 07 18:50	16° ♁ 39'24	
inferior conj	14891 Oct 05 09:03	28° ♁ 46'29	-0°27'58	evening set	14892 Sep 10 06:07	16° ♁ 10'15	
minimum elong	14891 Oct 05 08:04	28° ♁ 48'37	0°27'11	inferior conj	14892 Sep 16 21:50	11° ♁ 05'36	0°52'33
min. Earth dist.	14891 Oct 08 15:38	25° ♁ 58'35	0.59125 AU	minimum elong	14892 Sep 16 23:21	11° ♁ 01'52	0°52'05
morning rise	14891 Oct 12 12:08	23° ♁ 14'18		desc. node	14892 Sep 19 19:12	8° ♁ 14'31	
direct	14891 Oct 18 22:54	21° ♁ 21'01		min. Earth dist.	14892 Sep 19 22:44	8° ♁ 06'10	0.61410 AU
morning max el	14891 Nov 02 05:57	29° ♁ 04'07	27°36'08	morning rise	14892 Sep 23 13:50	5° ♁ 06'22	
	14891 Nov 03 04:19	0° ♁		direct	14892 Sep 30 05:39	2° ♁ 50'08	
	14891 Nov 24 03:58	0° ♁		morning max el	14892 Oct 14 10:25	10° ♁ 46'27	27°58'57
asc. node	14891 Nov 28 07:26	7° ♁ 45'35			14892 Oct 29 12:05	0° ♁	
morning set	14891 Dec 03 19:21	18° ♁ 56'51		asc. node	14892 Nov 14 04:15	27° ♁ 29'36	

	14892 Nov 15 10:10	0°♊		morning set	14893 Oct 31 15:24	16°♊38'24	
morning set	14892 Nov 16 21:10	2°♊59'19		asc. node	14893 Nov 01 01:00	17°♊26'31	
max. Earth dist.	14892 Nov 22 12:36	15°♊04'11	1.31423 AU	max. Earth dist.	14893 Nov 05 12:36	26°♊43'12	1.32308 AU
					14893 Nov 07 01:27	0°♊	
superior conj	14892 Nov 24 04:45	18°♊45'48	1°21'43				
minimum elong	14892 Nov 24 02:42	18°♊34'30	1°22'27	superior conj	14893 Nov 08 11:48	3°♊05'36	1°04'55
	14892 Nov 29 06:24	0°♊		minimum elong	14893 Nov 08 09:28	2°♊53'00	1°05'24
evening rise	14892 Nov 30 21:41	3°♊34'07		evening rise	14893 Nov 15 08:38	18°♊03'52	
	14892 Dec 14 18:52	0°♊			14893 Nov 21 03:17	0°♊	
desc. node	14892 Dec 16 16:39	2°♊57'03		desc. node	14893 Dec 03 13:40	20°♊18'26	
evening max el	14892 Dec 27 04:33	15°♊54'10	25°02'43	evening max el	14893 Dec 08 14:21	25°♊57'26	23°22'01
retrograde	14893 Jan 09 23:43	22°♊49'04			14893 Dec 13 16:32	0°♊	
evening set	14893 Jan 15 14:18	21°♊38'37		retrograde	14893 Dec 21 22:18	2°♊34'21	
min. Earth dist.	14893 Jan 20 16:35	18°♊54'53	0.56468 AU	evening set	14893 Dec 26 07:59	1°♊52'15	
inferior conj	14893 Jan 23 07:11	17°♊13'45	-5°03'14		14893 Dec 30 16:55	30°♊	
minimum elong	14893 Jan 23 16:06	16°♊59'19	5°00'24	min. Earth dist.	14894 Jan 02 00:44	28°♊42'36	0.55058 AU
morning rise	14893 Jan 31 20:21	13°♊05'36		inferior conj	14894 Jan 03 12:36	27°♊50'30	-5°53'59
direct	14893 Feb 03 00:41	12°♊52'07		minimum elong	14894 Jan 03 16:32	27°♊44'46	5°52'44
asc. node	14893 Feb 10 02:46	15°♊25'38		morning rise	14894 Jan 12 02:39	23°♊58'45	
morning max el	14893 Feb 12 12:41	17°♊28'55	19°19'08	direct	14894 Jan 14 20:55	23°♊40'25	
	14893 Feb 21 14:30	0°♊		morning max el	14894 Jan 25 22:56	29°♊00'04	20°34'22
morning set	14893 Mar 01 10:30	14°♊50'07			14894 Jan 26 22:50	0°♊	
	14893 Mar 09 01:44	0°♊		asc. node	14894 Jan 28 00:07	1°♊08'48	
				morning set	14894 Feb 13 17:42	29°♊28'36	
superior conj	14893 Mar 09 15:17	1°♊05'51	0°41'35		14894 Feb 13 23:48	0°♊	
minimum elong	14893 Mar 09 17:35	1°♊16'58	0°41'18				
desc. node	14893 Mar 14 18:04	10°♊46'53		superior conj	14894 Feb 21 06:07	15°♊00'06	1°05'29
max. Earth dist.	14893 Mar 16 07:11	13°♊36'33	1.38309 AU	minimum elong	14894 Feb 21 08:45	15°♊13'27	1°05'29
evening rise	14893 Mar 20 00:24	20°♊12'57		max. Earth dist.	14894 Feb 26 14:40	25°♊36'41	1.36109 AU
	14893 Mar 25 19:31	0°♊			14894 Feb 28 22:10	0°♊	
	14893 Apr 15 07:33	0°♊		desc. node	14894 Mar 01 14:36	1°♊16'34	
evening max el	14893 Apr 24 08:18	10°♊22'18	24°51'29	evening rise	14894 Mar 02 11:05	2°♊51'03	
retrograde	14893 May 06 03:50	17°♊15'40			14894 Mar 18 19:55	0°♊	
asc. node	14893 May 08 23:23	16°♊41'48		evening max el	14894 Apr 06 21:47	24°♊13'28	26°02'44
evening set	14893 May 11 20:38	14°♊51'40			14894 Apr 14 07:41	0°♊	
min. Earth dist.	14893 May 16 07:19	9°♊50'36	0.68325 AU	retrograde	14894 Apr 19 14:45	1°♊30'34	
inferior conj	14893 May 17 10:22	8°♊21'04	2°19'19		14894 Apr 24 09:43	30°♊	
minimum elong	14893 May 17 08:15	8°♊28'07	2°17'53	evening set	14894 Apr 25 18:16	28°♊59'50	
morning rise	14893 May 22 20:07	2°♊24'25		asc. node	14894 Apr 25 20:42	28°♊54'44	
direct	14893 May 26 13:40	1°♊04'35		min. Earth dist.	14894 Apr 29 22:21	24°♊34'16	0.67273 AU
morning max el	14893 Jun 02 19:24	5°♊04'12	19°33'09	inferior conj	14894 May 01 14:08	22°♊30'05	1°40'56
desc. node	14893 Jun 10 19:26	14°♊50'34		minimum elong	14894 May 01 12:05	22°♊36'30	1°39'33
greatest brilliancy	14893 Jun 15 10:55	21°♊28'58	-0.6m	morning rise	14894 May 07 06:39	16°♊43'43	
	14893 Jun 21 04:00	0°♊		direct	14894 May 10 13:13	15°♊42'44	
morning set	14893 Jun 28 08:15	10°♊56'21		morning max el	14894 May 17 04:14	19°♊15'43	18°41'23
max. Earth dist.	14893 Jul 10 06:35	29°♊28'52	1.45073 AU		14894 May 25 15:45	0°♊	
	14893 Jul 10 14:28	0°♊		desc. node	14894 May 28 16:22	4°♊29'38	
				morning set	14894 Jun 07 21:47	20°♊18'54	
superior conj	14893 Jul 14 12:42	6°♊13'59	-2°08'58		14894 Jun 14 02:42	0°♊	
minimum elong	14893 Jul 14 17:41	6°♊33'56	2°09'38	max. Earth dist.	14894 Jun 23 00:55	13°♊55'02	1.45832 AU
evening rise	14893 Jul 28 13:07	29°♊10'58					
	14893 Jul 29 00:51	0°♊		superior conj	14894 Jun 24 00:58	15°♊28'55	-2°13'00
asc. node	14893 Aug 04 23:03	11°♊30'21		minimum elong	14894 Jun 23 22:38	15°♊19'50	2°13'57
evening max el	14893 Aug 15 19:30	26°♊43'07	18°09'53		14894 Jul 03 06:48	0°♊	
	14893 Aug 21 06:57	0°♊		evening rise	14894 Jul 09 12:52	9°♊56'13	
retrograde	14893 Aug 22 04:09	0°♊04'11		greatest brilliancy	14894 Jul 16 06:30	20°♊40'25	-0.9m
	14893 Aug 23 01:19	30°♊			14894 Jul 22 07:07	0°♊	
evening set	14893 Aug 24 23:55	29°♊21'47		asc. node	14894 Jul 22 19:45	0°♊46'45	
inferior conj	14893 Aug 31 02:10	24°♊00'00	1°52'10	evening max el	14894 Jul 30 08:34	10°♊24'52	18°35'30
minimum elong	14893 Aug 31 04:32	23°♊53'23	1°51'14	retrograde	14894 Aug 05 20:56	13°♊55'55	
min. Earth dist.	14893 Sep 02 15:50	21°♊08'59	0.63617 AU	evening set	14894 Aug 09 01:42	12°♊57'55	
morning rise	14893 Sep 06 07:16	17°♊43'52		inferior conj	14894 Aug 14 18:04	7°♊20'58	2°32'55
desc. node	14893 Sep 06 16:42	17°♊26'14		minimum elong	14894 Aug 14 20:15	7°♊14'17	2°31'57
direct	14893 Sep 12 22:20	15°♊11'50		min. Earth dist.	14894 Aug 16 18:03	4°♊54'50	0.65569 AU
morning max el	14893 Sep 26 19:41	23°♊12'20	27°43'39	morning rise	14894 Aug 20 13:41	0°♊56'55	
	14893 Oct 02 21:05	0°♊			14894 Aug 21 19:48	30°♊	
	14893 Oct 22 19:16	0°♊		desc. node	14894 Aug 24 14:13	28°♊39'13	

direct	14894 Aug 26 23:16	28°Ω18'12		morning max el	14895 Aug 22 17:51	19°Ω27'09	25°45'03
	14894 Sep 01 15:33	0°♐			14895 Aug 31 17:41	0°♐	
morning max el	14894 Sep 09 06:47	6°♐09'26	26°56'07		14895 Sep 20 17:17	0°♐	
	14894 Sep 27 15:15	0°♐		morning set	14895 Sep 27 16:57	12°♐15'44	
morning set	14894 Oct 14 23:10	29°♐46'24		max. Earth dist.	14895 Oct 01 08:27	19°♐03'35	1.35681 AU
	14894 Oct 15 02:00	0°♐		asc. node	14895 Oct 05 18:19	27°♐39'18	
asc. node	14894 Oct 18 21:40	7°♐30'57			14895 Oct 06 22:26	0°♐	
max. Earth dist.	14894 Oct 19 03:17	7°♐59'14	1.33745 AU				
				superior conj	14895 Oct 07 06:49	0°♐42'16	0°14'00
superior conj	14894 Oct 23 13:22	17°♐06'26	0°42'14	minimum elong	14895 Oct 07 05:59	0°♐38'05	0°14'15
minimum elong	14894 Oct 23 11:23	16°♐56'00	0°42'32	behind sun begin	14895 Oct 07 03:05	0°♐23'25	
	14894 Oct 29 14:42	0°♐		behind sun end	14895 Oct 07 08:54	0°♐52'46	
evening rise	14894 Oct 30 18:50	2°♐29'17		evening rise	14895 Oct 15 02:17	16°♐46'03	
	14894 Nov 15 00:28	0°♐			14895 Oct 21 18:53	0°♐	
evening max el	14894 Nov 20 03:08	5°♐59'24	21°41'23	evening max el	14895 Nov 02 03:36	16°♐34'44	20°15'17
desc. node	14894 Nov 20 10:49	6°♐18'02		desc. node	14895 Nov 07 08:04	20°♐30'42	
retrograde	14894 Dec 02 10:13	12°♐04'32		retrograde	14895 Nov 12 21:31	21°♐55'42	
evening set	14894 Dec 05 11:53	11°♐43'16		evening set	14895 Nov 15 01:26	21°♐43'43	
inferior conj	14894 Dec 14 05:09	7°♐51'31	-5°50'53	inferior conj	14895 Nov 23 22:24	17°♐47'23	-4°48'27
minimum elong	14894 Dec 13 23:56	7°♐58'48	5°49'22	minimum elong	14895 Nov 23 12:22	18°♐02'14	4°44'52
min. Earth dist.	14894 Dec 14 06:33	7°♐49'33	0.54451 AU	min. Earth dist.	14895 Nov 25 12:59	16°♐50'19	0.54784 AU
morning rise	14894 Dec 22 12:41	4°♐03'24		morning rise	14895 Dec 01 22:36	13°♐44'12	
direct	14894 Dec 26 05:41	3°♐33'21		direct	14895 Dec 06 15:46	12°♐56'09	
morning max el	14895 Jan 07 18:34	9°♐36'17	22°11'01	morning max el	14895 Dec 20 04:40	19°♐35'37	24°00'06
asc. node	14895 Jan 14 21:25	18°♐06'51			14895 Dec 28 20:49	0°♐	
	14895 Jan 22 02:03	0°♐		asc. node	14896 Jan 01 18:39	6°♐02'37	
morning set	14895 Jan 29 04:18	14°♐12'56		morning set	14896 Jan 13 16:14	28°♐57'00	
					14896 Jan 14 03:57	0°♐	
superior conj	14895 Feb 05 05:58	29°♐17'14	1°22'41				
minimum elong	14895 Feb 05 08:09	29°♐28'47	1°23'03	superior conj	14896 Jan 20 11:54	13°♐48'45	1°33'22
	14895 Feb 05 14:04	0°♐		minimum elong	14896 Jan 20 13:12	13°♐55'51	1°34'04
max. Earth dist.	14895 Feb 09 04:09	7°♐26'40	1.34188 AU	max. Earth dist.	14896 Jan 23 01:32	19°♐21'29	1.32678 AU
evening rise	14895 Feb 13 12:49	16°♐06'03		evening rise	14896 Jan 28 02:11	29°♐48'37	
desc. node	14895 Feb 16 11:10	21°♐38'31			14896 Jan 28 04:27	0°♐	
	14895 Feb 21 03:08	0°♐		desc. node	14896 Feb 03 07:46	11°♐47'39	
	14895 Mar 13 07:39	0°♐			14896 Feb 14 04:45	0°♐	
evening max el	14895 Mar 20 11:39	7°♐55'34	26°58'02	evening max el	14896 Mar 02 00:38	21°♐16'41	27°29'58
retrograde	14895 Apr 02 19:58	15°♐23'45		retrograde	14896 Mar 15 18:20	28°♐45'48	
evening set	14895 Apr 09 08:34	12°♐51'54		evening set	14896 Mar 22 13:13	26°♐19'14	
asc. node	14895 Apr 12 18:06	9°♐37'09		min. Earth dist.	14896 Mar 26 08:32	22°♐57'55	0.63980 AU
min. Earth dist.	14895 Apr 13 07:28	8°♐59'59	0.65805 AU	inferior conj	14896 Mar 29 00:27	20°♐11'21	-0°12'03
inferior conj	14895 Apr 15 11:45	6°♐29'19	0°50'44	minimum elong	14896 Mar 29 00:50	20°♐10'22	0°12'08
minimum elong	14895 Apr 15 10:28	6°♐33'02	0°49'45	transit middle	14896 Mar 29 00:50	20°♐10'22	0°12'08
morning rise	14895 Apr 21 13:47	0°♐55'00		transit begin	14896 Mar 28 22:48	20°♐15'41	
direct	14895 Apr 24 10:29	0°♐10'22		transit end	14896 Mar 29 02:52	20°♐05'02	
morning max el	14895 Apr 30 18:36	3°♐29'10	18°06'21	asc. node	14896 Mar 29 15:33	19°♐32'07	
desc. node	14895 May 15 13:12	24°♐30'23		morning rise	14896 Apr 04 14:41	14°♐51'33	
	14895 May 18 22:46	0°♐		direct	14896 Apr 07 02:45	14°♐20'07	
morning set	14895 May 19 12:53	0°♐57'06		morning max el	14896 Apr 13 11:58	17°♐36'31	17°48'30
					14896 Apr 22 14:05	0°♐	
superior conj	14895 Jun 03 10:38	24°♐43'43	-1°57'00	morning set	14896 Apr 30 07:19	12°♐53'33	
minimum elong	14895 Jun 03 02:23	24°♐11'20	1°57'23	desc. node	14896 May 01 09:55	14°♐46'06	
max. Earth dist.	14895 Jun 05 21:10	28°♐32'54	1.45845 AU		14896 May 10 13:15	0°♐	
	14895 Jun 06 19:29	0°♐					
evening rise	14895 Jun 19 13:21	19°♐46'03		superior conj	14896 May 13 10:06	4°♐39'47	-1°25'36
	14895 Jun 26 04:48	0°♐		minimum elong	14896 May 13 01:59	4°♐07'01	1°25'30
greatest brilliancy	14895 Jul 01 19:22	8°♐30'03	-0.7m	max. Earth dist.	14896 May 18 16:53	13°♐06'15	1.45121 AU
asc. node	14895 Jul 09 16:33	19°♐35'43		evening rise	14896 May 29 00:53	29°♐09'44	
evening max el	14895 Jul 13 17:39	24°♐14'29	19°17'59		14896 May 29 14:02	0°♐	
retrograde	14895 Jul 20 18:01	28°♐08'12			14896 Jun 19 01:53	0°♐	
evening set	14895 Jul 24 08:21	26°♐53'07		asc. node	14896 Jun 25 13:26	7°♐46'46	
inferior conj	14895 Jul 29 18:15	21°♐02'28	2°57'40	evening max el	14896 Jun 25 21:02	8°♐05'58	20°15'49
minimum elong	14895 Jul 29 19:42	20°♐57'45	2°56'46	retrograde	14896 Jul 03 16:55	12°♐33'59	
min. Earth dist.	14895 Jul 31 03:54	19°♐12'39	0.67137 AU	evening set	14896 Jul 07 17:24	11°♐01'23	
morning rise	14895 Aug 04 06:27	14°♐36'56		inferior conj	14896 Jul 12 23:52	4°♐58'13	3°09'01
direct	14895 Aug 10 06:58	12°♐00'46		minimum elong	14896 Jul 13 00:21	4°♐56'35	3°08'08
desc. node	14895 Aug 11 11:41	12°♐06'15		min. Earth dist.	14896 Jul 13 19:28	3°♐51'19	0.68252 AU

	14896 Jul 16 21:05	30° 		inferior conj	14897 Jun 27 08:36	19°  04'02	3°08'44
morning rise	14896 Jul 18 06:59	28°  35'23		minimum elong	14897 Jun 27 08:06	19°  05'46	3°07'43
direct	14896 Jul 23 20:11	26°  09'24		min. Earth dist.	14897 Jun 27 14:44	18°  42'38	0.68889 AU
desc. node	14896 Jul 28 09:05	27°  28'14		morning rise	14897 Jul 02 13:06	12°  46'26	
	14896 Aug 01 00:13	0° 		direct	14897 Jul 07 13:58	10°  36'01	
morning max el	14896 Aug 04 04:31	2°  56'47	24°20'07	desc. node	14897 Jul 15 06:25	14°  19'43	
	14896 Aug 24 20:34	0° 		morning max el	14897 Jul 17 16:02	16°  34'26	22°50'40
morning set	14896 Sep 08 16:35	23°  56'44			14897 Jul 28 17:43	0° 	
	14896 Sep 12 03:06	0° 			14897 Aug 17 21:06	0° 	
max. Earth dist.	14896 Sep 12 07:45	0°  20'50	1.37957 AU	morning set	14897 Aug 20 17:46	4°  39'03	
				max. Earth dist.	14897 Aug 25 06:57	12°  15'54	1.40334 AU
superior conj	14896 Sep 19 12:46	13°  44'55	-0°18'57				
minimum elong	14896 Sep 19 14:03	13°  51'06	0°18'35	superior conj	14897 Sep 02 03:05	26°  04'14	-0°54'42
asc. node	14896 Sep 21 14:56	17°  47'53		minimum elong	14897 Sep 02 07:17	26°  23'20	0°54'11
	14896 Sep 27 18:51	0° 			14897 Sep 04 06:32	0° 	
evening rise	14896 Sep 28 04:32	0°  48'06		asc. node	14897 Sep 08 11:30	7°  52'35	
evening max el	14896 Oct 14 18:27	27°  59'19	19°10'30	evening rise	14897 Sep 11 22:27	14°  26'43	
	14896 Oct 17 01:15	0° 			14897 Sep 20 10:57	0° 	
retrograde	14896 Oct 23 21:34	2°  34'27		evening max el	14897 Sep 27 21:14	10°  10'40	18°27'50
desc. node	14896 Oct 24 05:23	2°  34'07		retrograde	14897 Oct 05 16:27	14°  07'52	
evening set	14896 Oct 25 18:29	2°  34'42		evening set	14897 Oct 07 16:06	13°  53'14	
	14896 Oct 31 11:05	30° 		desc. node	14897 Oct 11 02:48	12°  25'45	
inferior conj	14896 Nov 03 06:06	28°  11'31	-3°09'01	inferior conj	14897 Oct 15 10:58	9°  20'38	-1°23'18
minimum elong	14896 Nov 02 22:13	28°  24'47	3°05'18	minimum elong	14897 Oct 15 07:42	9°  27'04	1°21'25
min. Earth dist.	14896 Nov 05 23:20	26°  21'52	0.55995 AU	min. Earth dist.	14897 Oct 18 16:30	6°  48'37	0.57863 AU
morning rise	14896 Nov 10 23:27	23°  36'04		morning rise	14897 Oct 22 19:48	4°  07'33	
direct	14896 Nov 16 12:50	22°  24'54		direct	14897 Oct 29 00:23	2°  29'27	
morning max el	14896 Nov 30 14:46	29°  34'07	25°44'28	morning max el	14897 Nov 12 07:25	10°  02'51	27°05'23
	14896 Dec 01 01:28	0° 			14897 Nov 27 14:58	0° 	
asc. node	14896 Dec 18 15:46	24°  34'52		asc. node	14897 Dec 05 12:47	13°  34'43	
	14896 Dec 21 12:08	0° 		morning set	14897 Dec 12 12:54	28°  34'25	
morning set	14896 Dec 28 03:42	13°  36'03			14897 Dec 13 10:24	0° 	
superior conj	14897 Jan 03 21:36	28°  38'09	1°37'49	superior conj	14897 Dec 19 08:59	13°  38'49	1°36'14
minimum elong	14897 Jan 03 21:51	28°  39'31	1°38'44	minimum elong	14897 Dec 19 08:11	13°  39'41	1°37'12
	14897 Jan 04 14:11	0° 		max. Earth dist.	14897 Dec 19 12:56	13°  39'55	1.31136 AU
max. Earth dist.	14897 Jan 05 05:29	1°  24'36	1.31649 AU	evening rise	14897 Dec 26 04:30	28°  38'24	
evening rise	14897 Jan 11 00:15	13°  51'41			14897 Dec 27 01:34	0° 	
	14897 Jan 19 06:38	0° 		desc. node	14898 Jan 07 01:11	21°  02'14	
desc. node	14897 Jan 20 04:27	1°  38'15			14898 Jan 12 15:07	0° 	
	14897 Feb 08 12:57	0° 		evening max el	14898 Jan 25 14:36	16°  03'45	26°59'46
evening max el	14897 Feb 12 10:28	4°  03'26	27°31'58	retrograde	14898 Feb 08 14:41	23°  18'22	
retrograde	14897 Feb 26 08:56	11°  07'12		evening set	14898 Feb 15 06:22	21°  18'44	
evening set	14897 Mar 05 05:35	9°  07'13		min. Earth dist.	14898 Feb 19 04:48	18°  44'15	0.59661 AU
min. Earth dist.	14897 Mar 08 23:52	6°  07'58	0.61885 AU	inferior conj	14898 Feb 22 09:48	16°  08'41	-2°52'20
inferior conj	14897 Mar 12 01:02	3°  07'49	-1°27'16	minimum elong	14898 Feb 22 16:13	15°  35'42	2°49'36
minimum elong	14897 Mar 12 04:05	3°  07'44	1°25'59	morning rise	14898 Mar 02 05:28	11°  36'38	
	14897 Mar 16 04:17	30° 		asc. node	14898 Mar 03 10:24	11°  36'45	
asc. node	14897 Mar 16 12:58	29°  34'57		direct	14898 Mar 04 05:53	11°  36'52	
morning rise	14897 Mar 19 05:36	28°  34'53		morning max el	14898 Mar 11 18:59	14°  36'27	18°07'09
direct	14897 Mar 21 10:37	28°  34'55			14898 Mar 22 03:37	0° 	
	14897 Mar 26 12:07	0° 		morning set	14898 Mar 27 09:19	9°  36'29	
morning max el	14897 Mar 28 05:16	1°  07'29	17°48'25	desc. node	14898 Apr 05 03:10	25°  07'49	
morning set	14897 Apr 13 00:07	25°  07'46					
	14897 Apr 15 07:48	0° 		superior conj	14898 Apr 06 06:02	27°  07'44	-0°09'07
desc. node	14897 Apr 18 06:35	5°  08'12	05	minimum elong	14898 Apr 06 05:16	27°  07'40	0°09'21
				behind sun begin	14898 Apr 05 22:58	27°  07'12	39
superior conj	14897 Apr 24 08:28	15°  08'40	15	behind sun end	14898 Apr 06 11:34	28°  07'08	48
minimum elong	14897 Apr 24 04:01	15°  08'21	26		14898 Apr 07 12:39	0° 	
max. Earth dist.	14897 May 01 09:14	27°  08'17	53	max. Earth dist.	14898 Apr 13 20:38	10°  08'53	35
	14897 May 03 01:31	0° 		evening rise	14898 Apr 18 22:52	19°  08'15	30
evening rise	14897 May 08 15:46	8°  08'49	23		14898 Apr 25 19:03	0° 	
	14897 May 22 18:36	0° 			14898 May 17 05:37	0° 	
evening max el	14897 Jun 08 18:24	21°  08'57	09	evening max el	14898 May 22 11:04	5°  08'49	14
asc. node	14897 Jun 12 10:24	25°  08'07	27	asc. node	14898 May 30 07:26	11°  08'22	32
retrograde	14897 Jun 17 15:39	27°  08'07	41	retrograde	14898 Jun 01 12:38	11°  08'44	19
evening set	14897 Jun 22 02:53	25°  08'18	11	evening set	14898 Jun 06 11:09	9°  08'39	29

inferior conj	14898 Jun 11 18:26	3°☿16'30	2°57'47	evening max el	14899 May 05 01:14	19°♄42'55	24°06'26
minimum elong	14898 Jun 11 17:05	3°☿21'10	2°56'35	retrograde	14899 May 16 06:26	26°♄17'29	
min. Earth dist.	14898 Jun 11 11:35	3°☿40'18	0.69041 AU	asc. node	14899 May 17 04:36	26°♄13'45	
	14898 Jun 14 05:00	30°♄		evening set	14899 May 21 16:33	23°♄59'44	
morning rise	14898 Jun 16 22:54	27°♄05'54		min. Earth dist.	14899 May 26 07:50	18°♄37'26	0.68719 AU
direct	14898 Jun 21 11:17	25°♄14'13		inferior conj	14899 May 27 03:26	17°♄30'56	2°36'26
	14898 Jun 29 22:32	0°☿		minimum elong	14899 May 27 01:30	17°♄37'32	2°35'03
morning max el	14898 Jun 30 07:06	0°☿21'07	21°25'11	morning rise	14899 Jun 01 10:28	11°♄28'41	
desc. node	14898 Jul 02 03:38	2°☿18'18		direct	14899 Jun 05 10:46	9°♄57'07	
	14898 Jul 22 11:03	0°♄		morning max el	14899 Jun 13 04:24	14°♄18'04	20°10'01
morning set	14898 Jul 31 18:37	14°♄19'08		desc. node	14899 Jun 19 00:44	21°♄05'33	
max. Earth dist.	14898 Aug 07 11:02	25°♄03'05	1.42541 AU		14899 Jun 25 12:20	0°☿	
	14898 Aug 10 10:52	0°♄		morning set	14899 Jul 11 00:46	23°☿12'31	
					14899 Jul 15 09:57	0°♄	
superior conj	14898 Aug 14 21:27	7°♄31'17	-1°29'43	max. Earth dist.	14899 Jul 20 21:56	8°♄40'12	1.44326 AU
minimum elong	14898 Aug 15 04:23	8°♄01'07	1°29'19				
evening rise	14898 Aug 26 04:06	27°♄32'09		superior conj	14899 Jul 26 16:29	17°♄59'01	-1°58'17
asc. node	14898 Aug 26 08:04	27°♄50'06		minimum elong	14899 Jul 26 23:39	18°♄28'17	1°58'30
	14898 Aug 27 12:45	0°♄			14899 Aug 02 21:58	0°♄	
evening max el	14898 Sep 11 07:49	23°♄00'09	18°05'54	evening rise	14899 Aug 08 16:29	9°♄51'20	
retrograde	14898 Sep 18 05:20	26°♄32'08		asc. node	14899 Aug 13 04:39	17°♄35'40	
evening set	14898 Sep 20 11:58	26°♄09'21			14899 Aug 20 21:07	0°♄	
inferior conj	14898 Sep 27 13:02	21°♄16'10	0°08'45	evening max el	14899 Aug 25 22:02	6°♄16'41	18°03'10
minimum elong	14898 Sep 27 13:20	21°♄15'30	0°08'53	retrograde	14899 Sep 01 08:25	9°♄37'29	
transit middle	14898 Sep 27 13:20	21°♄15'30	0°08'53	evening set	14899 Sep 03 23:20	9°♄02'57	
transit begin	14898 Sep 27 10:32	21°♄21'53		inferior conj	14899 Sep 10 08:55	3°♄50'54	1°20'18
transit end	14898 Sep 27 16:07	21°♄09'06		minimum elong	14899 Sep 10 10:57	3°♄45'33	1°19'34
desc. node	14898 Sep 28 00:15	20°♄50'23		min. Earth dist.	14899 Sep 13 05:35	0°♄52'46	0.62381 AU
min. Earth dist.	14898 Sep 30 18:18	18°♄20'26	0.60091 AU		14899 Sep 14 03:15	30°♄	
morning rise	14898 Oct 04 11:27	15°♄31'07		desc. node	14899 Sep 14 21:45	29°♄17'26	
direct	14898 Oct 11 01:13	13°♄27'01		morning rise	14899 Sep 16 20:12	27°♄43'33	
morning max el	14898 Oct 25 07:54	21°♄17'28	27°50'35	direct	14899 Sep 23 12:37	25°♄19'22	
	14898 Nov 01 22:20	0°♄			14899 Oct 03 23:08	0°♄	
	14898 Nov 20 15:04	0°♄		morning max el	14899 Oct 07 14:30	3°♄18'17	27°56'42
asc. node	14898 Nov 22 09:42	3°♄26'41			14899 Oct 27 11:22	0°♄	
morning set	14898 Nov 26 17:59	12°♄17'42		asc. node	14899 Nov 09 06:31	23°♄16'34	
max. Earth dist.	14898 Dec 02 20:25	25°♄33'09	1.31161 AU	morning set	14899 Nov 10 16:52	26°♄10'29	
					14899 Nov 12 13:14	0°♄	
superior conj	14898 Dec 03 20:12	27°♄45'39	1°28'43	max. Earth dist.	14899 Nov 16 00:11	7°♄22'28	1.31732 AU
minimum elong	14898 Dec 03 18:32	27°♄36'19	1°29'35				
	14898 Dec 04 20:16	0°♄		superior conj	14899 Nov 18 05:22	12°♄13'08	1°15'19
evening rise	14898 Dec 10 12:51	12°♄34'03		minimum elong	14899 Nov 18 03:08	12°♄00'55	1°15'57
	14898 Dec 19 04:47	0°♄		evening rise	14899 Nov 24 23:23	27°♄03'40	
desc. node	14898 Dec 24 22:01	9°♄49'51			14899 Nov 26 08:18	0°♄	
evening max el	14899 Jan 07 10:58	27°♄12'00	25°53'34	desc. node	14899 Dec 11 19:00	27°♄47'44	
	14899 Jan 10 17:32	0°♄			14899 Dec 13 09:29	0°♄	
retrograde	14899 Jan 21 09:29	4°♄14'37		evening max el	14899 Dec 19 23:35	7°♄33'29	24°21'09
evening set	14899 Jan 27 11:49	2°♄47'47		retrograde	14900 Jan 02 15:10	14°♄21'07	
min. Earth dist.	14899 Feb 01 00:02	0°♄09'42	0.57535 AU	evening set	14900 Jan 07 18:28	13°♄23'24	
	14899 Feb 01 05:44	30°♄		min. Earth dist.	14900 Jan 13 11:17	10°♄31'01	0.55783 AU
inferior conj	14899 Feb 03 23:22	28°♄04'47	-4°19'01	inferior conj	14900 Jan 15 15:59	9°♄10'11	-5°30'00
minimum elong	14899 Feb 04 08:20	27°♄49'01	4°15'43	minimum elong	14900 Jan 15 23:35	8°♄58'29	5°27'50
morning rise	14899 Feb 12 07:49	23°♄44'12		morning rise	14900 Jan 24 06:38	5°♄09'41	
direct	14899 Feb 14 08:25	23°♄31'15		direct	14900 Jan 26 15:45	4°♄54'45	
asc. node	14899 Feb 18 07:51	24°♄24'12		asc. node	14900 Feb 05 05:15	9°♄15'55	
morning max el	14899 Feb 23 01:07	27°♄47'00	18°46'25	morning max el	14900 Feb 05 19:31	9°♄49'31	19°48'16
	14899 Feb 25 02:11	0°♄			14900 Feb 19 04:43	0°♄	
morning set	14899 Mar 11 05:53	23°♄49'56		morning set	14900 Feb 23 10:07	8°♄22'27	
	14899 Mar 14 09:43	0°♄					
superior conj	14899 Mar 19 23:04	10°♄40'18	0°24'49	superior conj	14900 Mar 03 07:10	24°♄17'00	0°52'33
minimum elong	14899 Mar 20 00:39	10°♄47'47	0°24'28	minimum elong	14900 Mar 03 09:43	24°♄29'39	0°52'21
desc. node	14899 Mar 22 23:41	16°♄17'33			14900 Mar 06 05:23	0°♄	
max. Earth dist.	14899 Mar 27 03:56	23°♄47'20	1.39620 AU	max. Earth dist.	14900 Mar 09 10:31	6°♄05'06	1.37352 AU
	14899 Mar 30 18:17	0°♄		desc. node	14900 Mar 09 20:12	6°♄50'03	
evening rise	14899 Mar 31 03:05	0°♄37'15		evening rise	14900 Mar 13 03:35	12°♄50'30	
	14899 Apr 19 03:21	0°♄			14900 Mar 23 08:44	0°♄	
					14900 Apr 14 04:22	0°♄	

evening max el	14900 Apr 17 14:52	3° Π 37'13	25°23'20	evening max el	14901 Mar 31 04:33	17° \mathcal{B} 25'25	26°28'35
retrograde	14900 Apr 29 20:01	10° Π 41'26		retrograde	14901 Apr 13 04:27	24° \mathcal{B} 48'10	
asc. node	14900 May 04 01:52	9° Π 26'23		evening set	14901 Apr 19 12:17	22° \mathcal{B} 16'01	
evening set	14900 May 05 17:32	8° Π 14'10		asc. node	14901 Apr 20 23:13	20° \mathcal{B} 57'26	
min. Earth dist.	14900 May 10 01:20	3° Π 28'21	0.67934 AU	min. Earth dist.	14901 Apr 23 13:58	18° \mathcal{B} 05'21	0.66703 AU
inferior conj	14900 May 11 09:44	1° Π 43'31	2°04'27	inferior conj	14901 Apr 25 11:10	15° \mathcal{B} 48'44	1°21'09
minimum elong	14900 May 11 07:34	1° Π 50'33	2°03'00	minimum elong	14901 Apr 25 09:20	15° \mathcal{B} 54'16	1°19'53
	14900 May 12 18:13	30° \mathcal{R} 8		morning rise	14901 May 01 07:25	10° \mathcal{B} 07'28	
morning rise	14900 May 16 22:00	25° \mathcal{B} 51'00		direct	14901 May 04 09:43	9° \mathcal{B} 13'44	
direct	14900 May 20 10:53	24° \mathcal{B} 39'12		morning max el	14901 May 10 20:42	12° \mathcal{B} 38'49	18°24'28
morning max el	14900 May 27 09:12	28° \mathcal{B} 25'35	19°09'09	desc. node	14901 May 23 18:37	0° Π 17'32	
	14900 May 28 21:27	0° Π			14901 May 23 14:07	0° Π	
desc. node	14900 Jun 05 21:44	10° Π 28'41		morning set	14901 May 31 05:05	12° Π 00'36	
greatest brilliancy	14900 Jun 09 07:02	15° Π 27'20	-0.7m		14901 Jun 11 15:26	0° \mathcal{B}	
	14900 Jun 18 20:19	0° \mathcal{B}					
morning set	14900 Jun 20 05:41	2° \mathcal{B} 08'30		superior conj	14901 Jun 15 22:25	6° \mathcal{B} 42'03	-2°08'32
max. Earth dist.	14900 Jul 03 14:47	22° \mathcal{B} 55'19	1.45493 AU	minimum elong	14901 Jun 15 16:57	6° \mathcal{B} 20'46	2°09'19
				max. Earth dist.	14901 Jun 16 10:40	7° \mathcal{B} 29'50	1.45930 AU
superior conj	14900 Jul 06 13:30	27° \mathcal{B} 33'23	-2°13'07		14901 Jun 30 20:11	0° \mathcal{Q}	
minimum elong	14900 Jul 06 15:44	27° \mathcal{B} 42'14	2°14'01	evening rise	14901 Jul 01 19:54	1° \mathcal{Q} 33'06	
	14900 Jul 08 02:36	0° \mathcal{Q}		greatest brilliancy	14901 Jul 11 04:35	16° \mathcal{Q} 11'18	-0.8m
evening rise	14900 Jul 21 06:37	21° \mathcal{Q} 13'09		asc. node	14901 Jul 17 22:03	26° \mathcal{Q} 10'26	
	14900 Jul 26 15:27	0° \mathcal{P}			14901 Jul 20 19:09	0° \mathcal{P}	
asc. node	14900 Jul 31 01:18	7° \mathcal{P} 04'35		evening max el	14901 Jul 23 24:00	3° \mathcal{P} 37'20	18°51'31
evening max el	14900 Aug 09 12:25	19° \mathcal{P} 51'37	18°18'36	retrograde	14901 Jul 30 16:32	7° \mathcal{P} 16'45	
retrograde	14900 Aug 15 21:25	23° \mathcal{P} 15'06		evening set	14901 Aug 03 01:16	6° \mathcal{P} 11'33	
evening set	14900 Aug 18 21:02	22° \mathcal{P} 26'06		inferior conj	14901 Aug 08 14:28	0° \mathcal{P} 28'20	2°45'11
inferior conj	14900 Aug 24 18:38	16° \mathcal{P} 57'26	2°11'33	minimum elong	14901 Aug 08 16:23	0° \mathcal{P} 22'18	2°44'15
minimum elong	14900 Aug 24 21:01	16° \mathcal{P} 50'29	2°10'35		14901 Aug 08 23:25	30° \mathcal{R} 8	
min. Earth dist.	14900 Aug 27 02:33	14° \mathcal{P} 15'38	0.64496 AU	min. Earth dist.	14901 Aug 10 08:16	28° \mathcal{Q} 16'45	0.66283 AU
morning rise	14900 Aug 30 19:31	10° \mathcal{P} 37'12		morning rise	14901 Aug 14 06:38	24° \mathcal{Q} 02'52	
desc. node	14900 Sep 01 19:16	9° \mathcal{P} 16'05		desc. node	14901 Aug 19 16:45	21° \mathcal{Q} 27'04	
direct	14900 Sep 06 08:46	8° \mathcal{P} 01'26		direct	14901 Aug 20 12:33	21° \mathcal{Q} 24'30	
morning max el	14900 Sep 20 00:50	15° \mathcal{P} 58'44	27°26'52	morning max el	14901 Sep 02 12:23	29° \mathcal{Q} 07'15	26°28'19
	14900 Oct 01 14:34	0° \mathcal{L}			14901 Sep 03 08:54	0° \mathcal{P}	
	14900 Oct 20 05:46	0° \mathcal{M}			14901 Sep 25 10:34	0° \mathcal{L}	
morning set	14900 Oct 25 07:03	9° \mathcal{M} 37'01		morning set	14901 Oct 08 09:26	22° \mathcal{L} 30'29	
asc. node	14900 Oct 27 03:15	13° \mathcal{M} 17'09			14901 Oct 12 06:51	0° \mathcal{M}	
max. Earth dist.	14900 Oct 29 20:45	18° \mathcal{M} 52'34	1.32860 AU	max. Earth dist.	14901 Oct 12 07:37	0° \mathcal{M} 03'46	1.34515 AU
				asc. node	14901 Oct 13 23:56	3° \mathcal{M} 24'07	
superior conj	14900 Nov 02 10:24	26° \mathcal{M} 25'33	0°56'00				
minimum elong	14900 Nov 02 08:08	26° \mathcal{M} 13'24	0°56'23	superior conj	14901 Oct 17 08:56	10° \mathcal{M} 17'06	0°30'55
	14900 Nov 04 02:13	0° \mathcal{X}		minimum elong	14901 Oct 17 07:20	10° \mathcal{M} 08'47	0°31'10
evening rise	14900 Nov 09 10:18	11° \mathcal{X} 32'25		evening rise	14901 Oct 24 19:40	25° \mathcal{M} 55'35	
	14900 Nov 18 17:44	0° \mathcal{Z}			14901 Oct 26 18:45	0° \mathcal{X}	
desc. node	14900 Nov 28 16:05	14° \mathcal{Z} 37'09		evening max el	14901 Nov 13 02:15	27° \mathcal{X} 43'52	21°02'19
evening max el	14900 Dec 01 09:24	17° \mathcal{Z} 31'09	22°38'08	desc. node	14901 Nov 15 13:17	29° \mathcal{X} 54'58	
retrograde	14900 Dec 14 08:11	23° \mathcal{Z} 56'12			14901 Nov 15 15:51	0° \mathcal{Z}	
evening set	14900 Dec 18 04:12	23° \mathcal{Z} 24'05		retrograde	14901 Nov 24 18:46	3° \mathcal{Z} 31'58	
min. Earth dist.	14900 Dec 25 17:38	19° \mathcal{Z} 58'02	0.54690 AU	evening set	14901 Nov 27 09:13	3° \mathcal{Z} 15'56	
inferior conj	14900 Dec 26 14:33	19° \mathcal{Z} 28'30	-6°00'14		14901 Dec 05 03:43	30° \mathcal{R} 8	
minimum elong	14900 Dec 26 14:41	19° \mathcal{Z} 28'19	5°59'15	inferior conj	14901 Dec 06 05:36	29° \mathcal{X} 23'26	-5°30'54
morning rise	14901 Jan 04 02:25	15° \mathcal{Z} 40'44		minimum elong	14901 Dec 05 21:24	29° \mathcal{X} 35'05	5°28'29
direct	14901 Jan 07 05:53	15° \mathcal{Z} 18'11		min. Earth dist.	14901 Dec 06 23:19	28° \mathcal{X} 58'17	0.54474 AU
morning max el	14901 Jan 18 23:18	20° \mathcal{Z} 56'04	21°13'16	morning rise	14901 Dec 14 09:53	25° \mathcal{X} 31'27	
asc. node	14901 Jan 23 02:37	25° \mathcal{Z} 33'01		direct	14901 Dec 18 13:05	24° \mathcal{X} 54'43	
	14901 Jan 26 07:35	0° \approx			14901 Dec 30 05:14	0° \mathcal{Z}	
morning set	14901 Feb 07 19:04	23° \approx 04'30		morning max el	14901 Dec 31 14:05	1° \mathcal{Z} 14'03	22°56'48
	14901 Feb 11 02:14	0° \mathcal{H}		asc. node	14902 Jan 09 23:53	12° \mathcal{Z} 57'40	
					14902 Jan 19 12:07	0° \approx	
superior conj	14901 Feb 15 02:15	8° \mathcal{H} 22'09	1°13'36	morning set	14902 Jan 23 06:29	7° \approx 49'34	
minimum elong	14901 Feb 15 04:46	8° \mathcal{H} 35'08	1°13'44				
max. Earth dist.	14901 Feb 19 20:29	18° \mathcal{H} 00'08	1.35247 AU	superior conj	14902 Jan 30 05:02	22° \approx 46'37	1°27'59
evening rise	14901 Feb 23 21:07	25° \mathcal{H} 45'12		minimum elong	14902 Jan 30 06:53	22° \approx 56'30	1°28'30
desc. node	14901 Feb 24 16:45	27° \mathcal{H} 16'51		max. Earth dist.	14902 Feb 02 13:09	29° \approx 50'16	1.33488 AU
	14901 Feb 26 04:15	0° \mathcal{Y}			14902 Feb 02 15:01	0° \mathcal{H}	
	14901 Mar 16 19:56	0° \mathcal{B}		evening rise	14902 Feb 07 04:11	9° \mathcal{H} 12'43	

desc. node	14902 Feb 11 13:21	17° X 33'53		max. Earth dist.	14903 Jan 16 13:19	11° \approx 47'19	1.32177 AU
	14902 Feb 18 15:55	0° Y		evening rise	14903 Jan 21 21:34	23° \approx 04'56	
	14902 Mar 12 18:06	0° Z			14903 Jan 25 08:52	0° X	
evening max el	14902 Mar 13 17:57	0° Z 58'53	27°14'46	desc. node	14903 Jan 29 09:59	7° X 36'00	
retrograde	14902 Mar 27 06:57	8° Z 29'13			14903 Feb 12 09:07	0° Y	
evening set	14902 Apr 02 22:46	5° Z 58'23		evening max el	14903 Feb 24 05:51	14° Y 07'02	27°34'50
min. Earth dist.	14902 Apr 06 19:46	2° Z 20'14	0.65069 AU	retrograde	14903 Mar 10 02:30	21° Y 35'16	
asc. node	14902 Apr 07 20:38	1° Z 12'06		evening set	14903 Mar 16 22:35	19° Y 13'10	
	14902 Apr 08 22:29	30° R Y		min. Earth dist.	14903 Mar 20 17:00	16° Y 03'12	0.63107 AU
inferior conj	14902 Apr 09 05:18	29° Y 40'59	0°25'39	inferior conj	14903 Mar 23 13:17	13° Y 13'32	-0°42'30
minimum elong	14902 Apr 09 04:36	29° Y 42'57	0°24'59	minimum elong	14903 Mar 23 14:40	13° Y 10'03	0°42'04
morning rise	14902 Apr 15 12:15	24° Y 12'50		asc. node	14903 Mar 25 18:04	11° Y 06'47	
direct	14902 Apr 18 05:03	23° Y 34'21		morning rise	14903 Mar 30 09:24	8° Y 00'49	
morning max el	14902 Apr 24 12:44	26° Y 50'45	17°56'39	direct	14903 Apr 01 18:07	7° Y 34'07	
	14902 Apr 27 08:23	0° Z		morning max el	14903 Apr 08 06:29	10° Y 53'19	17°46'13
desc. node	14902 May 10 15:24	20° Z 25'00			14903 Apr 21 06:19	0° Z	
morning set	14902 May 12 08:01	23° Z 12'25		morning set	14903 Apr 24 12:45	5° Z 38'09	
	14902 May 16 11:14	0° II		desc. node	14903 Apr 27 12:06	10° Z 45'50	
superior conj	14902 May 26 12:12	16° II 09'55	-1°45'04	superior conj	14903 May 06 20:56	26° Z 32'42	-1°09'43
minimum elong	14902 May 26 03:19	15° II 34'42	1°45'12	minimum elong	14903 May 06 14:11	26° Z 04'57	1°09'36
max. Earth dist.	14902 May 30 06:34	22° II 05'59	1.45617 AU		14903 May 08 23:37	0° II	
	14902 Jun 04 08:11	0° S		max. Earth dist.	14903 May 13 00:38	6° II 30'32	1.44599 AU
evening rise	14902 Jun 11 12:58	11° S 06'08		evening rise	14903 May 21 23:54	20° II 31'52	
	14902 Jun 24 00:28	0° Q			14903 May 28 05:34	0° S	
greatest brilliancy	14902 Jun 25 13:50	2° Q 17'21	-0.6m		14903 Jun 19 00:55	0° Q	
asc. node	14902 Jul 04 18:52	14° Q 44'29		evening max el	14903 Jun 20 07:29	1° Q 19'36	20°44'31
evening max el	14902 Jul 07 06:39	17° Q 27'34	19°40'51	asc. node	14903 Jun 21 15:47	2° Q 36'18	
retrograde	14902 Jul 14 14:42	21° Q 35'07		retrograde	14903 Jun 28 13:42	6° Q 05'02	
evening set	14902 Jul 18 09:10	20° Q 12'45		evening set	14903 Jul 02 18:36	4° Q 25'21	
inferior conj	14902 Jul 23 17:15	14° Q 16'33	3°04'01		14903 Jul 06 18:27	30° R S	
minimum elong	14902 Jul 23 18:18	14° Q 13'03	3°03'08	inferior conj	14903 Jul 08 00:28	28° S 17'32	3°10'15
min. Earth dist.	14902 Jul 24 20:54	12° Q 44'14	0.67660 AU	minimum elong	14903 Jul 08 00:31	28° S 17'19	3°09'19
morning rise	14902 Jul 29 02:57	7° Q 51'29		min. Earth dist.	14903 Jul 08 14:22	27° S 29'29	0.68580 AU
direct	14902 Aug 03 22:46	5° Q 18'45		morning rise	14903 Jul 13 06:08	21° S 56'32	
desc. node	14902 Aug 06 14:11	5° Q 45'33		direct	14903 Jul 18 14:15	19° S 36'20	
morning max el	14902 Aug 15 23:18	12° Q 31'06	25°10'06	desc. node	14903 Jul 24 11:31	21° S 48'45	
	14902 Aug 30 01:41	0° P		morning max el	14903 Jul 29 09:52	26° S 03'57	23°42'03
	14902 Sep 18 04:12	0° A			14903 Aug 02 00:30	0° Q	
morning set	14902 Sep 20 20:03	4° A 40'56		morning set	14903 Aug 23 14:16	0° P	
max. Earth dist.	14902 Sep 24 09:22	11° A 09'05	1.36613 AU	max. Earth dist.	14903 Sep 02 10:33	15° P 58'06	
					14903 Sep 06 07:24	22° P 37'55	1.38972 AU
superior conj	14902 Sep 30 21:54	23° A 39'47	0°00'32		14903 Sep 10 10:21	0° A	
minimum elong	14902 Sep 30 21:51	23° A 39'34	0°00'49	superior conj	14903 Sep 13 21:44	6° A 25'33	-0°33'56
behind sun begin	14902 Sep 30 15:26	23° A 07'49		minimum elong	14903 Sep 14 00:11	6° A 37'03	0°33'28
behind sun end	14902 Oct 01 04:17	24° A 11'23		asc. node	14903 Sep 17 17:07	13° A 40'34	
asc. node	14902 Sep 30 20:31	23° A 32'57		evening rise	14903 Sep 23 00:18	23° A 59'47	
	14902 Oct 04 01:53	0° M			14903 Sep 26 02:43	0° M	
evening rise	14902 Oct 09 01:12	10° M 06'49		evening max el	14903 Oct 09 05:23	20° M 25'41	18°49'45
	14902 Oct 19 17:10	0° J		retrograde	14903 Oct 17 17:32	24° M 42'44	
evening max el	14902 Oct 26 08:54	8° J 39'48	19°45'02	evening set	14903 Oct 19 14:57	24° M 30'49	
desc. node	14902 Nov 02 10:34	13° J 14'57		desc. node	14903 Oct 20 07:54	24° M 20'32	
retrograde	14902 Nov 05 10:10	13° J 40'49		inferior conj	14903 Oct 27 19:57	20° M 10'27	-2°23'22
evening set	14902 Nov 07 09:15	13° J 30'14		minimum elong	14903 Oct 27 14:01	20° M 21'07	2°20'21
inferior conj	14902 Nov 16 03:41	9° J 28'29	-4°08'55	min. Earth dist.	14903 Oct 30 20:21	18° M 00'53	0.56733 AU
minimum elong	14902 Nov 15 17:55	9° J 43'40	4°04'56	morning rise	14903 Nov 04 10:00	15° M 19'08	
min. Earth dist.	14902 Nov 18 07:27	8° J 08'02	0.55201 AU	direct	14903 Nov 10 06:52	13° M 56'26	
morning rise	14902 Nov 24 00:58	5° J 12'38		morning max el	14903 Nov 24 11:17	21° M 16'27	26°22'32
direct	14902 Nov 29 03:14	4° J 15'13			14903 Dec 02 01:55	0° J	
morning max el	14902 Dec 12 23:09	11° J 08'58	24°46'08	asc. node	14903 Dec 14 18:08	20° J 07'19	
	14902 Dec 27 03:49	0° S			14903 Dec 19 19:47	0° S	
asc. node	14902 Dec 27 21:04	1° S 13'24		morning set	14903 Dec 23 05:05	7° S 06'45	
morning set	14903 Jan 07 18:24	22° S 31'55					
	14903 Jan 11 04:35	0° \approx		superior conj	14903 Dec 29 23:29	22° S 03'01	1°37'52
superior conj	14903 Jan 14 12:51	7° \approx 22'25	1°35'59	minimum elong	14903 Dec 29 23:16	22° S 01'52	1°38'50
minimum elong	14903 Jan 14 13:43	7° \approx 27'10	1°36'49	max. Earth dist.	14903 Dec 30 19:08	23° S 52'34	1.31370 AU

	14904 Jan 02 13:39	0°≈		minimum elong	14904 Dec 13 09:50	6°≈36'27	1°34'42
evening rise	14904 Jan 05 22:33	7°≈14'47		max. Earth dist.	14904 Dec 13 03:19	6°≈00'00	1.31085 AU
desc. node	14904 Jan 16 06:41	27°≈16'27		evening rise	14904 Dec 20 04:50	21°≈36'43	
	14904 Jan 17 20:29	0°≈			14904 Dec 24 05:25	0°≈	
evening max el	14904 Feb 06 13:50	26°≈36'19	27°22'42	desc. node	14905 Jan 02 03:29	16°≈27'04	
	14904 Feb 10 14:04	0°≈			14905 Jan 11 06:52	0°≈	
retrograde	14904 Feb 20 13:28	3°≈56'03		evening max el	14905 Jan 18 15:02	8°≈15'48	26°35'30
evening set	14904 Feb 27 08:44	1°≈50'14		retrograde	14905 Feb 01 14:25	15°≈24'44	
	14904 Feb 29 23:34	30°≈		evening set	14905 Feb 08 01:47	13°≈41'56	
min. Earth dist.	14904 Mar 02 04:09	29°≈01'45	0.60939 AU	min. Earth dist.	14905 Feb 12 04:40	11°≈04'30	0.58737 AU
inferior conj	14904 Mar 05 07:38	26°≈16'35	-2°02'29	inferior conj	14905 Feb 15 08:39	8°≈40'12	-3°29'39
minimum elong	14904 Mar 05 12:04	26°≈06'50	2°00'33	minimum elong	14905 Feb 15 16:24	8°≈25'26	3°26'29
asc. node	14904 Mar 11 15:30	21°≈46'40		morning rise	14905 Feb 23 10:15	4°≈07'08	
morning rise	14904 Mar 12 18:37	21°≈22'15		direct	14905 Feb 25 10:12	3°≈53'06	
direct	14904 Mar 14 21:16	21°≈03'40		asc. node	14905 Feb 26 12:56	3°≈57'38	
morning max el	14904 Mar 21 22:39	24°≈36'19	17°53'57	morning max el	14905 Mar 05 09:38	7°≈49'43	18°21'13
	14904 Mar 26 08:50	0°≈			14905 Mar 19 14:26	0°≈	
morning set	14904 Apr 06 13:16	18°≈58'51		morning set	14905 Mar 21 03:53	2°≈57'27	
	14904 Apr 12 15:52	0°≈					
desc. node	14904 Apr 13 08:43	1°≈14'52		superior conj	14905 Mar 30 11:53	20°≈29'03	0°05'58
				minimum elong	14905 Mar 30 12:18	20°≈30'58	0°05'39
superior conj	14904 Apr 17 05:25	8°≈00'53	-0°30'46	behind sun begin	14905 Mar 30 05:25	19°≈59'31	
minimum elong	14904 Apr 17 02:40	7°≈48'56	0°30'50	behind sun end	14905 Mar 30 19:11	21°≈02'21	
max. Earth dist.	14904 Apr 24 15:11	20°≈29'13	1.42977 AU	desc. node	14905 Mar 31 05:18	21°≈48'21	
evening rise	14904 Apr 30 20:38	0°≈29'28			14905 Apr 04 19:54	0°≈	
	14904 Apr 30 13:10	0°≈		max. Earth dist.	14905 Apr 07 01:11	3°≈49'45	1.40918 AU
	14904 May 20 18:40	0°≈		evening rise	14905 Apr 11 12:36	11°≈19'24	
evening max el	14904 Jun 02 02:45	15°≈11'34	21°59'07		14905 Apr 23 11:19	0°≈	
asc. node	14904 Jun 07 12:46	19°≈31'19		evening max el	14905 May 15 18:05	29°≈04'16	23°19'39
retrograde	14904 Jun 11 11:41	20°≈40'35			14905 May 16 17:02	0°≈	
evening set	14904 Jun 16 03:44	18°≈44'20		asc. node	14905 May 25 09:51	5°≈13'06	
inferior conj	14904 Jun 21 09:52	12°≈26'24	3°05'20	retrograde	14905 May 26 07:24	5°≈16'40	
minimum elong	14904 Jun 21 09:00	12°≈29'28	3°04'15	evening set	14905 May 31 10:59	3°≈05'44	
min. Earth dist.	14904 Jun 21 10:29	12°≈24'17	0.69020 AU		14905 Jun 03 07:55	30°≈	
morning rise	14904 Jun 26 14:04	6°≈11'46		inferior conj	14905 Jun 05 19:34	26°≈39'53	2°49'57
direct	14904 Jul 01 09:43	4°≈08'52		minimum elong	14905 Jun 05 17:56	26°≈45'32	2°48'41
desc. node	14904 Jul 10 08:48	9°≈11'04		min. Earth dist.	14905 Jun 05 07:13	27°≈22'30	0.68970 AU
morning max el	14904 Jul 10 22:23	9°≈44'33	22°13'22	morning rise	14905 Jun 11 00:50	20°≈32'58	
	14904 Jul 26 20:02	0°≈		direct	14905 Jun 15 08:01	18°≈49'55	
morning set	14904 Aug 13 01:14	26°≈13'02		morning max el	14905 Jun 23 15:55	23°≈35'43	20°51'39
	14904 Aug 15 09:06	0°≈		desc. node	14905 Jun 27 06:00	27°≈32'10	
max. Earth dist.	14904 Aug 18 08:29	4°≈55'26	1.41315 AU		14905 Jun 29 06:08	0°≈	
					14905 Jul 20 03:21	0°≈	
superior conj	14904 Aug 26 04:05	18°≈23'53	-1°09'55	morning set	14905 Jul 23 16:45	5°≈29'21	
minimum elong	14904 Aug 26 09:34	18°≈48'13	1°09'24	max. Earth dist.	14905 Jul 31 15:54	18°≈06'35	1.43367 AU
	14904 Sep 01 13:37	0°≈					
asc. node	14904 Sep 03 13:41	3°≈42'55		superior conj	14905 Aug 07 12:42	29°≈25'28	-1°43'02
evening rise	14904 Sep 05 13:29	7°≈25'34		minimum elong	14905 Aug 07 20:13	29°≈57'08	1°42'51
	14904 Sep 18 22:53	0°≈			14905 Aug 07 20:54	0°≈	
evening max el	14904 Sep 21 11:59	2°≈54'34	18°16'04	evening rise	14905 Aug 19 12:25	20°≈12'57	
retrograde	14904 Sep 28 20:30	6°≈39'17		asc. node	14905 Aug 21 10:15	23°≈35'55	
evening set	14904 Sep 30 22:58	6°≈21'33			14905 Aug 25 01:54	0°≈	
desc. node	14904 Oct 06 05:17	3°≈26'54		evening max el	14905 Sep 05 00:30	15°≈56'07	18°02'26
inferior conj	14904 Oct 08 10:05	1°≈39'43	-0°41'56	retrograde	14905 Sep 11 16:10	19°≈22'03	
minimum elong	14904 Oct 08 08:33	1°≈42'57	0°40'53	evening set	14905 Sep 14 02:10	18°≈54'42	
	14904 Oct 10 09:14	30°≈		inferior conj	14905 Sep 20 20:13	13°≈52'57	0°41'41
min. Earth dist.	14904 Oct 11 16:40	28°≈55'25	0.58787 AU	minimum elong	14905 Sep 20 21:27	13°≈49'56	0°41'22
morning rise	14904 Oct 15 14:42	26°≈12'18		desc. node	14905 Sep 23 02:46	11°≈40'04	
direct	14904 Oct 22 00:00	24°≈23'00		min. Earth dist.	14905 Sep 23 22:26	10°≈53'44	0.61064 AU
	14904 Nov 03 01:23	0°≈		morning rise	14905 Sep 27 13:51	7°≈56'57	
morning max el	14904 Nov 05 07:14	2°≈03'35	27°29'27	direct	14905 Oct 04 05:16	5°≈43'40	
	14904 Nov 25 11:31	0°≈		morning max el	14905 Oct 18 10:50	13°≈39'03	27°58'06
asc. node	14904 Nov 30 15:06	9°≈29'29			14905 Oct 31 14:00	0°≈	
morning set	14904 Dec 06 12:48	21°≈29'53		asc. node	14905 Nov 17 11:59	29°≈11'11	
	14904 Dec 10 10:41	0°≈			14905 Nov 17 21:47	0°≈	
				morning set	14905 Nov 20 15:33	5°≈35'23	
superior conj	14904 Dec 13 11:02	6°≈43'10	1°33'46	max. Earth dist.	14905 Nov 26 09:51	17°≈58'44	1.31334 AU

superior conj	14905 Nov 27 21:35	21° ♊ 16'36	1°23'47	superior conj	14906 Nov 12 05:16	5° ♊ 38'23	1°07'51
minimum elong	14905 Nov 27 19:38	21° ♊ 05'44	1°24'32	minimum elong	14906 Nov 12 02:57	5° ♊ 25'47	1°08'22
	14905 Dec 01 19:45	0° ♋		evening rise	14906 Nov 19 01:13	20° ♊ 34'06	
evening rise	14905 Dec 04 14:19	6° ♋ 04'34			14906 Nov 23 13:28	0° ♋	
	14905 Dec 16 22:26	0° ♌		desc. node	14906 Dec 06 21:22	22° ♋ 27'02	
desc. node	14905 Dec 20 00:22	4° ♌ 55'44		evening max el	14906 Dec 12 17:54	29° ♋ 08'32	23°37'31
evening max el	14905 Dec 31 07:37	19° ♌ 01'47	25°16'37		14906 Dec 13 15:59	0° ♌	
retrograde	14906 Jan 14 03:55	25° ♌ 59'04		retrograde	14906 Dec 26 04:22	5° ♌ 48'41	
evening set	14906 Jan 19 21:51	24° ♌ 44'15		evening set	14906 Dec 30 18:44	5° ♌ 02'47	
min. Earth dist.	14906 Jan 24 19:53	22° ♌ 02'34	0.56731 AU	min. Earth dist.	14907 Jan 06 04:51	1° ♌ 58'09	0.55218 AU
inferior conj	14906 Jan 27 13:16	20° ♌ 14'46	-4°52'22	inferior conj	14907 Jan 07 21:24	0° ♌ 58'30	-5°49'19
minimum elong	14906 Jan 27 22:22	19° ♌ 59'44	4°49'22	minimum elong	14907 Jan 08 02:30	0° ♌ 50'59	5°47'53
morning rise	14906 Feb 05 01:30	16° ♌ 03'36			14907 Jan 09 13:39	30° ♌	
direct	14906 Feb 07 04:31	15° ♌ 50'26		morning rise	14907 Jan 16 11:54	27° ♌ 04'43	
asc. node	14906 Feb 13 10:22	17° ♌ 52'25		direct	14907 Jan 19 03:23	26° ♌ 47'30	
morning max el	14906 Feb 16 11:20	20° ♌ 21'28	19°09'55		14907 Jan 27 15:39	0° ♍	
	14906 Feb 23 19:13	0° ♍		morning max el	14907 Jan 29 23:47	2° ♍ 00'53	20°21'42
morning set	14906 Mar 05 04:06	17° ♍ 20'05		asc. node	14907 Jan 31 07:46	3° ♍ 22'30	
	14906 Mar 11 13:38	0° ♎			14907 Feb 16 11:39	0° ♍	
				morning set	14907 Feb 17 10:36	1° ♍ 57'16	
superior conj	14906 Mar 13 11:53	3° ♎ 44'17	0°37'22	superior conj	14907 Feb 25 01:05	17° ♍ 34'18	1°02'17
minimum elong	14906 Mar 13 14:02	3° ♎ 54'37	0°37'03	minimum elong	14907 Feb 25 03:43	17° ♍ 47'37	1°02'13
desc. node	14906 Mar 18 01:52	12° ♎ 22'14		max. Earth dist.	14907 Mar 02 14:32	28° ♍ 30'11	1.36423 AU
max. Earth dist.	14906 Mar 20 07:33	16° ♎ 26'27	1.38648 AU		14907 Mar 03 09:27	0° ♎	
evening rise	14906 Mar 24 01:41	23° ♎ 03'42		desc. node	14907 Mar 04 22:24	2° ♎ 52'56	
	14906 Mar 28 04:11	0° ♏		evening rise	14907 Mar 06 09:51	5° ♎ 35'52	
	14906 Apr 17 07:12	0° ♐			14907 Mar 21 01:18	0° ♏	
evening max el	14906 Apr 28 07:38	12° ♐ 58'04	24°40'02	evening max el	14907 Apr 10 21:11	26° ♏ 50'30	25°53'02
retrograde	14906 May 09 23:42	19° ♐ 47'14			14907 Apr 14 09:55	0° ♐	
asc. node	14906 May 12 07:03	19° ♐ 24'21		retrograde	14907 Apr 23 11:23	4° ♐ 04'46	
evening set	14906 May 15 14:46	17° ♐ 24'42		asc. node	14907 Apr 29 04:22	1° ♐ 53'04	
min. Earth dist.	14906 May 20 02:34	12° ♐ 18'07	0.68439 AU	evening set	14907 Apr 29 13:20	1° ♐ 34'52	
inferior conj	14906 May 21 03:41	10° ♐ 54'20	2°24'11		14907 May 01 05:35	30° ♐	
minimum elong	14906 May 21 01:36	11° ♐ 01'20	2°22'46	min. Earth dist.	14907 May 03 18:22	27° ♐ 04'00	0.67455 AU
morning rise	14906 May 26 12:38	4° ♐ 56'10		inferior conj	14907 May 05 08:13	25° ♐ 04'39	1°47'32
direct	14906 May 30 07:52	3° ♐ 33'22		minimum elong	14907 May 05 06:07	25° ♐ 11'18	1°46'07
morning max el	14906 Jun 06 16:33	7° ♐ 38'20	19°42'14	morning rise	14907 May 10 23:31	19° ♐ 16'34	
desc. node	14906 Jun 14 03:05	16° ♐ 36'28		direct	14907 May 14 07:42	18° ♐ 12'49	
greatest brilliancy	14906 Jun 19 13:06	24° ♐ 17'07	-0.6m	morning max el	14907 May 21 00:21	21° ♐ 48'57	18°48'02
	14906 Jun 23 09:50	0° ♑			14907 May 27 17:29	0° ♑	
morning set	14906 Jul 02 19:50	14° ♑ 17'19		desc. node	14907 Jun 01 00:03	6° ♑ 11'45	
	14906 Jul 12 22:36	0° ♒		greatest brilliancy	14907 Jun 03 21:16	10° ♑ 33'24	-0.8m
max. Earth dist.	14906 Jul 14 05:24	2° ♒ 01'28	1.44900 AU	morning set	14907 Jun 12 06:32	23° ♑ 31'23	
					14907 Jun 16 10:26	0° ♒	
superior conj	14906 Jul 18 21:48	9° ♒ 28'59	-2°06'41	max. Earth dist.	14907 Jun 26 23:19	16° ♒ 25'02	1.45768 AU
minimum elong	14906 Jul 19 03:32	9° ♒ 52'04	2°07'14				
	14906 Jul 31 09:09	0° ♓		superior conj	14907 Jun 28 11:55	18° ♒ 48'06	-2°13'42
evening rise	14906 Aug 01 16:00	2° ♓ 09'42		minimum elong	14907 Jun 28 10:49	18° ♒ 43'47	2°14'40
asc. node	14906 Aug 08 06:53	13° ♓ 15'34			14907 Jul 05 14:46	0° ♓	
evening max el	14906 Aug 19 15:10	29° ♓ 21'44	18°07'33	evening rise	14907 Jul 13 19:32	13° ♓ 04'33	
	14906 Aug 20 07:22	0° ♊			14907 Jul 24 10:39	0° ♓	
retrograde	14906 Aug 26 00:01	2° ♊ 42'19		asc. node	14907 Jul 26 03:34	2° ♓ 35'43	
evening set	14906 Aug 28 18:28	2° ♊ 02'06		evening max el	14907 Aug 03 04:43	13° ♓ 02'26	18°30'34
	14906 Aug 31 16:50	30° ♓		retrograde	14907 Aug 09 15:54	16° ♓ 30'57	
inferior conj	14906 Sep 03 22:31	26° ♓ 42'52	1°44'20	evening set	14907 Aug 12 19:20	15° ♓ 35'19	
minimum elong	14906 Sep 04 00:51	26° ♓ 36'29	1°43'28	inferior conj	14907 Aug 18 12:57	10° ♓ 00'33	2°27'45
min. Earth dist.	14906 Sep 06 14:09	23° ♓ 49'21	0.63306 AU	minimum elong	14907 Aug 18 15:13	9° ♓ 53'44	2°26'47
morning rise	14906 Sep 10 05:11	20° ♓ 28'40		min. Earth dist.	14907 Aug 20 15:03	7° ♓ 29'57	0.65308 AU
desc. node	14906 Sep 10 00:17	20° ♓ 38'04		morning rise	14907 Aug 24 09:54	3° ♓ 37'21	
direct	14906 Sep 16 20:48	17° ♓ 58'14		desc. node	14907 Aug 27 21:47	1° ♓ 31'10	
morning max el	14906 Sep 30 19:31	25° ♓ 58'56	27°48'03	direct	14907 Aug 30 20:37	0° ♔ 59'03	
	14906 Oct 04 13:01	0° ♕		morning max el	14907 Sep 13 06:25	8° ♔ 52'04	27°04'48
	14906 Oct 25 03:38	0° ♌			14907 Sep 29 19:22	0° ♕	
morning set	14906 Nov 04 11:05	19° ♌ 18'02			14907 Oct 17 13:04	0° ♌	
asc. node	14906 Nov 04 08:48	19° ♌ 06'30		morning set	14907 Oct 18 20:37	2° ♌ 31'11	
max. Earth dist.	14906 Nov 09 10:48	29° ♌ 39'38	1.32139 AU	asc. node	14907 Oct 22 05:31	9° ♌ 10'18	
	14906 Nov 09 14:36	0° ♍					

max. Earth dist.	14907 Oct 23 03:01	10°♄59'04	1.33500 AU	asc. node	14908 Oct 08 02:10	29°♑18'32	
					14908 Oct 08 10:27	0°♄	
superior conj	14907 Oct 27 07:51	19°♄42'42	0°46'03				
minimum elong	14907 Oct 27 05:46	19°♄31'41	0°46'22	superior conj	14908 Oct 10 02:42	3°♄23'00	0°18'37
	14907 Nov 01 03:22	0°♌		minimum elong	14908 Oct 10 01:38	3°♄17'35	0°18'52
evening rise	14907 Nov 03 11:41	5°♌00'46		evening rise	14908 Oct 17 19:42	19°♄19'37	
	14907 Nov 16 21:11	0°♌			14908 Oct 23 03:11	0°♌	
desc. node	14907 Nov 23 18:29	8°♌40'35		evening max el	14908 Nov 05 03:59	19°♌37'16	20°26'45
evening max el	14907 Nov 24 05:40	9°♌08'30	21°55'42	desc. node	14908 Nov 09 15:41	23°♌11'17	
retrograde	14907 Dec 06 17:10	15°♌19'03		retrograde	14908 Nov 16 03:49	25°♌05'26	
evening set	14907 Dec 09 23:25	14°♌55'21		evening set	14908 Nov 18 10:01	24°♌52'39	
inferior conj	14907 Dec 18 15:06	11°♌03'16	-5°55'25	inferior conj	14908 Nov 27 07:15	20°♌57'37	-5°01'03
minimum elong	14907 Dec 18 11:12	11°♌08'43	5°54'07	minimum elong	14908 Nov 26 21:25	21°♌11'57	4°57'42
min. Earth dist.	14907 Dec 18 10:42	11°♌09'25	0.54479 AU	min. Earth dist.	14908 Nov 28 16:39	20°♌08'51	0.54674 AU
morning rise	14907 Dec 26 23:48	7°♌15'51		morning rise	14908 Dec 05 08:28	16°♌58'06	
direct	14907 Dec 30 13:18	6°♌47'54		direct	14908 Dec 09 22:10	16°♌13'11	
morning max el	14908 Jan 11 21:22	12°♌44'37	21°55'35	morning max el	14908 Dec 23 08:18	22°♌47'28	23°43'48
asc. node	14908 Jan 18 05:06	20°♌10'38			14908 Dec 29 16:21	0°♌	
	14908 Jan 24 09:20	0°♌		asc. node	14909 Jan 04 02:20	7°♌58'45	
morning set	14908 Feb 01 20:52	16°♌41'40			14909 Jan 15 16:32	0°♌	
	14908 Feb 08 03:08	0°♌		morning set	14909 Jan 16 08:43	1°♌26'13	
superior conj	14908 Feb 08 23:48	1°♌48'59	1°20'29	superior conj	14909 Jan 23 04:58	16°♌18'47	1°32'08
minimum elong	14908 Feb 09 02:05	2°♌01'00	1°20'47	minimum elong	14909 Jan 23 06:26	16°♌26'40	1°32'49
max. Earth dist.	14908 Feb 13 03:10	10°♌21'58	1.34449 AU	max. Earth dist.	14909 Jan 25 23:24	22°♌15'36	1.32870 AU
evening rise	14908 Feb 17 09:36	18°♌46'25			14909 Jan 29 16:38	0°♌	
desc. node	14908 Feb 19 18:57	23°♌16'38		evening rise	14909 Jan 30 21:24	2°♌25'10	
	14908 Feb 23 12:16	0°♌		desc. node	14909 Feb 05 15:32	13°♌27'57	
	14908 Mar 14 04:24	0°♌			14909 Feb 15 09:15	0°♌	
evening max el	14908 Mar 23 11:08	10°♌35'16	26°51'05	evening max el	14909 Mar 06 00:14	23°♌59'51	27°26'55
retrograde	14908 Apr 05 17:23	18°♌02'05			14909 Mar 14 00:29	0°♌	
evening set	14908 Apr 12 04:50	15°♌30'02		retrograde	14909 Mar 19 16:45	1°♌29'25	
asc. node	14908 Apr 15 01:43	12°♌47'33			14909 Mar 24 23:12	30°♌♌	
min. Earth dist.	14908 Apr 16 04:28	11°♌33'20	0.66054 AU	evening set	14909 Mar 26 11:02	29°♌01'28	
inferior conj	14908 Apr 18 06:54	9°♌06'05	0°59'13	min. Earth dist.	14909 Mar 30 06:43	25°♌36'03	0.64274 AU
minimum elong	14908 Apr 18 05:26	9°♌10'21	0°58'08	inferior conj	14909 Apr 01 21:04	22°♌50'57	-0°01'39
morning rise	14908 Apr 24 07:20	3°♌29'48		minimum elong	14909 Apr 01 21:07	22°♌50'48	0°01'55
direct	14908 Apr 27 05:29	2°♌42'50		transit middle	14909 Apr 01 21:07	22°♌50'48	0°01'55
morning max el	14908 May 03 14:02	6°♌02'48	18°10'28	transit begin	14909 Apr 01 18:03	22°♌59'00	
desc. node	14908 May 17 20:55	26°♌09'51		transit end	14909 Apr 02 00:12	22°♌42'37	
	14908 May 20 06:20	0°♌		asc. node	14909 Apr 01 23:08	22°♌45'27	
morning set	14908 May 22 17:25	3°♌57'30		morning rise	14909 Apr 08 09:20	17°♌28'59	
				direct	14909 Apr 10 22:38	16°♌55'47	
superior conj	14908 Jun 06 20:46	27°♌59'38	-2°00'34	morning max el	14909 Apr 17 07:07	20°♌11'40	17°50'04
minimum elong	14908 Jun 06 13:03	27°♌29'24	2°01'05		14909 Apr 24 18:40	0°♌	
	14908 Jun 08 03:33	0°♌		morning set	14909 May 04 07:58	15°♌43'01	
max. Earth dist.	14908 Jun 08 19:43	1°♌03'09	1.45897 AU	desc. node	14909 May 04 17:39	16°♌23'44	
evening rise	14908 Jun 22 23:02	23°♌01'19			14909 May 12 22:02	0°♌	
	14908 Jun 27 11:12	0°♌					
greatest brilliancy	14908 Jul 04 11:58	10°♌45'31	-0.7m	superior conj	14909 May 17 17:22	7°♌47'43	-1°31'00
asc. node	14908 Jul 12 00:20	21°♌29'14		minimum elong	14909 May 17 08:54	7°♌13'44	1°30'57
evening max el	14908 Jul 16 14:30	26°♌51'08	19°10'35	max. Earth dist.	14909 May 22 15:39	15°♌38'15	1.45274 AU
	14908 Jul 20 18:27	0°♌			14909 May 31 21:17	0°♌	
retrograde	14908 Jul 23 12:31	0°♌40'38		evening rise	14909 Jun 02 11:28	2°♌26'17	
	14908 Jul 26 04:04	30°♌♌		greatest brilliancy	14909 Jun 17 05:18	24°♌30'49	-0.6m
evening set	14908 Jul 27 01:25	29°♌28'04			14909 Jun 21 02:08	0°♌	
inferior conj	14908 Aug 01 12:04	23°♌39'16	2°54'49	asc. node	14909 Jun 28 21:09	9°♌46'51	
minimum elong	14908 Aug 01 13:39	23°♌34'09	2°53'53	evening max el	14909 Jun 29 18:42	10°♌42'27	20°06'18
min. Earth dist.	14908 Aug 02 23:48	21°♌43'40	0.66934 AU	retrograde	14909 Jul 07 11:19	15°♌04'57	
morning rise	14908 Aug 07 01:14	17°♌13'40		evening set	14909 Jul 11 10:14	13°♌34'57	
direct	14908 Aug 13 03:13	14°♌36'47		inferior conj	14909 Jul 16 17:01	7°♌33'27	3°08'06
desc. node	14908 Aug 13 19:15	14°♌38'29		minimum elong	14909 Jul 16 17:39	7°♌31'19	3°07'12
morning max el	14908 Aug 25 17:36	22°♌07'35	25°56'44	min. Earth dist.	14909 Jul 17 14:39	6°♌19'56	0.68113 AU
	14908 Sep 01 15:15	0°♌		morning rise	14909 Jul 22 00:43	1°♌09'56	
	14908 Sep 22 01:29	0°♌			14909 Jul 23 12:59	30°♌♌	
morning set	14908 Sep 30 16:44	15°♌07'03		direct	14909 Jul 27 15:38	28°♌42'08	
max. Earth dist.	14908 Oct 04 09:40	22°♌05'06	1.35369 AU	desc. node	14909 Jul 31 16:40	29°♌44'48	

	14909 Aug 01 04:32	0°♎		direct	14910 Jul 11 08:51	13°♊06'43	
morning max el	14909 Aug 08 04:23	5°♎36'26	24°33'18	desc. node	14910 Jul 18 14:00	16°♊24'28	
	14909 Aug 27 01:33	0°♎		morning max el	14910 Jul 21 15:35	19°♊13'07	23°03'54
morning set	14909 Sep 12 19:22	26°♎56'26			14910 Jul 30 18:02	0°♎	
	14909 Sep 14 13:04	0°♎			14910 Aug 20 04:47	0°♎	
max. Earth dist.	14909 Sep 16 09:31	3°♎19'17	1.37603 AU	morning set	14910 Aug 25 00:05	7°♎48'12	
				max. Earth dist.	14910 Aug 29 08:07	15°♎06'38	1.39984 AU
superior conj	14909 Sep 23 10:34	16°♎31'23	-0°13'43				
minimum elong	14909 Sep 23 11:29	16°♎35'46	0°13'22	superior conj	14910 Sep 06 03:28	28°♎57'52	-0°49'13
behind sun begin	14909 Sep 23 07:40	16°♎17'17		minimum elong	14910 Sep 06 07:12	29°♎14'58	0°48'44
behind sun end	14909 Sep 23 15:18	16°♎54'16			14910 Sep 06 17:00	0°♎	
asc. node	14909 Sep 24 22:45	19°♎27'31		asc. node	14910 Sep 11 19:17	9°♎33'07	
	14909 Sep 30 06:00	0°♎		evening rise	14910 Sep 15 18:15	17°♎07'20	
evening rise	14909 Oct 01 22:54	3°♎24'42			14910 Sep 22 16:13	0°♎	
	14909 Oct 17 19:51	0°♎		evening max el	14910 Oct 01 18:01	12°♎59'50	18°32'52
evening max el	14909 Oct 18 16:44	0°♎54'38	19°18'43	retrograde	14910 Oct 09 17:20	17°♎01'46	
desc. node	14909 Oct 27 12:59	5°♎35'37		evening set	14910 Oct 11 16:14	16°♎48'00	
retrograde	14909 Oct 28 01:31	5°♎36'27		desc. node	14910 Oct 14 10:23	15°♎45'52	
evening set	14909 Oct 29 22:33	5°♎25'56		inferior conj	14910 Oct 19 13:48	12°♎18'44	-1°38'43
inferior conj	14909 Nov 07 12:13	1°♎16'34	-3°25'05	minimum elong	14910 Oct 19 09:52	12°♎26'19	1°36'32
minimum elong	14909 Nov 07 03:44	1°♎30'34	3°21'15	min. Earth dist.	14910 Oct 22 18:30	9°♎51'54	0.57558 AU
	14909 Nov 09 10:30	30°♎		morning rise	14910 Oct 27 00:03	7°♎11'06	
min. Earth dist.	14909 Nov 10 02:23	29°♎34'14	0.55766 AU	direct	14910 Nov 02 02:51	5°♎36'54	
morning rise	14909 Nov 15 06:36	26°♎46'22		morning max el	14910 Nov 16 09:24	13°♎07'18	26°55'18
direct	14909 Nov 20 17:09	25°♎38'57			14910 Nov 29 17:27	0°♎	
	14909 Dec 01 13:41	0°♎		asc. node	14910 Dec 08 20:30	15°♎39'07	
morning max el	14909 Dec 04 17:58	2°♎44'27	25°29'59		14910 Dec 15 23:08	0°♎	
asc. node	14909 Dec 21 23:28	26°♎32'19		morning set	14910 Dec 16 05:57	0°♎36'26	
	14909 Dec 23 21:03	0°♎					
morning set	14909 Dec 31 20:19	16°♎06'11		superior conj	14910 Dec 23 01:29	15°♎38'20	1°36'52
	14910 Jan 07 03:52	0°♎		minimum elong	14910 Dec 23 00:50	15°♎34'43	1°37'49
				max. Earth dist.	14910 Dec 23 09:25	16°♎22'47	1.31179 AU
superior conj	14910 Jan 07 14:13	0°♎57'21	1°37'31	evening rise	14910 Dec 29 21:46	0°♎40'34	
minimum elong	14910 Jan 07 14:38	0°♎59'38	1°38'26		14910 Dec 29 14:09	0°♎	
max. Earth dist.	14910 Jan 09 02:21	4°♎16'46	1.31769 AU	desc. node	14911 Jan 10 08:55	22°♎50'18	
evening rise	14910 Jan 14 18:18	16°♎25'20			14911 Jan 14 17:23	0°♎	
	14910 Jan 21 16:00	0°♎		evening max el	14911 Jan 29 15:46	19°♎00'10	27°06'52
desc. node	14910 Jan 23 12:11	3°♎21'36		retrograde	14911 Feb 12 15:59	26°♎16'26	
	14910 Feb 10 03:26	0°♎		evening set	14911 Feb 19 08:45	24°♎19'29	
evening max el	14910 Feb 16 10:33	6°♎51'53	27°33'45	min. Earth dist.	14911 Feb 23 06:10	21°♎37'13	0.59985 AU
retrograde	14910 Mar 02 08:41	14°♎17'14		inferior conj	14911 Feb 26 11:00	18°♎58'36	-2°39'09
evening set	14910 Mar 09 05:23	12°♎00'47		minimum elong	14911 Feb 26 16:54	18°♎46'22	2°36'35
min. Earth dist.	14910 Mar 12 23:30	9°♎01'20	0.62204 AU	morning rise	14911 Mar 06 04:27	14°♎13'19	
inferior conj	14910 Mar 15 23:36	6°♎11'26	-1°15'10	asc. node	14911 Mar 06 18:02	14°♎05'41	
minimum elong	14910 Mar 16 02:12	6°♎05'18	1°14'07	direct	14911 Mar 08 05:16	13°♎57'14	
asc. node	14910 Mar 19 20:35	2°♎51'08		morning max el	14911 Mar 15 15:07	17°♎39'02	18°03'08
morning rise	14910 Mar 23 01:58	1°♎06'30			14911 Mar 24 10:37	0°♎	
direct	14910 Mar 25 07:50	0°♎43'42		morning set	14911 Mar 31 04:55	12°♎12'23	
morning max el	14910 Apr 01 00:37	4°♎07'00	17°47'18	desc. node	14911 Apr 08 10:55	27°♎19'47	
morning set	14910 Apr 16 21:47	28°♎33'51			14911 Apr 09 22:51	0°♎	
	14910 Apr 17 17:18	0°♎					
desc. node	14910 Apr 21 14:18	6°♎48'23		superior conj	14911 Apr 10 06:26	0°♎33'36	-0°14'41
				minimum elong	14911 Apr 10 05:11	0°♎28'04	0°14'54
superior conj	14910 Apr 28 12:06	18°♎38'20	-0°53'13	behind sun begin	14911 Apr 10 02:21	0°♎15'31	
minimum elong	14910 Apr 28 07:03	18°♎17'04	0°53'09	behind sun end	14911 Apr 10 08:01	0°♎40'37	
	14910 May 05 10:01	0°♎		max. Earth dist.	14911 Apr 17 20:28	13°♎35'03	1.42132 AU
max. Earth dist.	14910 May 05 08:22	29°♎53'19	1.43971 AU	evening rise	14911 Apr 23 05:03	22°♎19'45	
evening rise	14910 May 13 00:47	12°♎01'00			14911 Apr 28 02:06	0°♎	
	14910 May 24 23:21	0°♎			14911 May 19 02:23	0°♎	
evening max el	14910 Jun 12 16:52	24°♎33'52	21°15'08	evening max el	14911 May 26 10:12	8°♎26'21	22°33'02
asc. node	14910 Jun 15 18:04	27°♎16'21		asc. node	14911 Jun 02 15:07	13°♎42'54	
retrograde	14910 Jun 21 10:11	29°♎37'59		retrograde	14911 Jun 05 07:30	14°♎14'48	
evening set	14910 Jun 25 19:44	27°♎51'02		evening set	14911 Jun 10 04:18	12°♎12'13	
inferior conj	14910 Jul 01 01:24	21°♎38'25	3°09'29	inferior conj	14911 Jun 15 11:12	5°♎50'30	3°00'05
minimum elong	14910 Jul 01 01:03	21°♎39'38	3°08'30	minimum elong	14911 Jun 15 09:59	5°♎54'46	2°58'56
min. Earth dist.	14910 Jul 01 09:32	21°♎10'04	0.68822 AU	min. Earth dist.	14911 Jun 15 06:20	6°♎07'31	0.69051 AU
morning rise	14910 Jul 06 06:08	15°♎19'46			14911 Jun 20 05:49	30°♎	

morning rise	14911 Jun 20 15:31	29° Π 38'43		min. Earth dist.	14912 May 29 02:47	21° Π 05'12	0.68800 AU
direct	14911 Jun 25 05:48	27° Π 44'00		inferior conj	14912 May 29 20:29	20° Π 04'51	2°40'19
	14911 Jun 30 20:36	0° \mathfrak{S}		minimum elong	14912 May 29 18:36	20° Π 11'15	2°38'59
morning max el	14911 Jul 04 05:52	2° \mathfrak{S} 58'18	21°37'22	morning rise	14912 Jun 04 02:58	14° Π 01'21	
desc. node	14911 Jul 05 11:14	4° \mathfrak{S} 14'20		direct	14912 Jun 08 05:04	12° Π 26'44	
	14911 Jul 24 16:41	0° Ω		morning max el	14912 Jun 16 02:07	16° Π 53'38	20°20'24
morning set	14911 Aug 05 04:25	17° Ω 37'11		desc. node	14912 Jun 21 08:24	22° Π 55'09	
max. Earth dist.	14911 Aug 11 11:13	27° Ω 45'42	1.42240 AU		14912 Jun 26 15:02	0° \mathfrak{S}	
	14911 Aug 12 19:42	0° \mathfrak{M}		morning set	14912 Jul 14 12:37	26° \mathfrak{S} 35'28	
					14912 Jul 16 17:28	0° Ω	
superior conj	14911 Aug 19 01:05	10° \mathfrak{M} 33'31	-1°24'39	max. Earth dist.	14912 Jul 23 21:25	11° Ω 17'13	1.44098 AU
minimum elong	14911 Aug 19 07:42	11° \mathfrak{M} 02'10	1°24'14				
asc. node	14911 Aug 29 15:51	29° \mathfrak{M} 32'04		superior conj	14912 Jul 29 23:44	21° Ω 10'25	-1°54'40
	14911 Aug 29 21:58	0° \mathfrak{L}		minimum elong	14912 Jul 30 07:09	21° Ω 40'56	1°54'45
evening rise	14911 Aug 30 02:00	0° \mathfrak{L} 18'25			14912 Aug 04 06:46	0° \mathfrak{M}	
evening max el	14911 Sep 15 03:44	25° \mathfrak{L} 44'23	18°07'54	evening rise	14912 Aug 11 17:20	12° \mathfrak{M} 45'40	
retrograde	14911 Sep 22 03:42	29° \mathfrak{L} 19'03		asc. node	14912 Aug 15 12:27	19° \mathfrak{M} 20'00	
evening set	14911 Sep 24 09:14	28° \mathfrak{L} 57'41			14912 Aug 21 22:26	0° \mathfrak{L}	
desc. node	14911 Oct 01 07:50	24° \mathfrak{L} 18'39		evening max el	14912 Aug 28 17:40	8° \mathfrak{L} 57'46	18°02'22
inferior conj	14911 Oct 01 12:51	24° \mathfrak{L} 07'24	-0°03'57	retrograde	14912 Sep 04 05:03	12° \mathfrak{L} 19'25	
minimum elong	14911 Oct 01 12:44	24° \mathfrak{L} 07'41	0°03'34	evening set	14912 Sep 06 18:43	11° \mathfrak{L} 46'48	
transit middle	14911 Oct 01 12:44	24° \mathfrak{L} 07'41	0°03'34	inferior conj	14912 Sep 13 06:22	6° \mathfrak{L} 37'14	1°10'45
transit begin	14911 Oct 01 09:27	24° \mathfrak{L} 15'03		minimum elong	14912 Sep 13 08:15	6° \mathfrak{L} 32'25	1°10'07
transit end	14911 Oct 01 16:01	24° \mathfrak{L} 00'18		min. Earth dist.	14912 Sep 16 04:36	3° \mathfrak{L} 38'20	0.62045 AU
min. Earth dist.	14911 Oct 04 18:47	21° \mathfrak{L} 13'58	0.59754 AU	desc. node	14912 Sep 17 05:19	2° \mathfrak{L} 39'32	
morning rise	14911 Oct 08 12:55	18° \mathfrak{L} 26'45		morning rise	14912 Sep 19 19:18	0° \mathfrak{L} 32'36	
direct	14911 Oct 15 01:51	16° \mathfrak{L} 26'13			14912 Sep 20 14:57	30° \mathfrak{R} \mathfrak{M}	
morning max el	14911 Oct 29 08:39	24° \mathfrak{L} 14'10	27°46'19	direct	14912 Sep 26 11:38	28° \mathfrak{M} 11'06	
	14911 Nov 03 14:37	0° \mathfrak{M}			14912 Oct 02 18:57	0° \mathfrak{L}	
	14911 Nov 23 00:41	0° \mathfrak{X}		morning max el	14912 Oct 10 14:35	6° \mathfrak{L} 09'05	27°58'17
asc. node	14911 Nov 25 17:27	5° \mathfrak{X} 10'10			14912 Oct 28 16:26	0° \mathfrak{M}	
morning set	14911 Nov 30 11:47	14° \mathfrak{X} 52'20		asc. node	14912 Nov 11 14:19	24° \mathfrak{M} 58'32	
max. Earth dist.	14911 Dec 06 17:11	28° \mathfrak{X} 26'30	1.31124 AU	morning set	14912 Nov 13 11:49	28° \mathfrak{M} 49'08	
	14911 Dec 07 09:57	0° \mathfrak{Z}			14912 Nov 14 01:34	0° \mathfrak{X}	
				max. Earth dist.	14912 Nov 18 21:57	10° \mathfrak{X} 19'35	1.31613 AU
superior conj	14911 Dec 07 12:51	0° \mathfrak{Z} 16'17	1°30'16				
minimum elong	14911 Dec 07 11:18	0° \mathfrak{Z} 07'35	1°31'07	superior conj	14912 Nov 20 22:30	14° \mathfrak{X} 45'58	1°17'45
evening rise	14911 Dec 14 05:40	15° \mathfrak{Z} 05'33		minimum elong	14912 Nov 20 20:20	14° \mathfrak{X} 34'01	1°18'24
	14911 Dec 21 13:27	0° \mathfrak{A}		evening rise	14912 Nov 27 16:03	29° \mathfrak{X} 35'28	
desc. node	14911 Dec 28 05:45	11° \mathfrak{A} 44'21			14912 Nov 27 20:35	0° \mathfrak{Z}	
	14912 Jan 11 06:27	0° \mathfrak{H}		desc. node	14912 Dec 14 02:41	29° \mathfrak{Z} 51'04	
evening max el	14912 Jan 11 13:32	0° \mathfrak{H} 16'54	26°05'26		14912 Dec 14 05:09	0° \mathfrak{A}	
retrograde	14912 Jan 25 12:25	7° \mathfrak{H} 21'02		evening max el	14912 Dec 23 03:08	10° \mathfrak{A} 44'34	24°35'59
evening set	14912 Jan 31 17:20	5° \mathfrak{H} 50'05		retrograde	14913 Jan 05 20:02	17° \mathfrak{A} 34'41	
min. Earth dist.	14912 Feb 05 02:48	3° \mathfrak{H} 12'37	0.57834 AU	evening set	14913 Jan 11 03:32	16° \mathfrak{A} 32'33	
inferior conj	14912 Feb 08 03:39	1° \mathfrak{H} 02'19	-4°06'25	min. Earth dist.	14913 Jan 16 14:55	13° \mathfrak{A} 43'38	0.56013 AU
minimum elong	14912 Feb 08 12:24	0° \mathfrak{H} 46'37	4°03'05	inferior conj	14913 Jan 18 23:23	12° \mathfrak{A} 15'33	-5°21'12
	14912 Feb 09 14:53	30° \mathfrak{R} \mathfrak{A}		minimum elong	14913 Jan 19 07:36	12° \mathfrak{A} 02'43	5°18'48
morning rise	14912 Feb 16 10:29	26° \mathfrak{A} 38'23		morning rise	14913 Jan 27 13:44	8° \mathfrak{A} 12'29	
direct	14912 Feb 18 10:42	26° \mathfrak{A} 25'16		direct	14913 Jan 29 21:00	7° \mathfrak{A} 58'10	
asc. node	14912 Feb 21 15:30	27° \mathfrak{A} 00'23		asc. node	14913 Feb 07 12:56	11° \mathfrak{A} 37'47	
	14912 Feb 26 07:27	0° \mathfrak{H}		morning max el	14913 Feb 08 19:05	12° \mathfrak{A} 46'25	19°37'34
morning max el	14912 Feb 26 22:39	0° \mathfrak{H} 35'53	18°39'12		14913 Feb 20 13:39	0° \mathfrak{H}	
morning set	14912 Mar 14 00:07	26° \mathfrak{H} 22'30		morning set	14913 Feb 26 03:25	10° \mathfrak{H} 52'53	
	14912 Mar 15 20:58	0° \mathfrak{Y}					
				superior conj	14913 Mar 06 03:01	26° \mathfrak{H} 54'20	0°48'45
superior conj	14912 Mar 22 20:52	13° \mathfrak{Y} 22'49	0°20'02	minimum elong	14913 Mar 06 05:30	27° \mathfrak{H} 06'32	0°48'31
minimum elong	14912 Mar 22 22:12	13° \mathfrak{Y} 29'02	0°19'41		14913 Mar 07 17:04	0° \mathfrak{Y}	
desc. node	14912 Mar 25 07:28	17° \mathfrak{Y} 53'35		desc. node	14913 Mar 12 04:01	8° \mathfrak{Y} 26'31	
max. Earth dist.	14912 Mar 30 04:27	26° \mathfrak{Y} 35'55	1.39960 AU	max. Earth dist.	14913 Mar 12 11:00	8° \mathfrak{Y} 58'45	1.37687 AU
	14912 Apr 01 03:42	0° \mathfrak{Z}		evening rise	14913 Mar 16 03:45	15° \mathfrak{Y} 39'18	
evening rise	14912 Apr 03 06:07	3° \mathfrak{Z} 33'28			14913 Mar 24 16:06	0° \mathfrak{Z}	
	14912 Apr 20 07:02	0° Π			14913 Apr 14 21:33	0° Π	
evening max el	14912 May 08 00:42	22° Π 20'05	23°54'24	evening max el	14913 Apr 20 14:15	6° Π 14'02	25°12'25
retrograde	14912 May 19 01:48	28° Π 48'56		retrograde	14913 May 02 16:04	13° Π 14'34	
asc. node	14912 May 19 12:17	28° Π 48'06		asc. node	14913 May 06 09:32	12° Π 16'06	
evening set	14912 May 24 10:15	26° Π 32'54		evening set	14913 May 08 12:00	10° Π 48'16	

min. Earth dist.	14913 May 12 20:46	5° Π 57'13	0.68081 AU	min. Earth dist.	14914 Apr 26 10:16	20° \mathcal{B} 36'48	0.66909 AU
inferior conj	14913 May 14 03:18	4° Π 17'36	2°10'01	inferior conj	14914 Apr 28 05:37	18° \mathcal{B} 24'15	1°28'32
minimum elong	14913 May 14 01:09	4° Π 24'41	2°08'34	minimum elong	14914 Apr 28 03:41	18° \mathcal{B} 30'09	1°27'12
	14913 May 17 17:28	30° \mathcal{R} 8		morning rise	14914 May 04 00:30	12° \mathcal{B} 41'15	
morning rise	14913 May 19 14:38	28° \mathcal{B} 23'41		direct	14914 May 07 04:15	11° \mathcal{B} 45'05	
direct	14913 May 23 05:09	27° \mathcal{B} 09'05		morning max el	14914 May 13 16:30	15° \mathcal{B} 12'39	18°30'02
	14913 May 29 04:05	0° Π			14914 May 24 19:20	0° Π	
morning max el	14913 May 30 05:52	0° Π 59'45	19°17'14	desc. node	14914 May 26 02:21	1° Π 58'57	
desc. node	14913 Jun 08 05:26	12° Π 13'22		morning set	14914 Jun 03 11:59	15° Π 08'14	
greatest brilliancy	14913 Jun 11 23:24	17° Π 40'35	-0.7m		14914 Jun 12 23:16	0° \mathcal{B}	
	14913 Jun 20 03:02	0° \mathcal{B}		superior conj	14914 Jun 19 09:18	10° \mathcal{B} 01'07	-2°10'32
morning set	14913 Jun 23 16:18	5° \mathcal{B} 27'09		minimum elong	14914 Jun 19 04:53	9° \mathcal{B} 43'52	2°11'24
max. Earth dist.	14913 Jul 06 13:38	25° \mathcal{B} 28'02	1.45360 AU	max. Earth dist.	14914 Jun 19 08:56	9° \mathcal{B} 59'40	1.45908 AU
	14913 Jul 09 10:39	0° Ω			14914 Jul 02 03:35	0° Ω	
superior conj	14913 Jul 09 23:34	0° Ω 51'10	-2°12'03	evening rise	14914 Jul 05 03:58	4° Ω 45'23	
minimum elong	14913 Jul 10 02:54	1° Ω 04'19	2°12'52	greatest brilliancy	14914 Jul 13 17:07	18° Ω 12'29	-0.8m
evening rise	14913 Jul 24 11:05	24° Ω 16'44		asc. node	14914 Jul 20 05:48	28° Ω 01'43	
	14913 Jul 27 22:21	0° \mathcal{M}			14914 Jul 21 15:41	0° \mathcal{M}	
asc. node	14913 Aug 02 09:05	8° \mathcal{M} 51'52		evening max el	14914 Jul 26 20:21	6° \mathcal{M} 14'51	18°45'34
evening max el	14913 Aug 12 08:12	22° \mathcal{M} 30'25	18°15'10	retrograde	14914 Aug 02 11:18	9° \mathcal{M} 51'12	
retrograde	14913 Aug 18 16:55	25° \mathcal{M} 52'50		evening set	14914 Aug 05 18:36	8° \mathcal{M} 48'35	
evening set	14913 Aug 21 15:10	25° \mathcal{M} 06'12		inferior conj	14914 Aug 11 08:50	3° \mathcal{M} 07'31	2°41'04
inferior conj	14913 Aug 27 14:18	19° \mathcal{M} 39'49	2°04'57	minimum elong	14914 Aug 11 10:51	3° \mathcal{M} 01'13	2°40'07
minimum elong	14913 Aug 27 16:42	19° \mathcal{M} 32'55	2°04'00	min. Earth dist.	14914 Aug 13 04:48	0° \mathcal{M} 50'35	0.66039 AU
min. Earth dist.	14913 Aug 30 00:14	16° \mathcal{M} 54'32	0.64193 AU		14914 Aug 13 21:37	30° \mathcal{R} 0	
morning rise	14913 Sep 02 16:38	13° \mathcal{M} 20'48		morning rise	14914 Aug 17 02:10	26° Ω 42'20	
desc. node	14913 Sep 04 02:50	12° \mathcal{M} 20'29		desc. node	14914 Aug 22 00:19	24° Ω 10'47	
direct	14913 Sep 09 06:34	10° \mathcal{M} 46'14		direct	14914 Aug 23 09:23	24° Ω 03'39	
morning max el	14913 Sep 23 00:40	18° \mathcal{M} 44'55	27°33'24		14914 Sep 03 14:40	0° \mathcal{M}	
	14913 Oct 02 13:26	0° \mathcal{L}		morning max el	14914 Sep 05 12:07	1° \mathcal{M} 49'52	26°38'29
	14913 Oct 21 15:13	0° \mathcal{M}			14914 Sep 26 16:37	0° \mathcal{L}	
morning set	14913 Oct 28 03:28	12° \mathcal{M} 20'07		morning set	14914 Oct 11 07:47	25° \mathcal{L} 18'53	
asc. node	14913 Oct 29 11:04	14° \mathcal{M} 57'54			14914 Oct 13 18:17	0° \mathcal{M}	
max. Earth dist.	14913 Nov 01 19:48	21° \mathcal{M} 52'55	1.32656 AU	max. Earth dist.	14914 Oct 15 07:59	3° \mathcal{M} 05'29	1.34236 AU
				asc. node	14914 Oct 16 07:44	5° \mathcal{M} 04'05	
superior conj	14913 Nov 05 04:17	29° \mathcal{M} 00'56	0°59'19	superior conj	14914 Oct 20 03:54	12° \mathcal{M} 55'48	0°35'04
minimum elong	14913 Nov 05 01:59	28° \mathcal{M} 48'33	0°59'45	minimum elong	14914 Oct 20 02:09	12° \mathcal{M} 46'38	0°35'22
	14913 Nov 05 15:14	0° \mathcal{X}		evening rise	14914 Oct 27 12:41	28° \mathcal{M} 28'30	
evening rise	14913 Nov 12 03:00	14° \mathcal{X} 04'33			14914 Oct 28 06:09	0° \mathcal{X}	
	14913 Nov 20 00:23	0° \mathcal{B}			14914 Nov 15 07:50	0° \mathcal{B}	
desc. node	14913 Nov 30 23:44	16° \mathcal{B} 52'10		evening max el	14914 Nov 16 03:53	0° \mathcal{B} 51'07	21°15'35
evening max el	14913 Dec 04 12:40	20° \mathcal{B} 43'02	22°53'22	desc. node	14914 Nov 17 20:52	2° \mathcal{B} 25'14	
retrograde	14913 Dec 17 14:57	27° \mathcal{B} 12'40		retrograde	14914 Nov 28 01:46	6° \mathcal{B} 45'28	
evening set	14913 Dec 21 15:48	26° \mathcal{B} 37'11		evening set	14914 Nov 30 19:50	6° \mathcal{B} 27'51	
min. Earth dist.	14913 Dec 28 21:46	23° \mathcal{B} 17'15	0.54802 AU	inferior conj	14914 Dec 09 15:21	2° \mathcal{B} 35'53	-5°39'15
inferior conj	14913 Dec 30 00:08	22° \mathcal{B} 39'43	-5°59'15	minimum elong	14914 Dec 09 08:04	2° \mathcal{B} 46'09	5°37'09
minimum elong	14913 Dec 30 01:41	22° \mathcal{B} 37'31	5°58'15	min. Earth dist.	14914 Dec 10 03:27	2° \mathcal{B} 18'48	0.54446 AU
morning rise	14914 Jan 07 12:56	18° \mathcal{B} 50'56			14914 Dec 14 13:08	30° \mathcal{R} 2	
direct	14914 Jan 10 12:58	18° \mathcal{B} 30'03		morning rise	14914 Dec 17 20:44	28° \mathcal{X} 45'35	
morning max el	14914 Jan 22 01:08	24° \mathcal{B} 01'30	20°59'13	direct	14914 Dec 21 20:21	28° \mathcal{X} 11'20	
asc. node	14914 Jan 25 10:18	27° \mathcal{B} 43'04			14914 Dec 28 17:58	0° \mathcal{B}	
	14914 Jan 27 04:45	0° \approx		morning max el	14915 Jan 03 17:28	4° \mathcal{B} 25'16	22°40'37
morning set	14914 Feb 10 11:48	25° \approx 33'47		asc. node	14915 Jan 12 07:35	14° \mathcal{B} 58'27	
	14914 Feb 12 14:48	0° \mathcal{X}			14915 Jan 20 22:25	0° \approx	
superior conj	14914 Feb 17 20:41	10° \mathcal{X} 55'53	1°10'49	morning set	14915 Jan 25 22:56	10° \approx 18'34	
minimum elong	14914 Feb 17 23:15	11° \mathcal{X} 09'05	1°10'54	superior conj	14915 Feb 01 22:29	25° \approx 17'55	1°26'12
max. Earth dist.	14914 Feb 22 20:00	20° \mathcal{X} 55'04	1.35542 AU	minimum elong	14915 Feb 02 00:27	25° \approx 28'27	1°26'40
evening rise	14914 Feb 26 18:57	28° \mathcal{X} 28'19			14915 Feb 04 03:49	0° \mathcal{X}	
desc. node	14914 Feb 27 00:33	28° \mathcal{X} 54'23		max. Earth dist.	14915 Feb 05 11:25	2° \mathcal{X} 44'25	1.33722 AU
	14914 Feb 27 14:45	0° \mathcal{Y}		evening rise	14915 Feb 10 00:12	11° \mathcal{X} 51'36	
evening max el	14914 Apr 03 03:48	20° \mathcal{B} 03'13	26°19'55	desc. node	14915 Feb 13 21:06	19° \mathcal{X} 13'06	
retrograde	14914 Apr 16 01:25	27° \mathcal{B} 24'26			14915 Feb 19 23:31	0° \mathcal{Y}	
evening set	14914 Apr 22 07:48	24° \mathcal{B} 52'34			14915 Mar 13 04:44	0° \mathcal{B}	
asc. node	14914 Apr 23 06:52	24° \mathcal{B} 01'53		evening max el	14915 Mar 16 17:22	3° \mathcal{B} 39'55	27°09'27

retrograde	14915 Mar 30 04:57	11°♄09'54			14916 Feb 13 09:50	0°♄	
evening set	14915 Apr 05 19:39	8°♄38'34		evening max el	14916 Feb 27 05:44	16°♄53'16	27°33'47
min. Earth dist.	14915 Apr 09 17:15	4°♄55'40	0.65332 AU	retrograde	14916 Mar 12 01:28	24°♄21'54	
asc. node	14915 Apr 10 04:15	4°♄25'19		evening set	14916 Mar 18 21:12	21°♄58'12	
inferior conj	14915 Apr 12 01:00	2°♄19'06	0°34'57	min. Earth dist.	14916 Mar 22 15:55	18°♄44'17	0.63419 AU
minimum elong	14915 Apr 12 00:04	2°♄21'44	0°34'08	inferior conj	14916 Mar 25 10:42	15°♄55'27	-0°31'19
	14915 Apr 14 04:16	30°♄		minimum elong	14916 Mar 25 11:42	15°♄52'54	0°31'05
morning rise	14915 Apr 18 06:10	26°♄48'44		asc. node	14916 Mar 27 01:41	14°♄18'51	
direct	14915 Apr 21 00:17	26°♄08'12		morning rise	14916 Apr 01 04:42	10°♄40'06	
morning max el	14915 Apr 27 07:59	29°♄25'17	17°59'39	direct	14916 Apr 03 14:33	10°♄11'49	
	14915 Apr 27 21:50	0°♄		morning max el	14916 Apr 10 01:39	13°♄29'49	17°46'38
desc. node	14915 May 12 23:10	22°♄04'08			14916 Apr 21 13:52	0°♄	
morning set	14915 May 15 10:47	26°♄08'11		morning set	14916 Apr 26 12:04	8°♄24'19	
	14915 May 17 19:30	0°♄		desc. node	14916 Apr 28 19:53	12°♄23'21	
superior conj	14915 May 29 21:18	19°♄23'26	-1°49'36	superior conj	14916 May 09 02:41	29°♄36'42	-1°15'29
minimum elong	14915 May 29 12:30	18°♄48'43	1°49'48	minimum elong	14916 May 08 19:25	29°♄06'58	1°15'21
max. Earth dist.	14915 Jun 02 04:51	24°♄36'05	1.45711 AU		14916 May 09 08:24	0°♄	
	14915 Jun 05 15:54	0°♄		max. Earth dist.	14916 May 14 23:33	9°♄04'04	1.44800 AU
evening rise	14915 Jun 14 23:18	14°♄23'06		evening rise	14916 May 24 10:07	23°♄47'21	
	14915 Jun 25 05:08	0°♄			14916 May 28 12:02	0°♄	
greatest brilliancy	14915 Jun 28 10:35	4°♄48'07	-0.7m		14916 Jun 18 16:19	0°♄	
asc. node	14915 Jul 07 02:35	16°♄41'05		evening max el	14916 Jun 22 05:34	3°♄56'23	20°34'13
evening max el	14915 Jul 10 03:51	20°♄04'41	19°32'34	asc. node	14916 Jun 22 23:26	4°♄39'49	
retrograde	14915 Jul 17 09:05	24°♄07'09		retrograde	14916 Jun 30 08:00	8°♄35'24	
evening set	14915 Jul 21 02:04	22°♄47'23		evening set	14916 Jul 04 11:23	6°♄58'10	
inferior conj	14915 Jul 26 10:44	16°♄53'10	3°01'59	inferior conj	14916 Jul 09 17:24	0°♄52'00	3°10'01
minimum elong	14915 Jul 26 11:56	16°♄49'13	3°01'05	minimum elong	14916 Jul 09 17:37	0°♄51'17	3°09'06
min. Earth dist.	14915 Jul 27 16:30	15°♄14'31	0.67486 AU		14916 Jul 10 08:31	30°♄	
morning rise	14915 Jul 31 21:15	10°♄27'49		min. Earth dist.	14916 Jul 10 09:18	29°♄57'18	0.68480 AU
direct	14915 Aug 06 18:46	7°♄53'41		morning rise	14916 Jul 14 23:33	24°♄30'22	
desc. node	14915 Aug 08 21:46	8°♄11'00		direct	14916 Jul 20 09:29	22°♄08'00	
morning max el	14915 Aug 18 23:03	15°♄11'22	25°22'33	desc. node	14916 Jul 25 19:10	23°♄59'44	
	14915 Aug 31 03:17	0°♄		morning max el	14916 Jul 31 09:32	28°♄42'32	23°55'22
	14915 Sep 19 13:12	0°♄			14916 Aug 01 15:19	0°♄	
morning set	14915 Sep 23 20:59	7°♄36'03			14916 Aug 23 20:43	0°♄	
max. Earth dist.	14915 Sep 27 10:41	14°♄09'18	1.36279 AU	morning set	14916 Sep 04 14:42	19°♄01'06	
asc. node	14915 Oct 03 04:20	25°♄12'48		max. Earth dist.	14916 Sep 08 08:56	25°♄32'49	1.38615 AU
					14916 Sep 10 20:42	0°♄	
superior conj	14915 Oct 03 18:30	26°♄23'16	0°05'27	superior conj	14916 Sep 15 20:31	9°♄14'40	-0°28'32
minimum elong	14915 Oct 03 18:09	26°♄21'30	0°05'44	minimum elong	14916 Sep 15 22:33	9°♄24'14	0°28'07
behind sun begin	14915 Oct 03 12:11	25°♄51'49		asc. node	14916 Sep 19 00:53	15°♄20'24	
behind sun end	14915 Oct 04 00:07	26°♄51'16		evening rise	14916 Sep 24 19:09	26°♄37'32	
	14915 Oct 05 13:43	0°♄			14916 Sep 26 12:32	0°♄	
evening rise	14915 Oct 11 18:55	12°♄41'41		evening max el	14916 Oct 11 02:57	23°♄18'12	18°56'37
	14915 Oct 20 19:59	0°♄		retrograde	14916 Oct 19 20:07	27°♄41'21	
evening max el	14915 Oct 29 08:23	11°♄39'58	19°55'11	evening set	14916 Oct 21 17:15	27°♄29'54	
desc. node	14915 Nov 04 18:06	16°♄04'44		desc. node	14916 Oct 21 15:27	27°♄30'47	
retrograde	14915 Nov 08 15:25	16°♄47'49		inferior conj	14916 Oct 30 00:39	23°♄12'25	-2°39'36
evening set	14915 Nov 10 15:55	16°♄36'53		minimum elong	14916 Oct 29 18:01	23°♄24'06	2°36'19
inferior conj	14915 Nov 19 11:31	12°♄37'21	-4°23'36	min. Earth dist.	14916 Nov 01 22:50	21°♄09'38	0.56460 AU
minimum elong	14915 Nov 19 01:30	12°♄52'36	4°19'42	morning rise	14916 Nov 06 15:53	18°♄26'51	
min. Earth dist.	14915 Nov 21 10:58	11°♄24'58	0.55036 AU	direct	14916 Nov 12 10:18	17°♄08'13	
morning rise	14915 Nov 27 09:46	8°♄26'14		morning max el	14916 Nov 26 13:54	24°♄24'22	26°09'50
direct	14915 Dec 02 09:02	7°♄32'07			14916 Dec 01 17:11	0°♄	
morning max el	14915 Dec 16 02:39	14°♄21'08	24°30'13	asc. node	14916 Dec 16 01:52	21°♄56'28	
	14915 Dec 28 07:15	0°♄			14916 Dec 20 06:44	0°♄	
asc. node	14915 Dec 30 04:46	3°♄07'37		morning set	14916 Dec 24 21:53	9°♄38'03	
morning set	14916 Jan 10 10:54	25°♄01'52					
	14916 Jan 12 17:50	0°♄		superior conj	14916 Dec 31 16:01	24°♄32'39	1°37'58
superior conj	14916 Jan 17 05:41	9°♄52'38	1°35'10	minimum elong	14916 Dec 31 15:58	24°♄32'24	1°38'55
minimum elong	14916 Jan 17 06:43	9°♄58'15	1°35'57	max. Earth dist.	14917 Jan 01 15:56	26°♄45'42	1.31458 AU
max. Earth dist.	14916 Jan 19 10:41	14°♄41'03	1.32342 AU		14917 Jan 03 03:04	0°♄	
evening rise	14916 Jan 24 16:16	25°♄41'01		evening rise	14917 Jan 07 16:16	9°♄48'22	
	14916 Jan 26 20:00	0°♄		desc. node	14917 Jan 17 14:22	29°♄01'55	
desc. node	14916 Jan 31 17:42	9°♄17'54			14917 Jan 18 03:34	0°♄	

evening max el	14917 Feb 08 14:27	29° H 28'49	27°26'40	desc. node	14918 Jan 04 11:09	18° \approx 17'21	
	14917 Feb 09 03:45	0° Y			14918 Jan 12 02:25	0° H	
retrograde	14917 Feb 22 13:41	6° Y 49'49		evening max el	14918 Jan 21 16:43	11° H 15'25	26°44'41
evening set	14917 Mar 01 09:35	4° Y 41'04		retrograde	14918 Feb 04 16:19	18° H 26'22	
min. Earth dist.	14917 Mar 05 04:31	1° Y 50'03	0.61274 AU	evening set	14918 Feb 11 05:26	16° H 39'33	
	14917 Mar 07 06:08	30° R H		min. Earth dist.	14918 Feb 15 06:31	14° H 01'25	0.59058 AU
inferior conj	14917 Mar 08 07:18	29° H 03'12	-1°49'44	inferior conj	14918 Feb 18 11:07	11° H 32'47	-3°16'23
minimum elong	14917 Mar 08 11:14	28° H 54'23	1°48'01	minimum elong	14918 Feb 18 18:25	11° H 18'34	3°13'20
asc. node	14917 Mar 13 23:09	24° H 47'45		morning rise	14918 Feb 26 10:42	6° H 56'35	
morning rise	14917 Mar 15 16:01	24° H 05'59		direct	14918 Feb 28 10:43	6° H 42'09	
direct	14917 Mar 17 19:29	23° H 46'22		asc. node	14918 Feb 28 20:37	6° H 42'47	
morning max el	14917 Mar 24 18:17	27° H 16'08	17°51'37	morning max el	14918 Mar 08 06:19	10° H 34'26	18°15'51
	14917 Mar 27 04:53	0° Y			14918 Mar 21 00:12	0° Y	
morning set	14917 Apr 09 10:01	21° Y 37'47		morning set	14918 Mar 23 22:48	5° Y 31'06	
	14917 Apr 14 01:54	0° B					
desc. node	14917 Apr 15 16:30	2° B 51'12		superior conj	14918 Apr 02 11:05	23° Y 14'51	0°00'41
				minimum elong	14918 Apr 02 11:07	23° Y 15'01	0°00'23
superior conj	14917 Apr 20 07:40	10° B 55'12	-0°36'37	behind sun begin	14918 Apr 02 03:42	22° Y 41'22	
minimum elong	14917 Apr 20 04:19	10° B 40'50	0°36'40	behind sun end	14918 Apr 02 18:33	23° Y 48'35	
max. Earth dist.	14917 Apr 27 14:54	23° B 08'00	1.43255 AU	desc. node	14918 Apr 02 13:04	23° Y 23'51	
	14917 May 01 21:16	0° II			14918 Apr 06 06:02	0° B	
evening rise	14917 May 04 04:36	3° II 38'12		max. Earth dist.	14918 Apr 10 01:23	6° B 33'50	1.41241 AU
	14917 May 21 21:25	0° B		evening rise	14918 Apr 14 17:23	14° B 19'20	
evening max el	14917 Jun 05 01:34	17° B 48'15	21°47'26		14918 Apr 24 17:27	0° II	
asc. node	14917 Jun 09 20:26	21° B 44'34			14918 May 17 02:30	0° B	
retrograde	14917 Jun 14 06:18	23° B 10'39		evening max el	14918 May 18 17:18	1° B 40'31	23°07'31
evening set	14917 Jun 18 20:42	21° B 16'40		asc. node	14918 May 27 17:33	7° B 38'45	
inferior conj	14917 Jun 24 02:38	15° B 00'01	3°06'44	retrograde	14918 May 29 02:33	7° B 47'07	
minimum elong	14917 Jun 24 01:54	15° B 02'36	3°05'42	evening set	14918 Jun 03 04:22	5° B 38'11	
min. Earth dist.	14917 Jun 24 05:10	14° B 51'12	0.68987 AU		14918 Jun 07 22:56	30° R II	
morning rise	14917 Jun 29 06:54	8° B 44'22		min. Earth dist.	14918 Jun 08 02:00	29° II 49'24	0.69005 AU
direct	14917 Jul 04 04:23	6° B 38'51		inferior conj	14918 Jun 08 12:27	29° II 13'15	2°52'58
desc. node	14917 Jul 12 16:29	11° B 11'41		minimum elong	14918 Jun 08 10:55	29° II 18'33	2°51'44
morning max el	14917 Jul 13 21:41	12° B 22'20	22°26'18	morning rise	14918 Jun 13 17:24	23° II 05'00	
	14917 Jul 27 23:29	0° Q		direct	14918 Jun 18 02:21	21° II 18'59	
morning set	14917 Aug 16 09:07	29° Q 25'47		morning max el	14918 Jun 26 14:23	26° II 12'06	21°03'08
	14917 Aug 16 17:32	0° M		desc. node	14918 Jun 29 13:42	29° II 25'04	
max. Earth dist.	14917 Aug 21 09:31	7° M 43'14	1.40978 AU		14918 Jun 30 01:38	0° B	
					14918 Jul 21 10:07	0° Q	
superior conj	14917 Aug 29 05:47	21° M 20'36	-1°04'31	morning set	14918 Jul 27 03:47	8° Q 50'07	
minimum elong	14917 Aug 29 10:49	21° M 43'09	1°04'01	max. Earth dist.	14918 Aug 03 15:49	20° Q 46'17	1.43091 AU
	14917 Sep 02 23:55	0° B			14918 Aug 09 06:02	0° M	
asc. node	14917 Sep 05 21:26	5° B 23'35					
evening rise	14917 Sep 08 10:07	10° B 08'10		superior conj	14918 Aug 10 17:53	2° M 31'08	-1°38'28
	14917 Sep 19 18:46	0° M		minimum elong	14918 Aug 11 01:17	3° M 02'26	1°38'11
evening max el	14917 Sep 24 08:19	5° M 40'59	18°19'47	evening rise	14918 Aug 22 11:33	23° M 02'11	
retrograde	14917 Oct 01 20:23	9° M 29'55		asc. node	14918 Aug 23 18:01	25° M 18'10	
evening set	14917 Oct 03 21:48	9° M 13'22			14918 Aug 26 09:28	0° B	
desc. node	14917 Oct 08 12:54	6° M 52'14		evening max el	14918 Sep 07 20:14	18° B 38'12	18°03'12
inferior conj	14917 Oct 11 11:36	4° M 34'39	-0°56'22	retrograde	14918 Sep 14 13:46	22° B 06'01	
minimum elong	14917 Oct 11 09:29	4° M 39'01	0°55'01	evening set	14918 Sep 16 22:32	21° B 40'23	
min. Earth dist.	14917 Oct 14 18:01	1° M 54'17	0.58455 AU	inferior conj	14918 Sep 23 18:59	16° B 41'36	0°30'21
	14917 Oct 17 09:32	30° R B		minimum elong	14918 Sep 23 19:56	16° B 39'22	0°30'11
morning rise	14917 Oct 18 17:43	29° B 12'06		desc. node	14918 Sep 25 10:24	15° B 07'12	
direct	14917 Oct 25 01:27	27° B 26'44		min. Earth dist.	14918 Sep 26 22:25	13° B 43'07	0.60725 AU
	14917 Nov 02 00:25	0° M		morning rise	14918 Sep 30 14:17	10° B 49'08	
morning max el	14917 Nov 08 08:46	5° M 04'54	27°21'52	direct	14918 Oct 07 05:14	8° B 38'53	
	14917 Nov 26 17:55	0° J		morning max el	14918 Oct 21 11:22	16° B 32'55	27°56'18
asc. node	14917 Dec 02 22:52	11° J 14'37			14918 Nov 01 14:03	0° M	
morning set	14917 Dec 09 06:10	24° J 03'01			14918 Nov 19 08:58	0° J	
	14917 Dec 12 00:07	0° B		asc. node	14918 Nov 19 19:46	0° J 53'18	
				morning set	14918 Nov 23 09:48	8° J 11'00	
superior conj	14917 Dec 16 03:34	9° B 12'52	1°34'47	max. Earth dist.	14918 Nov 29 06:53	20° J 52'21	1.31258 AU
minimum elong	14917 Dec 16 02:30	9° B 06'56	1°35'43				
max. Earth dist.	14917 Dec 16 00:01	8° B 53'00	1.31090 AU	superior conj	14918 Nov 30 14:24	23° J 47'16	1°25'41
evening rise	14917 Dec 22 21:53	24° B 08'22		minimum elong	14918 Nov 30 12:33	23° J 36'55	1°26'28
	14917 Dec 25 16:52	0° \approx			14918 Dec 03 09:19	0° B	

evening rise	14918 Dec 07 07:01	8° $\overline{3}$ 35'06			14919 Nov 25 00:28	0° $\overline{3}$	
	14918 Dec 18 03:52	0° \approx		desc. node	14919 Dec 09 05:01	24° $\overline{3}$ 33'43	
desc. node	14918 Dec 22 08:02	6° \approx 52'51			14919 Dec 13 15:16	0° \approx	
evening max el	14919 Jan 03 10:35	22° \approx 08'40	25°30'06	evening max el	14919 Dec 15 21:31	2° \approx 19'39	23°52'56
retrograde	14919 Jan 17 07:51	29° \approx 08'10		retrograde	14919 Dec 29 10:08	9° \approx 02'37	
evening set	14919 Jan 23 04:55	27° \approx 49'06		evening set	14920 Jan 03 05:04	8° \approx 12'47	
min. Earth dist.	14919 Jan 27 23:09	25° \approx 09'03	0.56997 AU	min. Earth dist.	14920 Jan 09 08:52	5° \approx 12'48	0.55395 AU
inferior conj	14919 Jan 30 18:54	23° \approx 14'56	-4°40'56	inferior conj	14920 Jan 11 05:52	4° \approx 05'42	-5°43'30
minimum elong	14919 Jan 31 04:04	22° \approx 59'29	4°37'48	minimum elong	14920 Jan 11 11:59	3° \approx 56'33	5°41'50
morning rise	14919 Feb 08 06:00	19° \approx 00'36		morning rise	14920 Jan 19 20:37	0° \approx 09'43	
direct	14919 Feb 10 07:55	18° \approx 47'39			14920 Jan 20 19:08	30° \overline{R} $\overline{3}$	
asc. node	14919 Feb 15 18:04	20° \approx 21'53		direct	14920 Jan 22 09:37	29° $\overline{3}$ 53'26	
morning max el	14919 Feb 19 09:43	23° \approx 13'14	19°01'15		14920 Jan 23 23:28	0° \approx	
	14919 Feb 24 20:51	0° \overline{H}		morning max el	14920 Feb 02 00:16	5° \approx 00'30	20°09'35
morning set	14919 Mar 07 21:51	19° \overline{H} 50'55		asc. node	14920 Feb 02 15:28	5° \approx 38'16	
	14919 Mar 13 01:25	0° \overline{Y}			14920 Feb 17 22:58	0° \overline{H}	
				morning set	14920 Feb 20 03:37	4° \overline{H} 26'24	
superior conj	14919 Mar 16 08:48	6° \overline{Y} 23'58	0°32'59	superior conj	14920 Feb 27 20:16	20° \overline{H} 09'17	0°58'55
minimum elong	14919 Mar 16 10:46	6° \overline{Y} 33'24	0°32'39	minimum elong	14920 Feb 27 22:53	20° \overline{H} 22'27	0°58'48
desc. node	14919 Mar 20 09:37	13° \overline{Y} 57'48			14920 Mar 03 20:54	0° \overline{Y}	
max. Earth dist.	14919 Mar 23 07:56	19° \overline{Y} 16'12	1.38986 AU	max. Earth dist.	14920 Mar 04 14:39	1° \overline{Y} 24'11	1.36740 AU
evening rise	14919 Mar 27 03:27	25° \overline{Y} 56'11		desc. node	14920 Mar 06 06:07	4° \overline{Y} 28'58	
	14919 Mar 29 13:04	0° \overline{B}		evening rise	14920 Mar 08 08:59	8° \overline{Y} 21'47	
	14919 Apr 18 08:14	0° \overline{II}			14920 Mar 21 07:19	0° \overline{B}	
evening max el	14919 May 01 07:03	15° \overline{II} 34'24	24°28'23	evening max el	14920 Apr 12 20:38	29° \overline{B} 27'39	25°42'56
retrograde	14919 May 12 19:28	22° \overline{II} 18'51			14920 Apr 13 09:59	0° \overline{II}	
asc. node	14919 May 14 14:45	22° \overline{II} 04'46		retrograde	14920 Apr 25 07:49	6° \overline{II} 38'35	
evening set	14919 May 18 08:47	19° \overline{II} 57'55		asc. node	14920 Apr 30 12:03	4° \overline{II} 49'01	
min. Earth dist.	14919 May 22 21:46	14° \overline{II} 45'47	0.68547 AU	evening set	14920 May 01 08:13	4° \overline{II} 09'35	
inferior conj	14919 May 23 20:57	13° \overline{II} 27'57	2°28'49		14920 May 05 05:42	30° \overline{R} \overline{B}	
minimum elong	14919 May 23 18:54	13° \overline{II} 34'50	2°27'25	min. Earth dist.	14920 May 05 14:12	29° \overline{B} 33'27	0.67634 AU
morning rise	14919 May 29 05:10	7° \overline{II} 28'16		inferior conj	14920 May 07 02:07	27° \overline{B} 39'05	1°53'53
direct	14919 Jun 02 02:08	6° \overline{II} 02'25		minimum elong	14920 May 06 23:59	27° \overline{B} 45'54	1°52'27
morning max el	14919 Jun 09 13:50	10° \overline{II} 12'51	19°51'38	morning rise	14920 May 12 16:18	21° \overline{B} 49'19	
desc. node	14919 Jun 16 10:47	18° \overline{II} 23'32		direct	14920 May 16 02:07	20° \overline{B} 42'45	
	14919 Jun 24 15:00	0° $\overline{\Theta}$		morning max el	14920 May 22 20:34	24° \overline{B} 22'12	18°55'02
morning set	14919 Jul 06 07:33	17° $\overline{\Theta}$ 38'58			14920 May 27 16:48	0° \overline{II}	
	14919 Jul 14 06:35	0° $\overline{\Omega}$		desc. node	14920 Jun 02 07:45	7° \overline{II} 54'27	
max. Earth dist.	14919 Jul 17 04:17	4° $\overline{\Omega}$ 34'41	1.44715 AU	greatest brilliancy	14920 Jun 05 06:40	12° \overline{II} 19'48	-0.8m
superior conj	14919 Jul 22 06:27	12° $\overline{\Omega}$ 43'08	-2°04'01	morning set	14920 Jun 14 15:47	26° \overline{II} 45'19	
minimum elong	14919 Jul 22 12:50	13° $\overline{\Omega}$ 08'53	2°04'27		14920 Jun 16 18:00	0° $\overline{\Theta}$	
	14919 Aug 01 17:42	0° $\overline{\eta}$		max. Earth dist.	14920 Jun 28 21:50	18° $\overline{\Theta}$ 55'24	1.45690 AU
evening rise	14919 Aug 04 18:22	5° $\overline{\eta}$ 07'09		superior conj	14920 Jun 30 22:41	22° $\overline{\Theta}$ 06'39	-2°13'55
asc. node	14919 Aug 10 14:39	15° $\overline{\eta}$ 00'08		minimum elong	14920 Jun 30 22:48	22° $\overline{\Theta}$ 07'07	2°14'53
	14919 Aug 20 14:32	0° $\overline{\Omega}$			14920 Jul 05 22:51	0° $\overline{\Omega}$	
evening max el	14919 Aug 22 10:50	2° $\overline{\Omega}$ 00'54	18°05'35	evening rise	14920 Jul 16 01:34	16° $\overline{\Omega}$ 11'08	
retrograde	14919 Aug 28 20:02	5° $\overline{\Omega}$ 21'14			14920 Jul 24 15:35	0° $\overline{\eta}$	
evening set	14919 Aug 31 13:13	4° $\overline{\Omega}$ 43'05		asc. node	14920 Jul 27 11:19	4° $\overline{\eta}$ 23'31	
	14919 Sep 06 06:35	30° \overline{R} $\overline{\eta}$		evening max el	14920 Aug 05 00:44	15° $\overline{\eta}$ 39'51	18°26'02
inferior conj	14919 Sep 06 19:08	29° $\overline{\eta}$ 26'21	1°36'07	retrograde	14920 Aug 11 10:56	19° $\overline{\eta}$ 06'13	
minimum elong	14919 Sep 06 21:23	29° $\overline{\eta}$ 20'17	1°35'17	evening set	14920 Aug 14 13:03	18° $\overline{\eta}$ 12'56	
min. Earth dist.	14919 Sep 09 12:38	26° $\overline{\eta}$ 30'48	0.62993 AU	inferior conj	14920 Aug 20 08:00	12° $\overline{\eta}$ 40'17	2°22'15
desc. node	14919 Sep 12 07:54	23° $\overline{\eta}$ 52'38		minimum elong	14920 Aug 20 10:19	12° $\overline{\eta}$ 33'23	2°21'17
morning rise	14919 Sep 13 03:24	23° $\overline{\eta}$ 14'22		min. Earth dist.	14920 Aug 22 12:08	10° $\overline{\eta}$ 05'33	0.65032 AU
direct	14919 Sep 19 19:27	20° $\overline{\eta}$ 45'49		morning rise	14920 Aug 26 06:17	6° $\overline{\eta}$ 18'02	
morning max el	14919 Oct 03 19:21	28° $\overline{\eta}$ 46'09	27°51'43	desc. node	14920 Aug 29 05:23	4° $\overline{\eta}$ 25'54	
	14919 Oct 05 00:10	0° $\overline{\Omega}$		direct	14920 Sep 01 17:59	3° $\overline{\eta}$ 40'28	
	14919 Oct 26 11:17	0° $\overline{\mathbb{M}}$		morning max el	14920 Sep 15 06:03	11° $\overline{\eta}$ 35'08	27°13'04
asc. node	14919 Nov 06 16:34	20° $\overline{\mathbb{M}}$ 46'33			14920 Sep 29 22:24	0° $\overline{\Omega}$	
morning set	14919 Nov 07 06:33	21° $\overline{\mathbb{M}}$ 57'05			14920 Oct 17 23:47	0° $\overline{\mathbb{M}}$	
	14919 Nov 11 03:39	0° $\overline{\mathcal{A}}$		morning set	14920 Oct 20 17:47	5° $\overline{\mathbb{M}}$ 15'18	
max. Earth dist.	14919 Nov 12 08:49	2° $\overline{\mathcal{A}}$ 35'40	1.31984 AU	asc. node	14920 Oct 23 13:17	10° $\overline{\mathbb{M}}$ 49'29	
superior conj	14919 Nov 14 22:39	8° $\overline{\mathcal{A}}$ 10'58	1°10'39	max. Earth dist.	14920 Oct 25 02:38	13° $\overline{\mathbb{M}}$ 59'18	1.33267 AU
minimum elong	14919 Nov 14 20:21	7° $\overline{\mathcal{A}}$ 58'26	1°11'12	superior conj	14920 Oct 29 02:09	22° $\overline{\mathbb{M}}$ 18'38	0°49'44
evening rise	14919 Nov 21 17:49	23° $\overline{\mathcal{A}}$ 04'29					

minimum elong	14920 Oct 28 23:59	22°♄07'07	0°50'05	superior conj	14921 Oct 12 22:18	6°♄02'44	0°23'07
	14920 Nov 01 16:12	0°♄		minimum elong	14921 Oct 12 21:01	5°♄56'12	0°23'23
evening rise	14920 Nov 05 04:29	7°♄32'20		evening rise	14921 Oct 20 12:59	21°♄52'41	
	14920 Nov 16 21:55	0°♄			14921 Oct 24 12:40	0°♄	
desc. node	14920 Nov 25 02:06	11°♄00'44		evening max el	14921 Nov 08 04:41	22°♄40'45	20°38'45
evening max el	14920 Nov 26 08:27	12°♄18'20	22°10'17	desc. node	14921 Nov 11 23:18	25°♄48'44	
retrograde	14920 Dec 09 00:05	18°♄34'05		retrograde	14921 Nov 19 10:26	28°♄16'06	
evening set	14920 Dec 12 11:06	18°♄07'39		evening set	14921 Nov 21 19:15	28°♄02'20	
min. Earth dist.	14920 Dec 20 14:47	14°♄29'03	0.54535 AU	inferior conj	14921 Nov 30 16:27	24°♄08'22	-5°12'37
inferior conj	14920 Dec 21 01:01	14°♄14'43	-5°58'27	minimum elong	14921 Nov 30 07:01	24°♄21'55	5°09'35
minimum elong	14920 Dec 20 22:31	14°♄18'14	5°57'20	min. Earth dist.	14921 Dec 01 20:29	23°♄27'55	0.54587 AU
morning rise	14920 Dec 29 10:54	10°♄27'35		morning rise	14921 Dec 08 18:43	20°♄11'57	
direct	14921 Jan 01 20:51	10°♄01'37		direct	14921 Dec 13 04:47	19°♄30'04	
morning max el	14921 Jan 13 23:54	15°♄51'47	21°40'26	morning max el	14921 Dec 26 11:59	25°♄59'07	23°27'19
asc. node	14921 Jan 19 12:47	22°♄15'35			14921 Dec 30 06:29	0°♄	
	14921 Jan 24 14:53	0°♄		asc. node	14922 Jan 06 10:01	9°♄55'26	
morning set	14921 Feb 03 13:26	19°♄09'56			14922 Jan 17 04:45	0°♄	
	14921 Feb 08 16:14	0°♄		morning set	14922 Jan 19 01:09	3°♄54'37	
superior conj	14921 Feb 10 17:44	4°♄20'30	1°18'09	superior conj	14922 Jan 25 22:07	18°♄48'23	1°30'47
minimum elong	14921 Feb 10 20:07	4°♄32'56	1°18'23	minimum elong	14922 Jan 25 23:43	18°♄57'02	1°31'23
max. Earth dist.	14921 Feb 15 02:19	13°♄16'45	1.34721 AU	max. Earth dist.	14922 Jan 28 21:18	25°♄08'47	1.33077 AU
evening rise	14921 Feb 19 06:36	21°♄26'44			14922 Jan 31 05:12	0°♄	
desc. node	14921 Feb 21 02:40	24°♄53'40		evening rise	14922 Feb 02 16:48	5°♄01'27	
	14921 Feb 23 21:58	0°♄		desc. node	14922 Feb 07 23:14	15°♄06'55	
	14921 Mar 15 03:29	0°♄			14922 Feb 16 14:59	0°♄	
evening max el	14921 Mar 26 10:30	13°♄13'38	26°43'40	evening max el	14922 Mar 08 23:42	26°♄41'19	27°23'15
retrograde	14921 Apr 08 14:35	20°♄39'04			14922 Mar 12 18:51	0°♄	
evening set	14921 Apr 15 00:51	18°♄06'52		retrograde	14922 Mar 22 15:03	4°♄11'21	
asc. node	14921 Apr 17 09:23	15°♄55'30		evening set	14922 Mar 29 08:35	1°♄42'12	
min. Earth dist.	14921 Apr 19 01:11	14°♄05'21	0.66291 AU		14922 Mar 31 09:17	30°♄	
inferior conj	14921 Apr 21 01:47	11°♄41'40	1°07'22	min. Earth dist.	14922 Apr 02 04:39	28°♄12'31	0.64557 AU
minimum elong	14921 Apr 21 00:11	11°♄46'26	1°06'12	asc. node	14922 Apr 04 06:47	25°♄57'53	
morning rise	14921 Apr 27 00:42	6°♄03'35		inferior conj	14922 Apr 04 17:23	25°♄29'09	0°08'24
direct	14921 Apr 30 00:19	5°♄14'16		minimum elong	14922 Apr 04 17:09	25°♄29'47	0°07'59
morning max el	14921 May 06 09:29	8°♄35'38	18°14'59	transit middle	14922 Apr 04 17:09	25°♄29'47	0°07'59
desc. node	14921 May 20 04:36	27°♄49'12		transit begin	14922 Apr 04 14:29	25°♄37'00	
	14921 May 21 13:32	0°♄		transit end	14922 Apr 04 19:49	25°♄22'35	
morning set	14921 May 25 22:30	6°♄59'03		morning rise	14922 Apr 11 03:45	20°♄05'04	
	14921 Jun 09 11:43	0°♄		direct	14922 Apr 13 18:15	19°♄30'05	
superior conj	14921 Jun 10 07:06	1°♄15'48	-2°03'47	morning max el	14922 Apr 20 02:16	22°♄45'50	17°52'04
minimum elong	14921 Jun 10 00:03	0°♄48'15	2°04'23		14922 Apr 25 21:22	0°♄	
max. Earth dist.	14921 Jun 11 18:12	3°♄32'48	1.45927 AU	morning set	14922 May 07 09:07	18°♄33'20	
evening rise	14921 Jun 26 08:17	26°♄15'17		desc. node	14922 May 07 01:22	18°♄01'00	
	14921 Jun 28 18:03	0°♄			14922 May 14 06:52	0°♄	
greatest brilliancy	14921 Jul 07 03:25	12°♄56'43	-0.8m	superior conj	14922 May 21 01:09	10°♄56'39	-1°36'14
asc. node	14921 Jul 14 08:02	23°♄21'26		minimum elong	14922 May 20 16:26	10°♄21'51	1°36'13
evening max el	14921 Jul 19 11:09	29°♄27'21	19°03'36	max. Earth dist.	14922 May 25 14:17	18°♄09'12	1.45407 AU
	14921 Jul 20 00:42	0°♄			14922 Jun 02 04:53	0°♄	
retrograde	14921 Jul 26 07:04	3°♄13'03		evening rise	14922 Jun 05 22:05	5°♄42'41	
evening set	14921 Jul 29 18:31	2°♄03'02		greatest brilliancy	14922 Jun 20 17:24	27°♄55'04	-0.6m
	14921 Aug 01 03:10	30°♄			14922 Jun 22 04:10	0°♄	
inferior conj	14921 Aug 04 05:59	26°♄16'04	2°51'36	asc. node	14922 Jul 01 04:52	11°♄45'24	
minimum elong	14921 Aug 04 07:41	26°♄10'36	2°50'42	evening max el	14922 Jul 02 16:13	13°♄18'34	19°57'04
min. Earth dist.	14921 Aug 05 19:48	24°♄14'50	0.66715 AU	retrograde	14922 Jul 10 05:43	17°♄35'42	
morning rise	14921 Aug 09 20:10	19°♄50'29		evening set	14922 Jul 14 03:03	16°♄08'21	
direct	14921 Aug 15 23:33	17°♄13'00		inferior conj	14922 Jul 19 10:14	10°♄08'38	3°06'50
desc. node	14921 Aug 16 02:52	17°♄13'04		minimum elong	14922 Jul 19 11:01	10°♄05'59	3°05'58
morning max el	14921 Aug 28 17:21	24°♄48'09	26°08'09	min. Earth dist.	14922 Jul 20 09:57	8°♄48'27	0.67964 AU
	14921 Sep 02 10:23	0°♄		morning rise	14922 Jul 24 18:35	3°♄44'24	
	14921 Sep 23 09:13	0°♄		direct	14922 Jul 30 11:11	1°♄14'50	
morning set	14921 Oct 03 16:06	17°♄57'14		desc. node	14922 Aug 03 00:17	2°♄03'04	
max. Earth dist.	14921 Oct 07 10:46	25°♄06'58	1.35063 AU	morning max el	14922 Aug 11 04:14	8°♄15'47	24°46'19
	14921 Oct 09 22:26	0°♄			14922 Aug 28 05:58	0°♄	
asc. node	14921 Oct 10 09:54	0°♄57'10		morning set	14922 Sep 15 21:37	29°♄54'13	
					14922 Sep 15 22:56	0°♄	

max. Earth dist.	14922 Sep 19 11:12	6°♄17'33	1.37254 AU		14923 Jul 31 16:51	0°♄	
					14923 Aug 21 12:24	0°♄	
superior conj	14922 Sep 26 08:01	19°♄16'13	-0°08'33	morning set	14923 Aug 28 05:52	10°♄55'11	
minimum elong	14922 Sep 26 08:34	19°♄18'52	0°08'14	max. Earth dist.	14923 Sep 01 09:20	17°♄57'23	1.39633 AU
behind sun begin	14922 Sep 26 02:49	18°♄50'51			14923 Sep 08 03:38	0°♄	
behind sun end	14922 Sep 26 14:19	19°♄46'57					
asc. node	14922 Sep 27 06:29	21°♄06'11		superior conj	14923 Sep 09 03:28	1°♄49'40	-0°43'45
	14922 Oct 01 17:35	0°♄		minimum elong	14923 Sep 09 06:44	2°♄04'46	0°43'16
evening rise	14922 Oct 04 17:04	6°♄00'01		asc. node	14923 Sep 14 03:03	11°♄12'33	
	14922 Oct 18 08:01	0°♄		evening rise	14923 Sep 18 13:49	19°♄46'24	
evening max el	14922 Oct 21 15:19	3°♄50'25	19°27'27		14923 Sep 23 23:28	0°♄	
desc. node	14922 Oct 29 20:36	8°♄33'09		evening max el	14923 Oct 04 15:01	15°♄49'08	18°38'21
retrograde	14922 Oct 31 05:49	8°♄38'56		retrograde	14923 Oct 12 18:37	19°♄56'03	
evening set	14922 Nov 02 03:17	8°♄28'31		evening set	14923 Oct 14 16:53	19°♄43'01	
inferior conj	14922 Nov 10 18:49	4°♄21'57	-3°41'00	desc. node	14923 Oct 16 18:00	19°♄02'43	
minimum elong	14922 Nov 10 09:48	4°♄36'31	3°37'02	inferior conj	14923 Oct 22 17:08	15°♄17'00	-1°54'27
min. Earth dist.	14922 Nov 13 05:38	2°♄47'05	0.55554 AU	minimum elong	14923 Oct 22 12:29	15°♄25'43	1°51'57
	14922 Nov 18 11:02	30°♄		min. Earth dist.	14923 Oct 25 20:39	12°♄55'48	0.57259 AU
morning rise	14922 Nov 18 14:12	29°♄56'53		morning rise	14923 Oct 30 04:43	10°♄15'03	
direct	14922 Nov 23 21:56	28°♄53'02		direct	14923 Nov 05 05:37	8°♄44'46	
	14922 Nov 29 07:50	0°♄		morning max el	14923 Nov 19 11:32	16°♄11'49	26°44'34
morning max el	14922 Dec 07 21:19	5°♄54'43	25°15'00		14923 Nov 30 18:00	0°♄	
asc. node	14922 Dec 24 07:11	28°♄22'49		asc. node	14923 Dec 11 04:15	17°♄25'25	
	14922 Dec 25 05:00	0°♄			14923 Dec 17 11:38	0°♄	
morning set	14923 Jan 03 12:54	18°♄35'28		morning set	14923 Dec 18 22:59	3°♄07'49	
	14923 Jan 08 17:40	0°♄					
superior conj	14923 Jan 10 06:55	3°♄26'07	1°37'07	superior conj	14923 Dec 25 18:02	18°♄07'33	1°37'21
minimum elong	14923 Jan 10 07:29	3°♄29'18	1°37'59	minimum elong	14923 Dec 25 17:33	18°♄04'48	1°38'19
max. Earth dist.	14923 Jan 11 23:19	7°♄08'23	1.31900 AU	max. Earth dist.	14923 Dec 26 06:01	19°♄14'31	1.31232 AU
evening rise	14923 Jan 17 12:31	18°♄58'52		evening rise	14924 Jan 01 15:12	3°♄12'48	
	14923 Jan 23 02:09	0°♄		desc. node	14924 Jan 12 16:36	24°♄36'53	
desc. node	14923 Jan 25 19:53	5°♄03'33			14924 Jan 15 21:30	0°♄	
	14923 Feb 10 22:04	0°♄		evening max el	14924 Feb 01 16:53	21°♄55'23	27°13'11
evening max el	14923 Feb 19 10:35	9°♄38'58	27°34'49	retrograde	14924 Feb 15 17:03	29°♄13'02	
retrograde	14923 Mar 05 08:21	17°♄05'42		evening set	14924 Feb 22 10:48	27°♄12'56	
evening set	14923 Mar 12 04:54	14°♄47'04		min. Earth dist.	14924 Feb 26 07:23	24°♄28'38	0.60318 AU
min. Earth dist.	14923 Mar 15 23:02	11°♄44'07	0.62520 AU	inferior conj	14924 Feb 29 11:53	21°♄47'21	-2°25'56
inferior conj	14923 Mar 18 21:54	8°♄53'54	-1°03'17	minimum elong	14924 Feb 29 17:16	21°♄35'58	2°23'35
minimum elong	14923 Mar 19 00:03	8°♄48'44	1°02'27	morning rise	14924 Mar 08 03:05	16°♄58'49	
asc. node	14923 Mar 22 04:15	5°♄57'58		asc. node	14924 Mar 08 01:44	16°♄59'44	
morning rise	14923 Mar 25 22:03	3°♄46'16		direct	14924 Mar 10 04:26	16°♄41'58	
direct	14923 Mar 28 04:50	3°♄22'12		morning max el	14924 Mar 17 11:10	20°♄20'24	17°59'29
morning max el	14923 Apr 03 19:58	6°♄43'55	17°46'36		14924 Mar 24 16:04	0°♄	
	14923 Apr 19 02:38	0°♄		morning set	14924 Apr 02 00:51	14°♄48'27	
morning set	14923 Apr 19 19:54	1°♄15'37		desc. node	14924 Apr 09 18:39	28°♄54'52	
desc. node	14923 Apr 23 22:03	8°♄24'13			14924 Apr 10 09:16	0°♄	
superior conj	14923 May 01 16:22	21°♄37'28	-0°59'08	superior conj	14924 Apr 12 07:20	3°♄23'32	-0°20'22
minimum elong	14923 May 01 10:41	21°♄13'48	0°59'03	minimum elong	14924 Apr 12 05:34	3°♄15'47	0°20'32
	14923 May 06 18:49	0°♄		max. Earth dist.	14924 Apr 19 20:16	16°♄14'56	1.42438 AU
max. Earth dist.	14923 May 08 07:24	2°♄27'21	1.44199 AU	evening rise	14924 Apr 25 11:45	25°♄24'32	
evening rise	14923 May 16 10:14	15°♄13'20			14924 Apr 28 09:43	0°♄	
	14923 May 26 04:55	0°♄			14924 May 19 01:42	0°♄	
evening max el	14923 Jun 15 15:19	27°♄10'11	21°04'12	evening max el	14924 May 28 09:20	11°♄02'38	22°21'04
asc. node	14923 Jun 18 01:48	29°♄23'17		asc. node	14924 Jun 03 22:52	16°♄00'29	
	14923 Jun 18 20:50	0°♄		retrograde	14924 Jun 07 02:17	16°♄44'14	
retrograde	14923 Jun 24 04:43	2°♄07'47		evening set	14924 Jun 11 21:25	14°♄43'53	
evening set	14923 Jun 28 12:36	0°♄23'24		inferior conj	14924 Jun 17 04:01	8°♄23'30	3°02'11
	14923 Jun 28 23:34	30°♄		minimum elong	14924 Jun 17 02:55	8°♄27'21	3°01'04
inferior conj	14923 Jul 03 18:17	24°♄12'24	3°09'57	min. Earth dist.	14924 Jun 17 01:05	8°♄33'45	0.69053 AU
minimum elong	14923 Jul 03 18:04	24°♄13'07	3°09'00	morning rise	14924 Jun 22 08:14	2°♄10'38	
min. Earth dist.	14923 Jul 04 04:26	23°♄37'05	0.68748 AU	direct	14924 Jun 27 00:25	0°♄12'58	
morning rise	14923 Jul 08 23:17	17°♄52'50		morning max el	14924 Jul 06 04:46	5°♄34'36	21°49'45
direct	14923 Jul 14 03:54	15°♄37'08		desc. node	14924 Jul 06 18:56	6°♄10'39	
desc. node	14923 Jul 20 21:40	18°♄30'16			14924 Jul 24 22:05	0°♄	
morning max el	14923 Jul 24 15:13	21°♄51'17	23°17'12	morning set	14924 Aug 07 13:48	20°♄53'05	

	14924 Aug 13 04:41	0°♍		direct	14925 Jun 10 23:22	14°♊55'21	
max. Earth dist.	14924 Aug 13 11:39	0°♍28'49	1.41927 AU	morning max el	14925 Jun 19 00:03	19°♊28'33	20°31'03
				desc. node	14925 Jun 23 16:04	24°♊44'41	
superior conj	14924 Aug 21 04:15	13°♍33'36	-1°19'30		14925 Jun 27 16:43	0°♊	
minimum elong	14924 Aug 21 10:30	14°♍00'52	1°19'01	morning set	14925 Jul 18 00:19	29°♊57'20	
	14924 Aug 30 07:47	0°♊			14925 Jul 18 01:00	0°♊	
asc. node	14924 Aug 30 23:37	1°♊12'46		max. Earth dist.	14925 Jul 26 21:07	13°♊54'39	1.43855 AU
evening rise	14924 Aug 31 23:35	3°♊02'53					
evening max el	14924 Sep 16 23:46	28°♊28'31	18°10'20	superior conj	14925 Aug 02 06:27	24°♊19'38	-1°50'45
	14924 Sep 18 17:05	0°♌		minimum elong	14925 Aug 02 14:01	24°♊50'58	1°50'44
retrograde	14924 Sep 24 02:27	2°♌06'19			14925 Aug 05 15:52	0°♌	
evening set	14924 Sep 26 06:54	1°♌46'16		evening rise	14925 Aug 14 17:44	15°♌38'03	
	14924 Sep 29 18:54	30°♌		asc. node	14925 Aug 17 20:14	21°♌03'03	
desc. node	14924 Oct 02 15:28	27°♌45'51			14925 Aug 23 02:28	0°♌	
inferior conj	14924 Oct 03 13:06	26°♌58'54	-0°17'04	evening max el	14925 Aug 31 13:19	11°♌38'26	18°01'57
minimum elong	14924 Oct 03 12:31	27°♌00'11	0°16'29	retrograde	14925 Sep 07 01:58	15°♌01'18	
min. Earth dist.	14924 Oct 06 19:29	24°♌08'14	0.59414 AU	evening set	14925 Sep 09 14:20	14°♌30'35	
morning rise	14924 Oct 10 14:47	21°♌22'48		inferior conj	14925 Sep 16 04:09	9°♌23'36	1°00'47
direct	14924 Oct 17 02:39	19°♌26'04		minimum elong	14925 Sep 16 05:51	9°♌19'21	1°00'14
morning max el	14924 Oct 31 09:35	27°♌11'24	27°41'17	min. Earth dist.	14925 Sep 19 03:50	6°♌24'16	0.61706 AU
	14924 Nov 03 02:18	0°♍		desc. node	14925 Sep 19 12:57	6°♌02'36	
	14924 Nov 23 09:41	0°♌		morning rise	14925 Sep 22 18:44	3°♌21'47	
asc. node	14924 Nov 27 01:11	6°♌53'20		direct	14925 Sep 29 10:50	1°♌03'05	
morning set	14924 Dec 02 05:31	17°♌26'11		morning max el	14925 Oct 13 14:48	9°♌00'09	27°59'00
	14924 Dec 07 23:43	0°♎			14925 Oct 29 20:33	0°♎	
max. Earth dist.	14924 Dec 08 14:01	1°♎19'42	1.31097 AU	asc. node	14925 Nov 13 22:01	26°♎39'29	
					14925 Nov 15 13:44	0°♌	
superior conj	14924 Dec 09 05:30	2°♎46'15	1°31'38	morning set	14925 Nov 16 06:31	1°♌26'11	
minimum elong	14924 Dec 09 04:04	2°♎38'14	1°32'32	max. Earth dist.	14925 Nov 21 19:30	13°♌15'10	1.31506 AU
evening rise	14924 Dec 15 22:34	17°♎36'45					
	14924 Dec 21 23:08	0°♏		superior conj	14925 Nov 23 15:29	17°♌17'20	1°20'02
desc. node	14924 Dec 29 13:26	13°♏37'05		minimum elong	14925 Nov 23 13:23	17°♌05'43	1°20'44
	14925 Jan 10 10:15	0°♏			14925 Nov 29 09:27	0°♎	
evening max el	14925 Jan 13 15:57	3°♏20'19	26°16'39	evening rise	14925 Nov 30 08:40	2°♎06'06	
retrograde	14925 Jan 27 15:05	10°♏25'59			14925 Dec 15 04:41	0°♏	
evening set	14925 Feb 02 22:26	8°♏50'53		desc. node	14925 Dec 16 10:21	1°♏51'56	
min. Earth dist.	14925 Feb 07 05:21	6°♏13'46	0.58144 AU	evening max el	14925 Dec 26 06:28	13°♏53'42	24°50'31
inferior conj	14925 Feb 10 07:32	3°♏58'18	-3°53'28	retrograde	14926 Jan 09 00:36	20°♏46'22	
minimum elong	14925 Feb 10 15:59	3°♏42'49	3°50'10	evening set	14926 Jan 14 12:02	19°♏39'44	
	14925 Feb 16 22:04	30°♏		min. Earth dist.	14926 Jan 19 18:22	16°♏53'49	0.56252 AU
morning rise	14925 Feb 18 12:39	29°♏31'05		inferior conj	14926 Jan 22 06:16	15°♏18'39	-5°11'39
direct	14925 Feb 20 12:38	29°♏17'43		minimum elong	14926 Jan 22 14:56	15°♏04'51	5°09'00
asc. node	14925 Feb 22 23:12	29°♏38'37		morning rise	14926 Jan 30 20:06	11°♏12'54	
	14925 Feb 23 23:42	0°♏		direct	14926 Feb 02 01:41	10°♏59'06	
morning max el	14925 Feb 28 19:59	3°♏23'15	18°32'24	asc. node	14926 Feb 09 20:36	14°♏00'47	
morning set	14925 Mar 16 18:31	28°♏54'48		morning max el	14926 Feb 11 18:17	15°♏41'04	19°27'25
	14925 Mar 17 08:03	0°♐			14926 Feb 21 21:27	0°♏	
				morning set	14926 Feb 28 20:46	13°♏22'33	
superior conj	14925 Mar 25 19:02	16°♐05'31	0°15'06				
minimum elong	14925 Mar 25 20:04	16°♐10'19	0°14'46	superior conj	14926 Mar 08 23:06	29°♏31'28	0°44'48
behind sun begin	14925 Mar 25 17:24	15°♐57'54		minimum elong	14926 Mar 09 01:29	29°♏43'06	0°44'32
behind sun end	14925 Mar 25 22:45	16°♐22'42			14926 Mar 09 04:57	0°♐	
desc. node	14925 Mar 27 15:12	19°♐28'28		desc. node	14926 Mar 14 11:43	10°♐01'39	
max. Earth dist.	14925 Apr 02 05:02	29°♐23'10	1.40301 AU	max. Earth dist.	14926 Mar 15 11:28	11°♐50'43	1.38021 AU
	14925 Apr 02 13:34	0°♑		evening rise	14926 Mar 19 04:16	18°♐28'11	
evening rise	14925 Apr 06 09:36	6°♑29'53			14926 Mar 26 00:08	0°♑	
	14925 Apr 21 11:44	0°♊			14926 Apr 15 17:56	0°♊	
evening max el	14925 May 11 00:07	24°♊56'09	23°42'18	evening max el	14926 Apr 23 13:34	8°♊49'51	25°01'17
	14925 May 17 08:48	0°♋		retrograde	14926 May 05 12:02	15°♊46'41	
retrograde	14925 May 21 21:05	1°♋19'14		asc. node	14926 May 08 17:16	15°♊02'45	
asc. node	14925 May 21 20:01	1°♋19'13		evening set	14926 May 11 06:20	13°♊21'32	
	14925 May 25 23:02	30°♋		min. Earth dist.	14926 May 15 16:06	8°♊25'09	0.68216 AU
evening set	14925 May 27 03:52	29°♊04'53		inferior conj	14926 May 16 20:46	6°♊50'52	2°15'21
min. Earth dist.	14925 May 31 21:39	23°♊31'50	0.68871 AU	minimum elong	14926 May 16 18:37	6°♊57'57	2°13'54
inferior conj	14925 Jun 01 13:29	22°♊37'38	2°44'01	morning rise	14926 May 22 07:13	0°♊55'31	
minimum elong	14925 Jun 01 11:41	22°♊43'46	2°42'42		14926 May 24 00:17	30°♋	
morning rise	14925 Jun 06 19:29	16°♊32'57		direct	14926 May 25 23:21	29°♋38'07	

	14926 May 28 00:01	0° Π		direct	14927 May 09 22:43	14° \mathcal{B} 15'46	
morning max el	14926 Jun 02 02:41	3° Π 33'28	19°25'39	morning max el	14927 May 16 12:23	17° \mathcal{B} 46'09	18°35'59
desc. node	14926 Jun 10 13:06	13° Π 57'59			14927 May 25 23:33	0° Π	
greatest brilliancy	14926 Jun 14 17:49	20° Π 00'46	-0.7m	desc. node	14927 May 28 10:01	3° Π 40'14	
	14926 Jun 21 09:36	0° \mathcal{E}		morning set	14927 Jun 06 19:32	18° Π 17'21	
morning set	14926 Jun 27 03:17	8° \mathcal{E} 46'17			14927 Jun 14 07:08	0° \mathcal{E}	
max. Earth dist.	14926 Jul 09 12:24	28° \mathcal{E} 00'03	1.45212 AU				
	14926 Jul 10 18:50	0° \mathcal{Q}		superior conj	14927 Jun 22 20:15	13° \mathcal{E} 20'04	-2°12'06
				minimum elong	14927 Jun 22 16:58	13° \mathcal{E} 07'13	2°13'00
superior conj	14926 Jul 13 09:19	4° \mathcal{Q} 07'36	-2°10'31	max. Earth dist.	14927 Jun 22 07:09	12° \mathcal{E} 28'56	1.45875 AU
minimum elong	14926 Jul 13 13:37	4° \mathcal{Q} 24'41	2°11'16		14927 Jul 03 11:19	0° \mathcal{Q}	
evening rise	14926 Jul 27 14:59	27° \mathcal{Q} 18'12		evening rise	14927 Jul 08 11:32	7° \mathcal{Q} 55'51	
	14926 Jul 29 05:56	0° \mathcal{P}		greatest brilliancy	14927 Jul 16 03:09	20° \mathcal{Q} 03'14	-0.9m
asc. node	14926 Aug 04 16:51	10° \mathcal{P} 37'55		asc. node	14927 Jul 22 13:34	29° \mathcal{Q} 51'46	
evening max el	14926 Aug 15 03:55	25° \mathcal{P} 08'36	18°12'07		14927 Jul 22 15:50	0° \mathcal{P}	
retrograde	14926 Aug 21 12:32	28° \mathcal{P} 30'13		evening max el	14927 Jul 29 16:34	8° \mathcal{P} 51'50	18°39'59
evening set	14926 Aug 24 09:24	27° \mathcal{P} 45'55		retrograde	14927 Aug 05 06:04	12° \mathcal{P} 25'13	
inferior conj	14926 Aug 30 10:11	22° \mathcal{P} 21'57	1°57'55	evening set	14927 Aug 08 11:59	11° \mathcal{P} 25'08	
minimum elong	14926 Aug 30 12:34	22° \mathcal{P} 15'11	1°56'59	inferior conj	14927 Aug 14 03:21	5° \mathcal{P} 46'17	2°36'33
min. Earth dist.	14926 Sep 01 22:07	19° \mathcal{P} 33'28	0.63888 AU	minimum elong	14927 Aug 14 05:28	5° \mathcal{P} 39'45	2°35'37
morning rise	14926 Sep 05 13:59	16° \mathcal{P} 04'22		min. Earth dist.	14927 Aug 16 01:30	3° \mathcal{P} 24'16	0.65791 AU
desc. node	14926 Sep 06 10:27	15° \mathcal{P} 27'02			14927 Aug 19 04:37	30° \mathcal{R} \mathcal{Q}	
direct	14926 Sep 12 04:34	13° \mathcal{P} 31'06		morning rise	14927 Aug 19 21:53	29° \mathcal{Q} 21'37	
morning max el	14926 Sep 26 00:29	21° \mathcal{P} 30'52	27°39'11	desc. node	14927 Aug 24 07:56	26° \mathcal{Q} 56'51	
	14926 Oct 03 10:19	0° \mathcal{L}		direct	14927 Aug 26 06:23	26° \mathcal{Q} 42'50	
	14926 Oct 23 00:21	0° \mathcal{M}			14927 Sep 03 08:29	0° \mathcal{P}	
morning set	14926 Oct 30 23:35	15° \mathcal{M} 01'30		morning max el	14927 Sep 08 11:47	4° \mathcal{P} 31'57	26°48'07
asc. node	14926 Oct 31 18:46	16° \mathcal{M} 37'34			14927 Sep 27 22:06	0° \mathcal{L}	
max. Earth dist.	14926 Nov 04 18:30	24° \mathcal{M} 51'20	1.32466 AU	morning set	14927 Oct 14 05:47	28° \mathcal{L} 05'36	
	14926 Nov 07 04:24	0° \mathcal{X}			14927 Oct 15 05:38	0° \mathcal{M}	
				max. Earth dist.	14927 Oct 18 08:02	6° \mathcal{M} 05'58	1.33968 AU
superior conj	14926 Nov 07 21:58	1° \mathcal{X} 34'50	1°02'30	asc. node	14927 Oct 18 15:27	6° \mathcal{M} 43'08	
minimum elong	14926 Nov 07 19:39	1° \mathcal{X} 22'17	1°02'57				
evening rise	14926 Nov 14 19:38	16° \mathcal{X} 35'26		superior conj	14927 Oct 22 22:40	15° \mathcal{M} 33'16	0°39'08
	14926 Nov 21 08:42	0° \mathcal{Z}		minimum elong	14927 Oct 22 20:47	15° \mathcal{M} 23'21	0°39'25
desc. node	14926 Dec 03 07:23	19° \mathcal{Z} 04'18			14927 Oct 29 18:09	0° \mathcal{X}	
evening max el	14926 Dec 07 15:58	23° \mathcal{Z} 53'58	23°08'42	evening rise	14927 Oct 30 05:37	1° \mathcal{X} 00'29	
	14926 Dec 17 09:55	0° \approx			14927 Nov 15 16:31	0° \mathcal{Z}	
retrograde	14926 Dec 20 21:26	0° \approx 27'43		evening max el	14927 Nov 19 05:50	3° \mathcal{Z} 58'53	21°29'17
	14926 Dec 24 10:48	30° \mathcal{R} \mathcal{Z}		desc. node	14927 Nov 20 04:32	4° \mathcal{Z} 52'39	
evening set	14926 Dec 25 03:04	29° \mathcal{Z} 48'46		retrograde	14927 Dec 01 08:49	9° \mathcal{Z} 59'06	
min. Earth dist.	14927 Jan 01 01:51	26° \mathcal{Z} 34'30	0.54927 AU	evening set	14927 Dec 04 06:50	9° \mathcal{Z} 39'39	
inferior conj	14927 Jan 02 09:23	25° \mathcal{Z} 49'09	-5°56'57	inferior conj	14927 Dec 13 01:12	5° \mathcal{Z} 47'58	-5°46'13
minimum elong	14927 Jan 02 12:16	25° \mathcal{Z} 44'59	5°55'51	minimum elong	14927 Dec 12 18:59	5° \mathcal{Z} 56'40	5°44'28
morning rise	14927 Jan 10 22:57	21° \mathcal{Z} 58'58		min. Earth dist.	14927 Dec 13 07:37	5° \mathcal{Z} 38'57	0.54438 AU
direct	14927 Jan 13 19:46	21° \mathcal{Z} 39'34		morning rise	14927 Dec 21 07:44	1° \mathcal{Z} 59'01	
morning max el	14927 Jan 25 02:35	27° \mathcal{Z} 04'46	20°45'44	direct	14927 Dec 25 03:48	1° \mathcal{Z} 27'03	
asc. node	14927 Jan 27 17:56	29° \mathcal{Z} 53'49		morning max el	14928 Jan 06 20:38	7° \mathcal{Z} 35'19	22°24'38
	14927 Jan 27 20:02	0° \approx		asc. node	14928 Jan 14 15:13	16° \mathcal{Z} 59'57	
morning set	14927 Feb 13 04:32	28° \approx 02'30			14928 Jan 22 07:47	0° \approx	
	14927 Feb 14 03:12	0° \mathcal{H}		morning set	14928 Jan 28 15:23	12° \approx 47'11	
superior conj	14927 Feb 20 15:17	13° \mathcal{H} 29'32	1°07'54	superior conj	14928 Feb 04 16:02	27° \approx 49'07	1°24'18
minimum elong	14927 Feb 20 17:53	13° \mathcal{H} 42'50	1°07'55	minimum elong	14928 Feb 04 18:08	28° \approx 00'14	1°24'41
max. Earth dist.	14927 Feb 25 19:35	23° \mathcal{H} 49'09	1.35839 AU		14928 Feb 05 16:47	0° \mathcal{H}	
desc. node	14927 Mar 01 08:15	0° \mathcal{Y} 30'53		max. Earth dist.	14928 Feb 08 09:55	5° \mathcal{H} 38'46	1.33965 AU
	14927 Mar 01 01:36	0° \mathcal{Y}		evening rise	14928 Feb 12 20:28	14° \mathcal{H} 30'51	
evening rise	14927 Mar 01 17:05	1° \mathcal{Y} 11'46		desc. node	14928 Feb 16 04:48	20° \mathcal{H} 51'33	
	14927 Mar 19 02:30	0° \mathcal{B}			14928 Feb 21 07:47	0° \mathcal{Y}	
evening max el	14927 Apr 06 03:03	22° \mathcal{B} 40'35	26°10'51		14928 Mar 12 20:17	0° \mathcal{B}	
retrograde	14927 Apr 18 22:16	29° \mathcal{B} 59'51		evening max el	14928 Mar 18 16:47	6° \mathcal{B} 20'23	27°03'34
evening set	14927 Apr 25 03:08	27° \mathcal{B} 28'29		retrograde	14928 Apr 01 02:43	13° \mathcal{B} 49'36	
asc. node	14927 Apr 25 14:33	27° \mathcal{B} 04'02		evening set	14928 Apr 07 16:17	11° \mathcal{B} 17'57	
min. Earth dist.	14927 Apr 29 06:25	23° \mathcal{B} 07'31	0.67109 AU	asc. node	14928 Apr 11 11:55	7° \mathcal{B} 37'36	
inferior conj	14927 Apr 30 23:53	20° \mathcal{B} 59'19	1°35'36	min. Earth dist.	14928 Apr 11 14:35	7° \mathcal{B} 30'13	0.65590 AU
minimum elong	14927 Apr 30 21:53	21° \mathcal{B} 05'31	1°34'15	inferior conj	14928 Apr 13 20:28	4° \mathcal{B} 56'40	0°43'54
morning rise	14927 May 06 17:28	15° \mathcal{B} 14'30		minimum elong	14928 Apr 13 19:20	4° \mathcal{B} 59'56	0°43'00

	14928 Apr 18 23:26	30° Υ		minimum elong	14929 Mar 28 08:27	18° Υ 34'27	0°20'24
morning rise	14928 Apr 19 23:55	29° Υ 24'09		asc. node	14929 Mar 29 09:20	17° Υ 31'04	
direct	14928 Apr 22 19:25	28° Υ 41'26		morning rise	14929 Apr 03 23:45	13° Υ 18'19	
	14928 Apr 26 16:51	0° B		direct	14929 Apr 06 10:48	12° Υ 48'21	
morning max el	14928 Apr 29 03:17	1° B 59'22	18°03'05	morning max el	14929 Apr 12 20:46	16° Υ 05'21	17°47'28
desc. node	14928 May 14 06:49	23° B 43'02			14929 Apr 22 20:36	0° B	
morning set	14928 May 17 14:10	29° B 05'35		morning set	14929 Apr 29 11:48	11° B 11'16	
	14928 May 18 03:34	0° II		desc. node	14929 May 01 03:34	14° B 00'26	
					14929 May 10 17:15	0° II	
superior conj	14928 Jun 01 06:48	22° II 37'52	-1°53'49				
minimum elong	14928 May 31 22:16	22° II 04'14	1°54'07	superior conj	14929 May 12 08:57	2° II 41'45	-1°21'08
max. Earth dist.	14928 Jun 04 03:12	27° II 06'04	1.45794 AU	minimum elong	14929 May 12 01:11	2° II 10'14	1°21'01
	14928 Jun 05 23:46	0° B		max. Earth dist.	14929 May 17 22:27	11° II 37'01	1.44981 AU
evening rise	14928 Jun 17 09:27	17° B 39'30		evening rise	14929 May 27 20:29	27° II 03'08	
	14928 Jun 25 10:36	0° Ω			14929 May 29 18:50	0° B	
greatest brilliancy	14928 Jun 30 05:21	7° Ω 11'36	-0.7m		14929 Jun 19 12:16	0° Ω	
asc. node	14928 Jul 08 10:21	18° Ω 36'32		evening max el	14929 Jun 25 03:32	6° Ω 33'11	20°24'12
evening max el	14928 Jul 12 00:55	22° Ω 41'28	19°24'36	asc. node	14929 Jun 25 07:13	6° Ω 42'22	
retrograde	14928 Jul 19 03:28	26° Ω 39'04		retrograde	14929 Jul 03 02:21	11° Ω 06'08	
evening set	14928 Jul 22 19:01	25° Ω 21'51		evening set	14929 Jul 07 04:12	9° Ω 31'22	
inferior conj	14928 Jul 28 04:20	19° Ω 29'34	2°59'37	inferior conj	14929 Jul 12 10:26	3° Ω 26'50	3°09'32
minimum elong	14928 Jul 28 05:39	19° Ω 25'11	2°58'45	minimum elong	14929 Jul 12 10:48	3° Ω 25'36	3°08'38
min. Earth dist.	14928 Jul 29 12:11	17° Ω 44'49	0.67303 AU	min. Earth dist.	14929 Jul 13 04:20	2° Ω 25'32	0.68363 AU
morning rise	14928 Aug 02 15:44	13° Ω 04'05			14929 Jul 15 00:26	30° R B	
direct	14928 Aug 08 14:53	10° Ω 28'48		morning rise	14929 Jul 17 17:05	27° B 04'32	
desc. node	14928 Aug 10 05:23	10° Ω 38'39		direct	14929 Jul 23 04:47	24° B 40'12	
morning max el	14928 Aug 20 22:46	17° Ω 51'21	25°34'46	desc. node	14929 Jul 28 02:48	26° B 12'49	
	14928 Aug 31 03:38	0° B			14929 Aug 01 23:49	0° Ω	
	14928 Sep 19 21:58	0° B		morning max el	14929 Aug 03 09:17	1° Ω 21'37	24°08'41
morning set	14928 Sep 25 21:30	10° B 29'40			14929 Aug 25 02:38	0° B	
max. Earth dist.	14928 Sep 29 11:59	17° B 09'54	1.35950 AU	morning set	14929 Sep 07 18:24	22° B 03'09	
asc. node	14928 Oct 04 12:05	26° B 52'07		max. Earth dist.	14929 Sep 11 10:45	28° B 29'45	1.38259 AU
					14929 Sep 12 06:55	0° B	
superior conj	14928 Oct 05 14:51	29° B 05'43	0°10'16				
minimum elong	14928 Oct 05 14:13	29° B 02'34	0°10'32	superior conj	14929 Sep 18 19:00	12° B 03'06	-0°23'11
behind sun begin	14928 Oct 05 09:27	28° B 38'39		minimum elong	14929 Sep 18 20:37	12° B 10'45	0°22'47
behind sun end	14928 Oct 05 19:00	29° B 26'31		asc. node	14929 Sep 21 08:41	17° B 00'18	
	14928 Oct 06 01:39	0° B		evening rise	14929 Sep 27 13:52	29° B 15'09	
evening rise	14928 Oct 13 12:32	15° B 16'04			14929 Sep 27 22:57	0° B	
	14928 Oct 21 01:27	0° A		evening max el	14929 Oct 14 00:48	26° B 11'51	19°03'55
evening max el	14928 Oct 31 08:15	14° A 41'14	20°05'52		14929 Oct 19 10:36	0° A	
desc. node	14928 Nov 06 01:47	18° A 51'31		retrograde	14929 Oct 22 23:14	0° A 41'26	
retrograde	14928 Nov 10 21:08	19° A 56'06		desc. node	14929 Oct 23 23:08	0° A 38'17	
evening set	14928 Nov 12 23:21	19° A 44'39		evening set	14929 Oct 24 20:12	0° A 30'24	
inferior conj	14928 Nov 21 19:47	15° A 46'57	-4°37'40		14929 Oct 26 15:45	30° R B	
minimum elong	14928 Nov 21 09:42	16° A 02'05	4°33'54	inferior conj	14929 Nov 02 05:55	26° B 15'47	-2°55'53
min. Earth dist.	14928 Nov 23 14:34	14° A 42'49	0.54893 AU	minimum elong	14929 Nov 01 22:34	26° B 28'23	2°52'21
morning rise	14928 Nov 29 19:04	11° A 40'19		min. Earth dist.	14929 Nov 05 01:33	24° B 20'00	0.56202 AU
direct	14928 Dec 04 15:07	10° A 49'28		morning rise	14929 Nov 09 22:16	21° B 35'45	
morning max el	14928 Dec 18 06:15	17° A 33'21	24°14'01	direct	14929 Nov 15 14:02	20° B 21'12	
	14928 Dec 28 08:19	0° B		morning max el	14929 Nov 29 16:48	27° B 33'35	25°56'26
asc. node	14928 Dec 31 12:25	5° B 02'16			14929 Dec 02 02:15	0° A	
morning set	14929 Jan 12 03:23	27° B 31'22		asc. node	14929 Dec 18 09:33	23° A 45'56	
	14929 Jan 13 06:56	0° \approx			14929 Dec 21 16:59	0° B	
				morning set	14929 Dec 27 14:39	12° B 09'12	
superior conj	14929 Jan 18 22:36	12° \approx 22'33	1°34'13				
minimum elong	14929 Jan 18 23:47	12° \approx 29'01	1°34'57	superior conj	14930 Jan 03 08:38	27° B 02'18	1°37'56
max. Earth dist.	14929 Jan 21 08:13	17° \approx 34'46	1.32522 AU	minimum elong	14930 Jan 03 08:45	27° B 02'58	1°38'52
evening rise	14929 Jan 26 11:09	28° \approx 17'03		max. Earth dist.	14930 Jan 04 12:51	29° B 38'55	1.31558 AU
	14929 Jan 27 07:38	0° H			14930 Jan 04 16:40	0° \approx	
desc. node	14929 Feb 02 01:26	10° H 59'06		evening rise	14930 Jan 10 10:08	12° \approx 22'12	
	14929 Feb 13 12:20	0° Υ			14930 Jan 19 11:37	0° H	
evening max el	14929 Mar 01 05:32	19° Υ 38'05	27°31'58	desc. node	14930 Jan 19 22:07	0° H 46'54	
retrograde	14929 Mar 15 00:13	27° Υ 06'58			14930 Feb 09 07:18	0° Υ	
evening set	14929 Mar 21 19:30	24° Υ 41'44		evening max el	14930 Feb 11 14:55	2° Υ 19'54	27°29'48
min. Earth dist.	14929 Mar 25 14:33	21° Υ 23'52	0.63725 AU	retrograde	14930 Feb 25 13:42	9° Υ 42'19	
inferior conj	14929 Mar 28 07:48	18° Υ 36'07	-0°20'26	evening set	14930 Mar 04 10:04	7° Υ 30'42	

min. Earth dist.	14930 Mar 08 04:37	4° Υ 36'58	0.61605 AU	inferior conj	14931 Feb 21 13:09	14° X 24'47	-3°03'04
inferior conj	14930 Mar 11 06:36	1° Υ 48'44	-1°37'09	minimum elong	14931 Feb 21 19:59	14° X 11'12	3°00'11
minimum elong	14930 Mar 11 10:02	1° Υ 40'52	1°35'41	morning rise	14931 Mar 01 10:40	9° X 45'29	
	14930 Mar 13 07:46	30° X		direct	14931 Mar 03 10:49	9° X 30'34	
asc. node	14930 Mar 16 06:48	27° X 50'41		asc. node	14931 Mar 03 04:16	9° X 30'51	
morning rise	14930 Mar 18 13:04	26° X 48'46		morning max el	14931 Mar 11 02:50	13° X 18'54	18°10'58
direct	14930 Mar 20 17:22	26° X 28'05			14931 Mar 22 09:03	0° Υ	
morning max el	14930 Mar 27 13:49	29° X 55'14	17°49'44	morning set	14931 Mar 26 17:57	8° Υ 05'53	
	14930 Mar 27 15:45	0° Υ		desc. node	14931 Apr 04 20:47	24° Υ 59'42	
morning set	14930 Apr 12 07:03	24° Υ 17'25					
	14930 Apr 15 11:47	0° Z		superior conj	14931 Apr 05 10:43	26° Υ 02'21	-0°04'45
desc. node	14930 Apr 18 00:13	4° Z 27'24		minimum elong	14931 Apr 05 10:19	26° Υ 00'35	0°05'01
				behind sun begin	14931 Apr 05 03:05	25° Υ 28'02	
superior conj	14930 Apr 23 10:24	13° Z 50'51	-0°42'32	behind sun end	14931 Apr 05 17:33	26° Υ 33'04	
minimum elong	14930 Apr 23 06:27	13° Z 34'02	0°42'32		14931 Apr 07 16:08	0° Z	
max. Earth dist.	14930 Apr 30 14:28	25° Z 45'55	1.43514 AU	max. Earth dist.	14931 Apr 13 01:25	9° Z 17'10	1.41558 AU
	14930 May 03 05:33	0° II		evening rise	14931 Apr 17 22:38	17° Z 21'07	
evening rise	14930 May 07 12:57	6° II 48'04			14931 Apr 25 23:55	0° II	
	14930 May 23 00:59	0° E			14931 May 17 17:49	0° E	
evening max el	14930 Jun 08 00:18	20° E 25'18	21°35'57	evening max el	14931 May 21 16:28	4° E 17'17	22°55'25
asc. node	14930 Jun 12 04:12	23° E 56'43		asc. node	14931 May 30 01:17	10° E 02'44	
retrograde	14930 Jun 17 00:57	25° E 41'16		retrograde	14931 May 31 21:37	10° E 17'51	
evening set	14930 Jun 21 13:40	23° E 49'39		evening set	14931 Jun 05 21:40	8° E 11'04	
inferior conj	14930 Jun 26 19:26	17° E 34'18	3°07'57	inferior conj	14931 Jun 11 05:17	1° E 47'08	2°55'45
minimum elong	14930 Jun 26 18:50	17° E 36'25	3°06'56	minimum elong	14931 Jun 11 03:51	1° E 52'06	2°54'32
min. Earth dist.	14930 Jun 26 23:54	17° E 18'45	0.68939 AU	min. Earth dist.	14931 Jun 10 20:46	2° E 16'40	0.69030 AU
morning rise	14930 Jul 01 23:49	11° E 17'37			14931 Jun 12 12:29	30° X II	
direct	14930 Jul 06 23:07	9° E 09'28		morning rise	14931 Jun 16 09:57	25° II 37'34	
desc. node	14930 Jul 15 00:07	13° E 14'06		direct	14931 Jun 20 20:43	23° II 48'32	
morning max el	14930 Jul 16 21:08	15° E 01'00	22°39'23	morning max el	14931 Jun 29 12:56	28° II 49'04	21°14'53
	14930 Jul 29 01:51	0° Ω			14931 Jun 30 16:26	0° E	
	14930 Aug 18 01:38	0° P		desc. node	14931 Jul 01 21:19	1° E 19'15	
morning set	14930 Aug 19 16:31	2° P 37'52			14931 Jul 22 16:25	0° Ω	
max. Earth dist.	14930 Aug 24 10:42	10° P 32'42	1.40637 AU	morning set	14931 Jul 30 14:25	12° Ω 10'25	
				max. Earth dist.	14931 Aug 06 15:41	23° Ω 26'54	1.42803 AU
superior conj	14930 Sep 01 07:04	24° P 16'41	-0°59'06		14931 Aug 10 14:57	0° P	
minimum elong	14930 Sep 01 11:39	24° P 37'21	0°58'33				
	14930 Sep 04 10:16	0° A		superior conj	14931 Aug 13 22:32	5° P 36'00	-1°33'41
asc. node	14930 Sep 08 05:17	7° A 04'42		minimum elong	14931 Aug 14 05:42	6° P 06'38	1°33'21
evening rise	14930 Sep 11 06:30	12° A 50'32		evening rise	14931 Aug 25 10:14	25° P 50'44	
	14930 Sep 20 19:33	0° M		asc. node	14931 Aug 26 01:51	27° P 00'58	
evening max el	14930 Sep 27 04:47	8° M 28'29	18°23'52		14931 Aug 27 17:42	0° A	
retrograde	14930 Oct 04 20:37	12° M 21'46		evening max el	14931 Sep 10 16:00	21° A 21'28	18°04'26
evening set	14930 Oct 06 21:02	12° M 06'18		retrograde	14931 Sep 17 11:36	24° A 51'24	
desc. node	14930 Oct 10 20:32	10° M 16'03		evening set	14931 Sep 19 19:11	24° A 27'22	
inferior conj	14930 Oct 14 13:34	7° M 30'50	-1°11'07	inferior conj	14931 Sep 26 18:06	19° A 31'34	0°18'32
minimum elong	14930 Oct 14 10:50	7° M 36'21	1°09'29	minimum elong	14931 Sep 26 18:42	19° A 30'11	0°18'32
min. Earth dist.	14930 Oct 17 19:36	4° M 54'47	0.58135 AU	desc. node	14931 Sep 27 18:00	18° A 35'30	
morning rise	14930 Oct 21 21:08	2° M 13'19		min. Earth dist.	14931 Sep 29 22:36	16° A 34'19	0.60386 AU
direct	14930 Oct 28 03:15	0° M 31'50		morning rise	14931 Oct 03 15:03	13° A 42'59	
morning max el	14930 Nov 11 10:30	8° M 07'32	27°13'24	direct	14931 Oct 10 05:27	11° A 35'53	
	14930 Nov 27 23:03	0° J		morning max el	14931 Oct 24 11:57	19° A 28'10	27°53'39
asc. node	14930 Dec 05 06:35	13° J 00'06			14931 Nov 02 11:34	0° M	
morning set	14930 Dec 11 23:28	26° J 35'59			14931 Nov 20 19:29	0° J	
	14930 Dec 13 13:19	0° Z		asc. node	14931 Nov 22 03:30	2° J 36'14	
				morning set	14931 Nov 26 03:54	10° J 46'53	
superior conj	14930 Dec 18 20:06	11° Z 42'43	1°35'38	max. Earth dist.	14931 Dec 02 03:48	23° J 46'20	1.31193 AU
minimum elong	14930 Dec 18 19:11	11° Z 37'36	1°36'36				
max. Earth dist.	14930 Dec 18 20:37	11° Z 45'35	1.31107 AU	superior conj	14931 Dec 03 07:10	26° J 18'33	1°27'27
evening rise	14930 Dec 25 15:01	26° Z 40'21		minimum elong	14931 Dec 03 05:24	26° J 08'45	1°28'16
	14930 Dec 27 04:48	0° \approx			14931 Dec 04 22:51	0° Z	
desc. node	14931 Jan 06 18:53	20° \approx 07'12		evening rise	14931 Dec 09 23:44	11° Z 06'33	
	14931 Jan 13 00:59	0° X			14931 Dec 19 10:37	0° \approx	
evening max el	14931 Jan 24 18:11	14° X 14'05	26°53'10	desc. node	14931 Dec 24 15:44	8° \approx 49'43	
retrograde	14931 Feb 07 18:04	21° X 27'08		evening max el	14932 Jan 06 13:25	25° \approx 15'42	25°43'06
evening set	14931 Feb 14 08:40	19° X 36'35			14932 Jan 12 17:38	0° X	
min. Earth dist.	14931 Feb 18 08:13	16° X 57'20	0.59379 AU	retrograde	14932 Jan 20 11:30	2° X 17'06	

evening set	14932 Jan 26 11:27	0° H 53'53		retrograde	14932 Dec 31 15:32	12° \approx 17'20	
	14932 Jan 28 06:16	30° \approx		evening set	14933 Jan 05 15:01	11° \approx 23'20	
min. Earth dist.	14932 Jan 31 02:16	28° \approx 15'05	0.57277 AU	min. Earth dist.	14933 Jan 11 12:46	8° \approx 27'37	0.55594 AU
inferior conj	14932 Feb 03 00:06	26° \approx 14'58	-4°29'02	inferior conj	14933 Jan 13 14:00	7° \approx 13'08	-5°36'32
minimum elong	14932 Feb 03 09:13	25° \approx 59'16	4°25'47	minimum elong	14933 Jan 13 21:00	7° \approx 02'30	5°34'36
morning rise	14932 Feb 11 09:52	21° \approx 57'20		morning rise	14933 Jan 22 04:48	3° \approx 14'45	
direct	14932 Feb 13 10:56	21° \approx 44'27		direct	14933 Jan 24 15:35	2° \approx 59'16	
asc. node	14932 Feb 18 01:42	22° \approx 54'21		asc. node	14933 Feb 03 23:05	7° \approx 56'38	
morning max el	14932 Feb 22 07:48	26° \approx 04'45	18°53'02	morning max el	14933 Feb 04 00:24	7° \approx 59'48	19°57'54
	14932 Feb 25 17:40	0° H			14933 Feb 18 09:22	0° H	
morning set	14932 Mar 09 15:45	22° H 22'55		morning set	14933 Feb 21 20:42	6° H 56'34	
	14932 Mar 13 12:56	0° Y					
superior conj	14932 Mar 18 06:00	9° Y 05'10	0°28'28	superior conj	14933 Mar 01 15:40	22° H 45'36	0°55'25
minimum elong	14932 Mar 18 07:46	9° Y 13'33	0°28'06	minimum elong	14933 Mar 01 18:15	22° H 58'31	0°55'14
desc. node	14932 Mar 21 17:20	15° Y 33'55			14933 Mar 05 08:23	0° Y	
max. Earth dist.	14932 Mar 25 08:21	22° Y 06'00	1.39330 AU	max. Earth dist.	14933 Mar 07 14:56	4° Y 18'53	1.37069 AU
evening rise	14932 Mar 29 05:38	28° Y 50'31		desc. node	14933 Mar 08 13:52	6° Y 05'40	
	14932 Mar 29 22:02	0° B		evening rise	14933 Mar 11 08:28	11° Y 09'18	
	14932 Apr 18 10:20	0° II			14933 Mar 22 13:47	0° B	
evening max el	14932 May 03 06:27	18° II 11'21	24°16'32	evening max el	14933 Apr 13 19:12	0° II	
retrograde	14932 May 14 15:03	24° II 50'31		retrograde	14933 Apr 15 20:03	2° II 05'09	25°32'29
asc. node	14932 May 15 22:27	24° II 43'05		asc. node	14933 Apr 28 04:01	9° II 12'28	
evening set	14932 May 20 02:38	22° II 31'17		evening set	14933 May 02 19:42	7° II 43'01	
min. Earth dist.	14932 May 24 16:50	17° II 13'38	0.68650 AU	min. Earth dist.	14933 May 04 02:54	6° II 44'22	
inferior conj	14932 May 25 14:05	16° II 01'52	2°33'10	inferior conj	14933 May 08 09:52	2° II 03'01	0.67804 AU
minimum elong	14932 May 25 12:05	16° II 08'36	2°31'47	minimum elong	14933 May 09 19:52	0° II 13'46	1°59'55
morning rise	14932 May 30 21:38	10° II 00'44			14933 May 09 17:43	0° II 20'43	1°58'28
direct	14932 Jun 03 20:23	8° II 31'49			14933 May 10 00:09	30° R B	
morning max el	14932 Jun 11 11:12	12° II 47'46	20°01'17	morning rise	14933 May 15 09:00	24° B 22'28	
desc. node	14932 Jun 17 18:24	20° II 11'33		direct	14933 May 18 20:28	23° B 13'05	
	14932 Jun 24 19:17	0° B		morning max el	14933 May 25 16:54	26° B 56'05	19°02'25
morning set	14932 Jul 08 19:14	21° B 00'58			14933 May 28 12:15	0° II	
	14932 Jul 14 14:20	0° Q		desc. node	14933 Jun 04 15:23	9° II 38'07	
max. Earth dist.	14932 Jul 19 03:13	7° Q 08'58	1.44515 AU	greatest brilliancy	14933 Jun 07 19:41	14° II 20'44	-0.7m
				morning set	14933 Jun 18 01:32	0° B 01'25	
superior conj	14932 Jul 24 14:30	15° Q 56'14	-2°01'00		14933 Jun 18 01:10	0° B	
minimum elong	14932 Jul 24 21:22	16° Q 24'08	2°01'19	max. Earth dist.	14933 Jul 01 20:29	21° B 27'05	1.45593 AU
	14932 Aug 02 02:18	0° H					
evening rise	14932 Aug 06 20:03	8° H 03'19		superior conj	14933 Jul 04 09:13	25° B 25'25	-2°13'41
asc. node	14932 Aug 11 22:26	16° H 44'58		minimum elong	14933 Jul 04 10:31	25° B 30'34	2°14'36
	14932 Aug 20 08:22	0° B			14933 Jul 07 06:49	0° Q	
evening max el	14932 Aug 24 06:26	4° B 41'03	18°04'07	evening rise	14933 Jul 19 07:01	19° Q 17'04	
retrograde	14932 Aug 30 16:10	8° B 01'28			14933 Jul 25 21:20	0° H	
evening set	14932 Sep 02 08:08	7° B 25'18		asc. node	14933 Jul 29 19:05	6° H 11'37	
inferior conj	14932 Sep 08 15:59	2° B 11'05	1°27'26	evening max el	14933 Aug 07 20:38	18° H 18'08	18°21'53
minimum elong	14932 Sep 08 18:08	2° B 05'24	1°26'40	retrograde	14933 Aug 14 06:05	21° H 42'47	
	14932 Sep 10 17:23	30° R H		evening set	14933 Aug 17 06:51	20° H 51'49	
min. Earth dist.	14932 Sep 11 11:14	29° H 13'58	0.62665 AU	inferior conj	14933 Aug 23 03:12	15° H 21'17	2°16'22
desc. node	14932 Sep 13 15:29	27° H 10'16		minimum elong	14933 Aug 23 05:33	15° H 14'19	2°15'25
morning rise	14932 Sep 15 01:52	26° H 01'32		min. Earth dist.	14933 Aug 25 09:22	12° H 42'41	0.64746 AU
direct	14932 Sep 21 18:11	23° H 35'13		morning rise	14933 Aug 29 02:52	9° H 00'04	
	14932 Oct 04 03:36	0° B		desc. node	14933 Aug 31 12:58	7° H 24'24	
morning max el	14932 Oct 05 19:10	1° B 34'52	27°54'45	direct	14933 Sep 04 15:27	6° H 23'26	
	14932 Oct 26 17:54	0° M		morning max el	14933 Sep 18 05:41	14° H 19'32	27°20'46
asc. node	14932 Nov 08 00:18	22° M 27'45			14933 Sep 30 23:55	0° B	
morning set	14932 Nov 09 01:47	24° M 36'34			14933 Oct 19 09:56	0° M	
	14932 Nov 11 16:17	0° J		morning set	14933 Oct 23 14:37	7° M 59'21	
max. Earth dist.	14932 Nov 14 06:43	5° J 32'54	1.31841 AU	asc. node	14933 Oct 25 21:01	12° M 29'33	
				max. Earth dist.	14933 Oct 28 02:02	17° M 00'06	1.33044 AU
superior conj	14932 Nov 16 15:54	10° J 44'19	1°13'20				
minimum elong	14932 Nov 16 13:38	10° J 31'56	1°13'55	superior conj	14933 Oct 31 20:15	24° M 54'40	0°53'19
evening rise	14932 Nov 23 10:24	25° J 36'04		minimum elong	14933 Oct 31 18:01	24° M 42'46	0°53'40
	14932 Nov 25 11:54	0° B			14933 Nov 03 05:03	0° J	
desc. node	14932 Dec 10 12:42	26° B 40'00		evening rise	14933 Nov 07 21:13	10° J 04'30	
	14932 Dec 13 01:15	0° \approx			14933 Nov 18 01:20	0° B	
evening max el	14932 Dec 18 01:12	5° \approx 31'49	24°08'14	desc. node	14933 Nov 27 09:47	13° B 19'30	
				evening max el	14933 Nov 29 11:23	15° B 29'21	22°25'09

retrograde	14933 Dec 12 06:55	21° ♄ 50'07			14934 Nov 16 20:56	0° ♄	
evening set	14933 Dec 15 22:48	21° ♄ 20'41		retrograde	14934 Nov 22 17:16	1° ♄ 28'10	
inferior conj	14933 Dec 24 10:49	17° ♄ 26'30	-6°00'01	evening set	14934 Nov 25 05:01	1° ♄ 13'15	
minimum elong	14933 Dec 24 09:45	17° ♄ 27'59	5°59'02		14934 Nov 28 23:48	30° ♄	
min. Earth dist.	14933 Dec 23 18:49	17° ♄ 48'57	0.54611 AU	inferior conj	14934 Dec 04 01:52	27° ♄ 20'10	-5°23'11
morning rise	14934 Jan 01 21:49	13° ♄ 39'10		minimum elong	14934 Dec 03 17:02	27° ♄ 32'47	5°20'28
direct	14934 Jan 05 04:15	13° ♄ 15'06		min. Earth dist.	14934 Dec 05 00:26	26° ♄ 47'54	0.54517 AU
morning max el	14934 Jan 17 02:11	18° ♄ 58'39	21°25'41	morning rise	14934 Dec 12 05:11	23° ♄ 26'18	
asc. node	14934 Jan 21 20:25	24° ♄ 22'26		direct	14934 Dec 16 11:37	22° ♄ 47'16	
	14934 Jan 25 17:55	0° ♄		morning max el	14934 Dec 29 15:38	29° ♄ 11'11	23°10'58
morning set	14934 Feb 06 06:03	21° ♄ 39'00			14934 Dec 30 11:40	0° ♄	
	14934 Feb 10 05:06	0° ♄		asc. node	14935 Jan 08 17:41	11° ♄ 53'45	
					14935 Jan 18 16:15	0° ♄	
superior conj	14934 Feb 13 11:51	6° ♄ 53'11	1°15'39	morning set	14935 Jan 21 17:37	6° ♄ 23'51	
minimum elong	14934 Feb 13 14:18	7° ♄ 05'58	1°15'50				
max. Earth dist.	14934 Feb 18 01:37	16° ♄ 12'04	1.35000 AU	superior conj	14935 Jan 28 15:23	21° ♄ 19'14	1°29'16
evening rise	14934 Feb 22 03:54	24° ♄ 08'24		minimum elong	14935 Jan 28 17:08	21° ♄ 28'36	1°29'50
desc. node	14934 Feb 23 10:25	26° ♄ 31'18		max. Earth dist.	14935 Jan 31 19:22	28° ♄ 03'00	1.33288 AU
	14934 Feb 25 07:57	0° ♄			14935 Feb 01 17:49	0° ♄	
	14934 Mar 16 04:05	0° ♄		evening rise	14935 Feb 05 12:25	7° ♄ 39'13	
evening max el	14934 Mar 29 09:49	15° ♄ 52'14	26°35'45	desc. node	14935 Feb 10 07:01	16° ♄ 46'42	
retrograde	14934 Apr 11 11:41	23° ♄ 16'18			14935 Feb 17 21:24	0° ♄	
evening set	14934 Apr 17 20:41	20° ♄ 44'05		evening max el	14935 Mar 11 23:10	29° ♄ 23'21	27°19'00
asc. node	14934 Apr 19 17:02	19° ♄ 02'48			14935 Mar 12 14:36	0° ♄	
min. Earth dist.	14934 Apr 21 21:43	16° ♄ 37'43	0.66516 AU	retrograde	14935 Mar 25 13:19	6° ♄ 53'46	
inferior conj	14934 Apr 23 20:31	14° ♄ 17'43	1°15'12	evening set	14935 Apr 01 05:57	4° ♄ 23'35	
minimum elong	14934 Apr 23 18:46	14° ♄ 22'55	1°13'59	min. Earth dist.	14935 Apr 05 02:28	0° ♄ 49'28	0.64832 AU
morning rise	14934 Apr 29 17:57	8° ♄ 37'57			14935 Apr 05 20:51	30° ♄	
direct	14934 May 02 19:02	7° ♄ 46'15		asc. node	14935 Apr 06 14:27	29° ♄ 11'45	
morning max el	14934 May 09 05:04	11° ♄ 09'26	18°19'56	inferior conj	14935 Apr 07 13:32	28° ♄ 08'07	0°18'13
desc. node	14934 May 22 12:17	29° ♄ 29'37		minimum elong	14935 Apr 07 13:02	28° ♄ 09'31	0°17'38
	14934 May 22 20:01	0° ♄		morning rise	14935 Apr 13 22:02	22° ♄ 41'52	
morning set	14934 May 29 04:18	10° ♄ 03'33		direct	14935 Apr 16 13:46	22° ♄ 05'02	
	14934 Jun 10 19:39	0° ♄		morning max el	14935 Apr 22 21:32	25° ♄ 21'02	17°54'25
					14935 Apr 26 20:43	0° ♄	
superior conj	14934 Jun 13 17:46	4° ♄ 33'57	-2°06'35	desc. node	14935 May 09 09:05	19° ♄ 39'15	
minimum elong	14934 Jun 13 11:32	4° ♄ 09'40	2°07'17	morning set	14935 May 10 10:54	21° ♄ 26'17	
max. Earth dist.	14934 Jun 14 16:42	6° ♄ 03'26	1.45938 AU		14935 May 15 15:24	0° ♄	
evening rise	14934 Jun 29 17:14	29° ♄ 29'37					
	14934 Jun 30 01:00	0° ♄		superior conj	14935 May 24 09:30	14° ♄ 08'07	-1°41'14
greatest brilliancy	14934 Jul 09 18:03	15° ♄ 05'49	-0.8m	minimum elong	14935 May 24 00:39	13° ♄ 32'54	1°41'18
asc. node	14934 Jul 16 15:49	25° ♄ 13'57		max. Earth dist.	14935 May 28 12:51	20° ♄ 40'30	1.45528 AU
	14934 Jul 20 09:31	0° ♄			14935 Jun 03 12:26	0° ♄	
evening max el	14934 Jul 22 07:42	2° ♄ 04'33	18°56'55	evening rise	14935 Jun 09 08:44	9° ♄ 00'10	
retrograde	14934 Jul 29 01:42	5° ♄ 46'45			14935 Jun 23 07:18	0° ♄	
evening set	14934 Aug 01 11:41	4° ♄ 39'20		greatest brilliancy	14935 Jun 23 19:17	0° ♄ 43'40	-0.6m
	14934 Aug 06 03:14	30° ♄		asc. node	14935 Jul 03 12:39	13° ♄ 43'51	
inferior conj	14934 Aug 07 00:04	28° ♄ 54'20	2°48'06	evening max el	14935 Jul 05 13:40	15° ♄ 55'30	19°48'08
minimum elong	14934 Aug 07 01:53	28° ♄ 48'31	2°47'11	retrograde	14935 Jul 13 00:10	20° ♄ 07'22	
min. Earth dist.	14934 Aug 08 16:01	26° ♄ 47'27	0.66488 AU	evening set	14935 Jul 16 19:57	18° ♄ 42'43	
morning rise	14934 Aug 12 15:18	22° ♄ 28'43		inferior conj	14935 Jul 22 03:35	12° ♄ 44'51	3°05'20
desc. node	14934 Aug 18 10:27	19° ♄ 51'22		minimum elong	14935 Jul 22 04:31	12° ♄ 41'43	3°04'26
direct	14934 Aug 18 20:02	19° ♄ 50'46		min. Earth dist.	14935 Jul 23 05:25	11° ♄ 18'05	0.67810 AU
morning max el	14934 Aug 31 17:09	27° ♄ 30'04	26°19'08	morning rise	14935 Jul 27 12:40	6° ♄ 20'04	
	14934 Sep 03 01:45	0° ♄		direct	14935 Aug 02 07:00	3° ♄ 48'46	
	14934 Sep 24 16:16	0° ♄		desc. node	14935 Aug 05 07:53	4° ♄ 24'12	
morning set	14934 Oct 06 15:07	20° ♄ 47'08		morning max el	14935 Aug 14 04:08	10° ♄ 56'00	24°59'06
max. Earth dist.	14934 Oct 10 11:39	28° ♄ 09'20	1.34765 AU		14935 Aug 29 09:24	0° ♄	
	14934 Oct 11 10:10	0° ♄			14935 Sep 17 08:27	0° ♄	
asc. node	14934 Oct 12 17:40	2° ♄ 36'41		morning set	14935 Sep 18 23:26	2° ♄ 51'19	
				max. Earth dist.	14935 Sep 22 12:41	9° ♄ 16'23	1.36910 AU
superior conj	14934 Oct 15 17:40	8° ♄ 42'24	0°27'31				
minimum elong	14934 Oct 15 16:12	8° ♄ 34'50	0°27'46	superior conj	14935 Sep 29 05:11	22° ♄ 00'45	-0°03'30
evening rise	14934 Oct 23 06:10	24° ♄ 26'02		minimum elong	14935 Sep 29 05:23	22° ♄ 01'44	0°03'11
	14934 Oct 25 22:58	0° ♄		behind sun begin	14935 Sep 28 22:58	21° ♄ 30'13	
evening max el	14934 Nov 11 05:42	25° ♄ 45'51	20°51'13	behind sun end	14935 Sep 29 11:48	22° ♄ 33'20	
desc. node	14934 Nov 14 06:58	28° ♄ 23'56		asc. node	14935 Sep 29 14:18	22° ♄ 45'37	
































































































































	14935 Oct 03 05:19	0°♍		evening rise	14936 Sep 20 09:09	22°♌25'28	
evening rise	14935 Oct 07 11:04	8°♍35'19			14936 Sep 24 07:53	0°♍	
	14935 Oct 19 04:04	0°♌		evening max el	14936 Oct 06 12:15	18°♍40'03	18°44'17
evening max el	14935 Oct 24 14:12	6°♌47'58	19°36'42	retrograde	14936 Oct 14 20:21	22°♍52'17	
desc. node	14935 Nov 01 04:16	11°♌28'03		evening set	14936 Oct 16 18:07	22°♍39'54	
retrograde	14935 Nov 03 10:29	11°♌43'09		desc. node	14936 Oct 18 01:36	22°♍17'46	
evening set	14935 Nov 05 08:41	11°♌32'43		inferior conj	14936 Oct 24 20:57	18°♍16'58	-2°10'21
inferior conj	14935 Nov 14 01:52	7°♌28'50	-3°56'33	minimum elong	14936 Oct 24 15:35	18°♍26'47	2°07'34
minimum elong	14935 Nov 13 16:24	7°♌43'50	3°52'33	min. Earth dist.	14936 Oct 27 22:57	16°♍01'52	0.56970 AU
min. Earth dist.	14935 Nov 16 09:02	6°♌01'38	0.55354 AU	morning rise	14936 Nov 01 09:50	13°♍20'48	
morning rise	14935 Nov 21 22:14	3°♌08'49		direct	14936 Nov 07 08:41	11°♍54'31	
direct	14935 Nov 27 03:07	2°♌08'25		morning max el	14936 Nov 21 13:49	19°♍17'51	26°33'04
morning max el	14935 Dec 11 00:45	9°♌06'02	24°59'42		14936 Nov 30 15:41	0°♌	
	14935 Dec 26 11:27	0°♊		asc. node	14936 Dec 12 11:57	19°♌12'49	
asc. node	14935 Dec 26 14:52	0°♊14'46			14936 Dec 17 23:34	0°♊	
morning set	14936 Jan 06 05:29	21°♊05'28		morning set	14936 Dec 20 15:55	5°♊39'18	
	14936 Jan 10 07:14	0°♐					
				superior conj	14936 Dec 27 10:34	20°♊37'04	1°37'41
superior conj	14936 Jan 12 23:40	5°♐55'54	1°36'32	minimum elong	14936 Dec 27 10:14	20°♊35'12	1°38'39
minimum elong	14936 Jan 13 00:25	5°♐59'58	1°37'23	max. Earth dist.	14936 Dec 28 02:40	22°♊06'55	1.31300 AU
max. Earth dist.	14936 Jan 14 20:24	10°♐01'06	1.32040 AU		14936 Dec 31 16:20	0°♐	
evening rise	14936 Jan 20 06:55	21°♐33'48		evening rise	14937 Jan 03 08:43	5°♐45'43	
	14936 Jan 24 12:39	0°♏		desc. node	14937 Jan 14 00:22	26°♐23'34	
desc. node	14936 Jan 28 03:40	6°♏46'16			14937 Jan 16 02:54	0°♏	
	14936 Feb 11 19:21	0°♎		evening max el	14937 Feb 03 17:50	24°♏49'50	27°18'40
evening max el	14936 Feb 22 10:35	12°♎26'26	27°35'12		14937 Feb 10 11:41	0°♎	
retrograde	14936 Mar 07 07:51	19°♎54'14		retrograde	14937 Feb 17 17:47	2°♎08'34	
evening set	14936 Mar 14 04:11	17°♎33'40		evening set	14937 Feb 24 12:22	0°♎05'24	
min. Earth dist.	14936 Mar 17 22:25	14°♎27'00	0.62835 AU		14937 Feb 24 15:58	30°♏♏	
inferior conj	14936 Mar 20 19:57	11°♎36'51	-0°51'34	min. Earth dist.	14937 Feb 28 08:17	27°♏18'54	0.60653 AU
minimum elong	14936 Mar 20 21:40	11°♎32'39	0°50'59	inferior conj	14937 Mar 03 12:18	24°♏35'21	-2°12'51
asc. node	14936 Mar 23 11:54	9°♎07'40		minimum elong	14937 Mar 03 17:10	24°♏24'51	2°10'44
morning rise	14936 Mar 27 17:55	6°♎26'30		asc. node	14937 Mar 10 09:20	19°♏56'22	
direct	14936 Mar 30 01:42	6°♎01'04		morning rise	14937 Mar 11 01:14	19°♏43'36	
morning max el	14936 Apr 05 15:17	9°♎21'20	17°46'14	direct	14937 Mar 13 03:15	19°♏25'51	
	14936 Apr 19 11:19	0°♎		morning max el	14937 Mar 20 07:01	23°♏01'06	17°56'17
morning set	14936 Apr 21 18:26	3°♎59'25			14937 Mar 25 19:03	0°♎	
desc. node	14936 Apr 25 05:46	10°♎00'53		morning set	14937 Apr 04 21:00	17°♎25'24	
					14937 Apr 11 19:34	0°♎	
superior conj	14936 May 03 21:11	24°♎38'48	-1°05'03	desc. node	14937 Apr 12 02:24	0°♎30'26	
minimum elong	14936 May 03 14:54	24°♎12'50	1°04'55				
	14936 May 07 03:32	0°♍		superior conj	14937 Apr 15 08:37	6°♎14'46	-0°26'07
max. Earth dist.	14936 May 10 06:20	5°♍01'24	1.44421 AU	minimum elong	14937 Apr 15 06:19	6°♎04'44	0°26'14
evening rise	14936 May 18 20:02	18°♍27'24		max. Earth dist.	14937 Apr 22 20:03	18°♎54'29	1.42733 AU
	14936 May 26 10:48	0°♌		evening rise	14937 Apr 28 18:51	28°♎30'35	
evening max el	14936 Jun 17 13:41	29°♌47'10	20°53'27		14937 Apr 29 17:32	0°♍	
	14936 Jun 17 18:51	0°♌			14937 May 20 02:36	0°♌	
asc. node	14936 Jun 19 09:35	1°♌29'29		evening max el	14937 May 31 08:22	13°♌39'11	22°09'12
retrograde	14936 Jun 25 23:11	4°♌38'09		asc. node	14937 Jun 06 06:36	18°♌16'35	
evening set	14936 Jun 30 05:28	2°♌56'18		retrograde	14937 Jun 09 20:59	19°♌13'56	
	14936 Jul 03 01:21	30°♏♌		evening set	14937 Jun 14 14:28	17°♌15'46	
inferior conj	14936 Jul 05 11:12	26°♌47'01	3°10'11	inferior conj	14937 Jun 19 20:47	10°♌56'44	3°04'01
minimum elong	14936 Jul 05 11:09	26°♌47'12	3°09'15	minimum elong	14937 Jun 19 19:48	11°♌00'08	3°02'56
min. Earth dist.	14936 Jul 05 23:24	26°♌04'46	0.68667 AU	min. Earth dist.	14937 Jun 19 19:46	11°♌00'18	0.69040 AU
morning rise	14936 Jul 10 16:34	20°♌26'36		morning rise	14937 Jun 25 00:58	4°♌42'53	
direct	14936 Jul 15 23:04	18°♌08'26		direct	14937 Jun 29 19:01	2°♌42'23	
desc. node	14936 Jul 22 05:14	20°♌38'01		morning max el	14937 Jul 09 03:48	8°♌11'30	22°02'22
morning max el	14936 Jul 26 14:51	24°♌29'53	23°30'30	desc. node	14937 Jul 09 02:30	8°♌08'17	
	14936 Jul 31 13:15	0°♌			14937 Jul 26 02:45	0°♌	
	14936 Aug 21 19:32	0°♎		morning set	14937 Aug 10 22:41	24°♌08'17	
morning set	14936 Aug 30 11:07	14°♎01'12			14937 Aug 14 13:24	0°♎	
max. Earth dist.	14936 Sep 03 10:39	20°♎49'51	1.39279 AU	max. Earth dist.	14937 Aug 16 12:25	3°♎14'19	1.41603 AU
	14936 Sep 08 14:06	0°♌					
				superior conj	14937 Aug 24 06:55	16°♎32'55	-1°14'13
superior conj	14936 Sep 11 03:04	4°♌41'03	-0°38'18	minimum elong	14937 Aug 24 12:45	16°♎58'39	1°13'43
minimum elong	14936 Sep 11 05:53	4°♌54'09	0°37'49		14937 Aug 31 17:45	0°♌	
asc. node	14936 Sep 15 10:54	12°♌52'46		asc. node	14937 Sep 02 07:28	2°♌54'09	

evening rise	14937 Sep 03 20:50	5°♄47'07		minimum elong	14938 Aug 05 20:12	27°♄59'15	1°46'28
	14937 Sep 18 16:11	0°♄			14938 Aug 07 00:59	0°♄	
evening max el	14937 Sep 19 19:53	1°♄13'45	18°13'10	evening rise	14938 Aug 17 17:39	18°♄29'16	
retrograde	14937 Sep 27 01:33	4°♄55'07		asc. node	14938 Aug 20 04:03	22°♄46'06	
evening set	14937 Sep 29 04:57	4°♄36'20			14938 Aug 24 08:12	0°♄	
desc. node	14937 Oct 04 23:02	1°♄13'08		evening max el	14938 Sep 03 08:56	14°♄19'25	18°01'58
	14937 Oct 06 10:00	30°♄		retrograde	14938 Sep 09 23:07	17°♄43'48	
inferior conj	14937 Oct 06 13:47	29°♄51'54	-0°30'42	evening set	14938 Sep 12 10:11	17°♄14'57	
minimum elong	14937 Oct 06 12:41	29°♄54'15	0°29'51	inferior conj	14938 Sep 19 02:16	12°♄10'41	0°50'16
min. Earth dist.	14937 Oct 09 20:22	27°♄04'29	0.59078 AU	minimum elong	14938 Sep 19 03:43	12°♄07'06	0°49'51
morning rise	14937 Oct 13 17:03	24°♄20'25		desc. node	14938 Sep 21 20:29	9°♄27'30	
direct	14937 Oct 20 03:38	22°♄27'39		min. Earth dist.	14938 Sep 22 03:19	9°♄11'19	0.61366 AU
	14937 Nov 03 06:28	0°♄		morning rise	14938 Sep 25 18:28	6°♄11'54	
morning max el	14937 Nov 03 10:43	0°♄10'21	27°35'19	direct	14938 Oct 02 10:16	3°♄56'03	
	14937 Nov 24 17:45	0°♄		morning max el	14938 Oct 16 15:08	11°♄52'09	27°58'50
asc. node	14937 Nov 29 08:55	8°♄37'18			14938 Oct 30 23:24	0°♄	
morning set	14937 Dec 04 23:05	19°♄59'47		asc. node	14938 Nov 16 05:48	28°♄21'00	
	14937 Dec 09 13:24	0°♄			14938 Nov 17 01:34	0°♄	
				morning set	14938 Nov 19 01:02	4°♄02'33	
superior conj	14937 Dec 11 22:04	5°♄16'05	1°32'54	max. Earth dist.	14938 Nov 24 16:51	16°♄09'51	1.31411 AU
minimum elong	14937 Dec 11 20:46	5°♄08'47	1°33'48				
max. Earth dist.	14937 Dec 11 10:47	4°♄12'54	1.31085 AU	superior conj	14938 Nov 26 08:23	19°♄48'13	1°22'11
evening rise	14937 Dec 18 15:29	20°♄08'08		minimum elong	14938 Nov 26 06:22	19°♄37'00	1°22'54
	14937 Dec 23 09:34	0°♄			14938 Nov 30 22:40	0°♄	
desc. node	14937 Dec 31 21:09	15°♄29'08		evening rise	14938 Dec 03 01:17	4°♄36'26	
	14938 Jan 10 22:09	0°♄			14938 Dec 16 06:56	0°♄	
evening max el	14938 Jan 16 18:03	6°♄22'09	26°27'07	desc. node	14938 Dec 18 18:02	3°♄51'22	
retrograde	14938 Jan 30 17:18	13°♄29'29		evening max el	14938 Dec 29 09:37	17°♄01'42	25°04'42
evening set	14938 Feb 06 02:54	11°♄50'13		retrograde	14939 Jan 12 04:57	23°♄56'57	
min. Earth dist.	14938 Feb 10 07:34	9°♄13'04	0.58460 AU	evening set	14939 Jan 17 20:00	22°♄45'55	
inferior conj	14938 Feb 13 10:50	6°♄52'45	-3°40'23	min. Earth dist.	14939 Jan 22 21:42	20°♄02'27	0.56500 AU
minimum elong	14938 Feb 13 18:55	6°♄37'37	3°37'09	inferior conj	14939 Jan 25 12:41	18°♄20'26	-5°01'21
morning rise	14938 Feb 21 14:06	2°♄22'21		minimum elong	14939 Jan 25 21:39	18°♄05'52	4°58'30
direct	14938 Feb 23 14:00	2°♄08'40		morning rise	14939 Feb 03 01:47	14°♄11'53	
asc. node	14938 Feb 25 06:46	2°♄19'00		direct	14939 Feb 05 05:51	13°♄58'30	
morning max el	14938 Mar 03 17:00	6°♄09'16	18°26'11	asc. node	14939 Feb 12 04:12	16°♄25'47	
	14938 Mar 18 18:44	0°♄		morning max el	14939 Feb 14 17:09	18°♄34'31	19°17'50
morning set	14938 Mar 19 13:02	1°♄27'25			14939 Feb 23 03:30	0°♄	
				morning set	14939 Mar 03 14:14	15°♄52'27	
superior conj	14938 Mar 28 17:31	18°♄49'08	0°10'05		14939 Mar 10 16:50	0°♄	
minimum elong	14938 Mar 28 18:13	18°♄52'22	0°09'44				
behind sun begin	14938 Mar 28 12:28	18°♄25'54		superior conj	14939 Mar 11 19:26	2°♄09'25	0°40'43
behind sun end	14938 Mar 28 23:58	19°♄18'47		minimum elong	14939 Mar 11 21:42	2°♄20'22	0°40'24
desc. node	14938 Mar 29 22:58	21°♄03'47		desc. node	14939 Mar 16 19:29	11°♄37'16	
	14938 Apr 03 23:33	0°♄		max. Earth dist.	14939 Mar 18 11:51	14°♄41'44	1.38354 AU
max. Earth dist.	14938 Apr 05 05:30	2°♄09'25	1.40633 AU	evening rise	14939 Mar 22 05:10	21°♄18'09	
evening rise	14938 Apr 09 13:29	9°♄27'22			14939 Mar 27 08:32	0°♄	
	14938 Apr 22 17:01	0°♄			14939 Apr 16 16:26	0°♄	
evening max el	14938 May 13 23:25	27°♄32'14	23°30'10	evening max el	14939 Apr 26 12:51	11°♄25'42	24°49'57
	14938 May 16 15:31	0°♄		retrograde	14939 May 08 07:56	18°♄18'36	
asc. node	14938 May 24 03:40	3°♄48'25		asc. node	14939 May 11 00:52	17°♄47'18	
retrograde	14938 May 24 16:16	3°♄49'38		evening set	14939 May 14 00:31	15°♄54'45	
evening set	14938 May 29 21:21	1°♄37'01		min. Earth dist.	14939 May 18 11:20	10°♄52'56	0.68340 AU
	14938 May 31 12:30	30°♄		inferior conj	14939 May 19 14:07	9°♄24'11	2°20'24
min. Earth dist.	14938 Jun 03 16:25	25°♄58'33	0.68927 AU	minimum elong	14939 May 19 12:00	9°♄31'14	2°18'59
inferior conj	14938 Jun 04 06:23	25°♄10'32	2°47'26	morning rise	14939 May 24 23:44	3°♄27'20	
minimum elong	14938 Jun 04 04:41	25°♄16'25	2°46'09	direct	14939 May 28 17:31	2°♄07'04	
morning rise	14938 Jun 09 11:58	19°♄04'41		morning max el	14939 Jun 04 23:40	6°♄07'27	19°34'25
direct	14938 Jun 13 17:38	17°♄24'08		desc. node	14939 Jun 12 20:45	15°♄43'19	
morning max el	14938 Jun 21 22:08	22°♄04'02	20°42'04	greatest brilliancy	14939 Jun 17 15:24	22°♄32'21	-0.6m
desc. node	14938 Jun 25 23:41	26°♄35'14			14939 Jun 22 15:45	0°♄	
	14938 Jun 28 16:37	0°♄		morning set	14939 Jun 30 14:35	12°♄06'20	
	14938 Jul 19 08:15	0°♄			14939 Jul 12 02:59	0°♄	
morning set	14938 Jul 21 11:50	3°♄19'01		max. Earth dist.	14939 Jul 12 11:08	0°♄32'05	1.45051 AU
max. Earth dist.	14938 Jul 29 20:54	16°♄32'54	1.43598 AU				
				superior conj	14939 Jul 16 18:41	7°♄23'03	-2°08'35
superior conj	14938 Aug 05 12:36	27°♄27'33	-1°46'34	minimum elong	14939 Jul 16 23:50	7°♄43'39	2°09'13

evening rise	14939 Jul 30 18:16	0° \mathbb{M} 17'55		superior conj	14940 Jun 25 07:10	16° \mathbb{S} 38'29	-2°13'10
	14939 Jul 30 13:59	0° \mathbb{M}		minimum elong	14940 Jun 25 05:04	16° \mathbb{S} 30'17	2°14'08
asc. node	14939 Aug 07 00:39	12° \mathbb{M} 23'22			14940 Jul 03 19:20	0° \mathbb{Q}	
evening max el	14939 Aug 17 23:35	27° \mathbb{M} 46'51	18°09'30	evening rise	14940 Jul 10 18:32	11° \mathbb{Q} 04'22	
	14939 Aug 20 17:35	0° \mathbb{L}		greatest brilliancy	14940 Jul 17 07:40	21° \mathbb{Q} 31'13	-0.9m
retrograde	14939 Aug 24 08:15	1° \mathbb{L} 07'51			14940 Jul 22 18:26	0° \mathbb{M}	
evening set	14939 Aug 27 03:48	0° \mathbb{L} 25'47		asc. node	14940 Jul 23 21:19	1° \mathbb{M} 40'28	
	14939 Aug 27 22:25	30° \mathbb{R} \mathbb{M}		evening max el	14940 Jul 31 12:44	11° \mathbb{M} 28'26	18°34'47
inferior conj	14939 Sep 02 06:19	25° \mathbb{M} 04'20	1°50'27	retrograde	14940 Aug 07 00:55	14° \mathbb{M} 59'03	
minimum elong	14939 Sep 02 08:41	24° \mathbb{M} 57'46	1°49'33	evening set	14940 Aug 10 05:28	14° \mathbb{M} 01'25	
min. Earth dist.	14939 Sep 04 20:16	22° \mathbb{M} 12'59	0.63578 AU	inferior conj	14940 Aug 15 22:02	8° \mathbb{M} 24'47	2°31'45
morning rise	14939 Sep 08 11:39	18° \mathbb{M} 48'27		minimum elong	14940 Aug 16 00:14	8° \mathbb{M} 18'04	2°30'47
desc. node	14939 Sep 08 17:59	18° \mathbb{M} 36'32		min. Earth dist.	14940 Aug 17 22:19	5° \mathbb{M} 58'00	0.65533 AU
direct	14939 Sep 15 02:48	16° \mathbb{M} 16'37		morning rise	14940 Aug 21 17:51	2° \mathbb{M} 00'49	
morning max el	14939 Sep 29 00:19	24° \mathbb{M} 17'04	27°44'14		14940 Aug 24 23:25	30° \mathbb{R} \mathbb{Q}	
	14939 Oct 04 04:26	0° \mathbb{L}		desc. node	14940 Aug 25 15:30	29° \mathbb{Q} 45'29	
	14939 Oct 24 09:00	0° \mathbb{M}		direct	14940 Aug 28 03:35	29° \mathbb{Q} 22'11	
morning set	14939 Nov 02 19:29	17° \mathbb{M} 42'02			14940 Aug 31 12:36	0° \mathbb{M}	
asc. node	14939 Nov 03 02:35	18° \mathbb{M} 17'40		morning max el	14940 Sep 10 11:24	7° \mathbb{M} 13'40	26°57'20
max. Earth dist.	14939 Nov 07 16:58	27° \mathbb{M} 48'54	1.32284 AU		14940 Sep 28 02:54	0° \mathbb{L}	
	14939 Nov 08 17:33	0° \mathbb{L}			14940 Oct 15 16:51	0° \mathbb{M}	
				morning set	14940 Oct 16 03:30	0° \mathbb{M} 50'59	
superior conj	14939 Nov 10 15:33	4° \mathbb{L} 08'14	1°05'34	asc. node	14940 Oct 19 23:17	8° \mathbb{M} 22'15	
minimum elong	14939 Nov 10 13:13	3° \mathbb{L} 55'37	1°06'03	max. Earth dist.	14940 Oct 20 07:55	9° \mathbb{M} 05'46	1.33708 AU
evening rise	14939 Nov 17 12:15	19° \mathbb{L} 06'05					
	14939 Nov 22 18:14	0° \mathbb{S}		superior conj	14940 Oct 24 17:18	18° \mathbb{M} 09'53	0°43'03
desc. node	14939 Dec 05 15:03	21° \mathbb{S} 14'37		minimum elong	14940 Oct 24 15:17	17° \mathbb{M} 59'19	0°43'22
evening max el	14939 Dec 10 19:31	27° \mathbb{S} 05'31	23°24'13		14940 Oct 30 06:38	0° \mathbb{L}	
	14939 Dec 14 05:30	0° \mathbb{M}		evening rise	14940 Oct 31 22:30	3° \mathbb{L} 32'00	
retrograde	14939 Dec 24 03:51	3° \mathbb{M} 42'53			14940 Nov 15 09:44	0° \mathbb{S}	
evening set	14939 Dec 28 14:12	3° \mathbb{M} 00'16		evening max el	14940 Nov 21 08:12	7° \mathbb{S} 07'34	21°43'24
	14940 Jan 04 00:00	30° \mathbb{R} \mathbb{S}		desc. node	14940 Nov 21 12:10	7° \mathbb{S} 17'16	
min. Earth dist.	14940 Jan 04 06:01	29° \mathbb{S} 51'21	0.55073 AU	retrograde	14940 Dec 03 15:53	13° \mathbb{S} 13'24	
inferior conj	14940 Jan 05 18:29	28° \mathbb{S} 58'16	-5°53'19	evening set	14940 Dec 06 18:15	12° \mathbb{S} 51'45	
minimum elong	14940 Jan 05 22:39	28° \mathbb{S} 52'13	5°52'03	inferior conj	14940 Dec 15 11:13	9° \mathbb{S} 00'02	-5°51'55
morning rise	14940 Jan 14 08:40	25° \mathbb{S} 06'17		minimum elong	14940 Dec 15 06:14	9° \mathbb{S} 07'00	5°50'26
direct	14940 Jan 17 02:28	24° \mathbb{S} 48'09		min. Earth dist.	14940 Dec 15 11:51	8° \mathbb{S} 59'09	0.54452 AU
morning max el	14940 Jan 28 03:46	0° \mathbb{M} 07'08	20°32'37	morning rise	14940 Dec 23 18:56	5° \mathbb{S} 12'03	
	14940 Jan 28 00:47	0° \mathbb{M}		direct	14940 Dec 27 11:26	4° \mathbb{S} 42'17	
asc. node	14940 Jan 30 01:35	2° \mathbb{M} 06'28		morning max el	14941 Jan 08 23:40	10° \mathbb{S} 44'27	22°08'51
morning set	14940 Feb 15 21:23	0° \mathbb{K} 31'17		asc. node	14941 Jan 15 22:55	19° \mathbb{S} 02'41	
	14940 Feb 15 15:19	0° \mathbb{K}			14941 Jan 22 16:01	0° \mathbb{M}	
				morning set	14941 Jan 30 07:57	15° \mathbb{M} 15'36	
superior conj	14940 Feb 23 10:06	16° \mathbb{K} 03'37	1°04'48				
minimum elong	14940 Feb 23 12:44	16° \mathbb{K} 16'57	1°04'46	superior conj	14941 Feb 06 09:47	0° \mathbb{K} 20'19	1°22'12
max. Earth dist.	14940 Feb 28 19:22	26° \mathbb{K} 43'07	1.36149 AU	minimum elong	14941 Feb 06 11:59	0° \mathbb{K} 31'58	1°22'33
	14940 Mar 01 12:46	0° \mathbb{Y}			14941 Feb 06 05:56	0° \mathbb{K}	
desc. node	14940 Mar 02 16:02	2° \mathbb{Y} 07'27		max. Earth dist.	14941 Feb 10 08:43	8° \mathbb{K} 33'14	1.34224 AU
evening rise	14940 Mar 03 15:36	3° \mathbb{Y} 56'07		evening rise	14941 Feb 14 17:04	17° \mathbb{K} 10'25	
	14940 Mar 19 07:23	0° \mathbb{B}		desc. node	14941 Feb 17 12:36	22° \mathbb{K} 29'31	
evening max el	14940 Apr 08 02:24	25° \mathbb{B} 17'35	26°01'21		14941 Feb 21 16:45	0° \mathbb{Y}	
	14940 Apr 13 17:42	0° \mathbb{I}			14941 Mar 13 15:33	0° \mathbb{B}	
retrograde	14940 Apr 20 19:00	2° \mathbb{I} 34'19		evening max el	14941 Mar 21 16:15	8° \mathbb{B} 59'48	26°57'03
evening set	14940 Apr 26 22:18	0° \mathbb{I} 03'40		retrograde	14941 Apr 04 00:17	16° \mathbb{B} 27'51	
asc. node	14940 Apr 26 22:09	0° \mathbb{I} 03'58		evening set	14941 Apr 10 12:43	13° \mathbb{B} 55'59	
	14940 Apr 27 00:03	30° \mathbb{R} \mathbb{B}		asc. node	14941 Apr 13 19:33	10° \mathbb{B} 48'21	
min. Earth dist.	14940 May 01 02:30	25° \mathbb{B} 37'22	0.67303 AU	min. Earth dist.	14941 Apr 14 11:44	10° \mathbb{B} 03'24	0.65844 AU
inferior conj	14940 May 02 18:01	23° \mathbb{B} 33'49	1°42'26	inferior conj	14941 Apr 16 15:46	7° \mathbb{B} 33'09	0°52'37
minimum elong	14940 May 02 15:57	23° \mathbb{B} 40'17	1°41'02	minimum elong	14941 Apr 16 14:26	7° \mathbb{B} 37'00	0°51'36
morning rise	14940 May 08 10:21	17° \mathbb{B} 47'12		morning rise	14941 Apr 22 17:34	1° \mathbb{B} 58'34	
direct	14940 May 11 17:10	16° \mathbb{B} 45'47		direct	14941 Apr 25 14:29	1° \mathbb{B} 13'35	
morning max el	14940 May 18 08:23	20° \mathbb{B} 19'11	18°42'16	morning max el	14941 May 01 22:38	4° \mathbb{B} 32'28	18°06'53
	14940 May 26 02:26	0° \mathbb{I}		desc. node	14941 May 16 14:35	25° \mathbb{B} 21'54	
desc. node	14940 May 29 17:43	5° \mathbb{I} 21'48			14941 May 19 11:30	0° \mathbb{I}	
morning set	14940 Jun 09 03:42	21° \mathbb{I} 27'40		morning set	14941 May 20 18:11	2° \mathbb{I} 04'00	
	14940 Jun 14 15:02	0° \mathbb{S}					
max. Earth dist.	14940 Jun 24 05:23	14° \mathbb{S} 57'46	1.45828 AU	superior conj	14941 Jun 04 16:42	25° \mathbb{I} 52'38	-1°57'41

minimum elong	14941 Jun 04 08:32	25° Π 20'38	1°58'07	desc. node	14942 May 03 11:19	15° \mathcal{B} 37'17	
max. Earth dist.	14941 Jun 07 01:37	29° Π 35'27	1.45858 AU		14942 May 12 02:15	0° Π	
	14941 Jun 07 07:54	0° \mathcal{E}					
evening rise	14941 Jun 20 19:24	20° \mathcal{E} 54'57		superior conj	14942 May 15 15:45	5° Π 47'45	-1°26'40
	14941 Jun 26 16:48	0° Ω		minimum elong	14942 May 15 07:35	5° Π 14'44	1°26'34
greatest brilliancy	14941 Jul 02 22:57	9° Ω 30'19	-0.7m	max. Earth dist.	14942 May 20 21:23	14° Π 09'16	1.45144 AU
asc. node	14941 Jul 10 18:05	20° Ω 30'19		evening rise	14942 May 31 07:01	0° \mathcal{E} 18'55	
evening max el	14941 Jul 14 21:52	25° Ω 17'46	19°16'55		14942 May 31 02:04	0° \mathcal{E}	
retrograde	14941 Jul 21 21:54	29° Ω 10'50			14942 Jun 20 11:21	0° Ω	
evening set	14941 Jul 25 12:01	27° Ω 56'07		asc. node	14942 Jun 27 14:56	8° Ω 42'59	
inferior conj	14941 Jul 30 22:02	22° Ω 05'44	2°57'02	evening max el	14942 Jun 28 01:22	9° Ω 09'26	20°14'25
minimum elong	14941 Jul 30 23:30	22° Ω 00'56	2°56'07	retrograde	14942 Jul 05 20:45	13° Ω 36'37	
min. Earth dist.	14941 Aug 01 07:59	20° Ω 15'04	0.67108 AU	evening set	14942 Jul 09 21:02	12° Ω 04'22	
morning rise	14941 Aug 05 10:22	15° Ω 40'10		inferior conj	14942 Jul 15 03:32	6° Ω 01'27	3°08'48
direct	14941 Aug 11 11:05	13° Ω 03'57		minimum elong	14942 Jul 15 04:03	5° Ω 59'42	3°07'54
desc. node	14941 Aug 12 12:59	13° Ω 08'25		min. Earth dist.	14942 Jul 15 23:26	4° Ω 53'34	0.68235 AU
morning max el	14941 Aug 23 22:28	20° Ω 31'00	25°46'44	morning rise	14942 Jul 20 10:45	29° \mathcal{E} 38'28	
	14941 Sep 01 02:33	0° \mathfrak{M}			14942 Jul 20 01:24	30° \mathcal{R} \mathcal{E}	
	14941 Sep 21 06:31	0° $\underline{\mathfrak{A}}$		direct	14942 Jul 26 00:10	27° \mathcal{E} 12'17	
morning set	14941 Sep 28 21:38	13° $\underline{\mathfrak{A}}$ 21'28		desc. node	14942 Jul 30 10:24	28° \mathcal{E} 27'23	
max. Earth dist.	14941 Oct 02 13:17	20° $\underline{\mathfrak{A}}$ 10'32	1.35632 AU		14942 Aug 01 20:24	0° Ω	
asc. node	14941 Oct 06 19:55	28° $\underline{\mathfrak{A}}$ 30'50		morning max el	14942 Aug 06 09:08	4° Ω 00'38	24°21'57
	14941 Oct 07 13:46	0° \mathfrak{M}			14942 Aug 26 08:08	0° \mathfrak{M}	
				morning set	14942 Sep 10 21:36	25° \mathfrak{M} 03'13	
superior conj	14941 Oct 08 10:57	1° \mathfrak{M} 46'38	0°14'58		14942 Sep 13 17:09	0° $\underline{\mathfrak{A}}$	
minimum elong	14941 Oct 08 10:04	1° \mathfrak{M} 42'11	0°15'14	max. Earth dist.	14942 Sep 14 12:37	1° $\underline{\mathfrak{A}}$ 27'06	1.37908 AU
behind sun begin	14941 Oct 08 08:03	1° \mathfrak{M} 31'57					
behind sun end	14941 Oct 08 12:06	1° \mathfrak{M} 52'25		superior conj	14942 Sep 21 17:07	14° $\underline{\mathfrak{A}}$ 49'41	-0°17'54
evening rise	14941 Oct 16 06:03	17° \mathfrak{M} 49'21		minimum elong	14942 Sep 21 18:19	14° $\underline{\mathfrak{A}}$ 55'29	0°17'31
	14941 Oct 22 08:58	0° \mathcal{A}		asc. node	14942 Sep 23 16:29	18° $\underline{\mathfrak{A}}$ 39'17	
evening max el	14941 Nov 03 08:22	17° \mathcal{A} 42'24	20°16'56		14942 Sep 29 10:00	0° \mathfrak{M}	
desc. node	14941 Nov 08 09:24	21° \mathcal{A} 34'05		evening rise	14942 Sep 30 08:23	1° \mathfrak{M} 51'24	
retrograde	14941 Nov 14 03:08	23° \mathcal{A} 04'25		evening max el	14942 Oct 16 22:50	29° \mathfrak{M} 05'16	19°11'38
evening set	14941 Nov 16 07:25	22° \mathcal{A} 52'17			14942 Oct 17 21:49	0° \mathcal{A}	
inferior conj	14941 Nov 25 04:22	18° \mathcal{A} 56'09	-4°50'55	retrograde	14942 Oct 26 02:44	3° \mathcal{A} 41'23	
minimum elong	14941 Nov 24 18:21	19° \mathcal{A} 10'57	4°47'22	desc. node	14942 Oct 26 06:44	3° \mathcal{A} 41'18	
min. Earth dist.	14941 Nov 26 18:13	18° \mathcal{A} 00'17	0.54767 AU	evening set	14942 Oct 27 23:41	3° \mathcal{A} 30'39	
morning rise	14941 Dec 03 04:40	14° \mathcal{A} 53'33			14942 Nov 04 10:55	30° \mathcal{R} \mathfrak{M}	
direct	14941 Dec 07 21:23	14° \mathcal{A} 05'55		inferior conj	14942 Nov 05 11:34	29° \mathfrak{M} 18'53	-3°12'00
morning max el	14941 Dec 21 09:54	20° \mathcal{A} 44'38	23°57'46	minimum elong	14942 Nov 05 03:35	29° \mathfrak{M} 32'18	3°08'18
	14941 Dec 29 06:31	0° \mathcal{B}		min. Earth dist.	14942 Nov 08 04:24	27° \mathfrak{M} 30'13	0.55961 AU
asc. node	14942 Jan 02 20:10	6° \mathcal{B} 57'16		morning rise	14942 Nov 13 05:00	24° \mathfrak{M} 44'12	
morning set	14942 Jan 14 19:52	29° \mathcal{B} 59'57		direct	14942 Nov 18 18:03	23° \mathfrak{M} 33'31	
	14942 Jan 14 19:53	0° \approx			14942 Dec 02 01:46	0° \mathcal{A}	
				morning max el	14942 Dec 02 19:52	0° \mathcal{A} 42'15	25°42'31
superior conj	14942 Jan 21 15:37	14° \approx 51'44	1°33'05	asc. node	14942 Dec 20 17:18	25° \mathcal{A} 35'09	
minimum elong	14942 Jan 21 16:57	14° \approx 59'01	1°33'48		14942 Dec 23 02:38	0° \mathcal{B}	
max. Earth dist.	14942 Jan 24 05:57	20° \approx 27'58	1.32708 AU	morning set	14942 Dec 30 07:21	14° \mathcal{B} 38'53	
	14942 Jan 28 19:48	0° \mathcal{H}					
evening rise	14942 Jan 29 06:13	0° \mathcal{H} 52'35		superior conj	14943 Jan 06 01:14	29° \mathcal{B} 30'45	1°37'46
desc. node	14942 Feb 04 09:11	12° \mathcal{H} 39'02		minimum elong	14943 Jan 06 01:31	29° \mathcal{B} 32'20	1°38'40
	14942 Feb 14 16:22	0° \mathcal{Y}			14943 Jan 06 06:30	0° \approx	
evening max el	14942 Mar 04 05:15	22° \mathcal{Y} 21'19	27°29'31	max. Earth dist.	14943 Jan 07 09:43	2° \approx 30'35	1.31662 AU
retrograde	14942 Mar 17 22:48	29° \mathcal{Y} 50'31		evening rise	14943 Jan 13 04:05	14° \approx 54'58	
evening set	14942 Mar 24 17:34	27° \mathcal{Y} 23'48			14943 Jan 20 20:42	0° \mathcal{H}	
min. Earth dist.	14942 Mar 28 12:56	24° \mathcal{Y} 01'55	0.64024 AU	desc. node	14943 Jan 22 05:51	2° \mathcal{H} 30'13	
inferior conj	14942 Mar 31 04:40	21° \mathcal{Y} 15'28	-0°09'50		14943 Feb 09 18:41	0° \mathcal{Y}	
minimum elong	14942 Mar 31 04:58	21° \mathcal{Y} 14'40	0°09'59	evening max el	14943 Feb 14 15:11	5° \mathcal{Y} 09'05	27°32'20
transit middle	14942 Mar 31 04:58	21° \mathcal{Y} 14'40	0°09'59	retrograde	14943 Feb 28 13:37	12° \mathcal{Y} 33'12	
transit begin	14942 Mar 31 02:32	21° \mathcal{Y} 21'04		evening set	14943 Mar 07 10:15	10° \mathcal{Y} 18'54	
transit end	14942 Mar 31 07:25	21° \mathcal{Y} 08'16		min. Earth dist.	14943 Mar 11 04:31	7° \mathcal{Y} 22'14	0.61927 AU
asc. node	14942 Mar 31 17:00	20° \mathcal{Y} 43'17		inferior conj	14943 Mar 14 05:34	4° \mathcal{Y} 32'53	-1°24'49
morning rise	14942 Apr 06 18:36	15° \mathcal{Y} 55'24		minimum elong	14943 Mar 14 08:31	4° \mathcal{Y} 26'00	1°23'35
direct	14942 Apr 09 06:52	15° \mathcal{Y} 23'42		asc. node	14943 Mar 18 14:27	0° \mathcal{Y} 55'00	
morning max el	14942 Apr 15 15:56	18° \mathcal{Y} 39'58	17°48'41		14943 Mar 20 04:29	30° \mathcal{R} \mathcal{H}	
	14942 Apr 24 02:19	0° \mathcal{B}		morning rise	14943 Mar 21 09:48	29° \mathcal{H} 30'16	
morning set	14942 May 02 12:02	13° \mathcal{B} 58'55		direct	14943 Mar 23 14:56	29° \mathcal{H} 08'29	

	14943 Mar 26 23:28	0°♿		morning set	14944 Mar 28 13:22	10°♿40'39	
morning max el	14943 Mar 30 09:18	2°♿33'23	17°48'14	desc. node	14944 Apr 06 04:33	26°♿35'04	
morning set	14943 Apr 15 04:27	26°♿57'23					
	14943 Apr 16 21:35	0°♿		superior conj	14944 Apr 07 10:46	28°♿50'17	-0°10'15
desc. node	14943 Apr 20 07:58	6°♿03'16		minimum elong	14944 Apr 07 09:54	28°♿46'28	0°10'29
				behind sun begin	14944 Apr 07 04:02	28°♿20'17	
superior conj	14943 Apr 26 13:39	16°♿47'23	-0°48'28	behind sun end	14944 Apr 07 15:47	29°♿12'36	
minimum elong	14943 Apr 26 09:05	16°♿28'06	0°48'26		14944 Apr 08 02:27	0°♿	
max. Earth dist.	14943 May 03 13:51	28°♿22'06	1.43766 AU	max. Earth dist.	14944 Apr 15 01:19	11°♿58'44	1.41872 AU
	14943 May 04 14:09	0°♿		evening rise	14944 Apr 20 04:24	20°♿23'37	
evening rise	14943 May 10 21:42	9°♿58'24			14944 Apr 26 06:58	0°♿	
	14943 May 24 05:31	0°♿			14944 May 17 13:10	0°♿	
evening max el	14943 Jun 10 22:53	23°♿01'20	21°24'36	evening max el	14944 May 23 15:37	6°♿53'24	22°43'18
asc. node	14943 Jun 14 11:54	26°♿06'13		asc. node	14944 May 31 08:57	12°♿23'43	
retrograde	14943 Jun 19 19:33	28°♿10'56		retrograde	14944 Jun 02 16:34	12°♿47'30	
evening set	14943 Jun 24 06:33	26°♿21'47		evening set	14944 Jun 07 14:51	10°♿42'57	
inferior conj	14943 Jun 29 12:14	20°♿07'52	3°08'51	inferior conj	14944 Jun 12 22:04	4°♿20'10	2°58'14
minimum elong	14943 Jun 29 11:47	20°♿09'28	3°07'52	minimum elong	14944 Jun 12 20:45	4°♿24'45	2°57'05
min. Earth dist.	14943 Jun 29 18:40	19°♿45'26	0.68884 AU	min. Earth dist.	14944 Jun 12 15:32	4°♿42'57	0.69050 AU
morning rise	14943 Jul 04 16:48	13°♿50'04			14944 Jun 16 05:55	30°♿	
direct	14943 Jul 09 17:54	11°♿39'18		morning rise	14944 Jun 18 02:32	28°♿09'21	
desc. node	14943 Jul 17 07:42	15°♿17'00		direct	14944 Jun 22 15:10	26°♿17'16	
morning max el	14943 Jul 19 20:39	17°♿38'53	22°52'29		14944 Jun 29 23:36	0°♿	
	14943 Jul 30 03:16	0°♿		morning max el	14944 Jul 01 11:34	1°♿25'10	21°26'47
	14943 Aug 19 09:40	0°♿		desc. node	14944 Jul 03 04:56	3°♿13'37	
morning set	14943 Aug 22 23:16	5°♿47'17			14944 Jul 22 22:34	0°♿	
max. Earth dist.	14943 Aug 27 11:45	13°♿21'31	1.40293 AU	morning set	14944 Aug 02 00:35	15°♿28'32	
				max. Earth dist.	14944 Aug 08 15:36	26°♿07'19	1.42505 AU
superior conj	14943 Sep 04 07:48	27°♿10'19	-0°53'37		14944 Aug 10 23:59	0°♿	
minimum elong	14943 Sep 04 11:55	27°♿29'02	0°53'07				
	14943 Sep 05 20:52	0°♿		superior conj	14944 Aug 16 02:36	8°♿38'34	-1°28'46
asc. node	14943 Sep 10 13:03	8°♿44'27		minimum elong	14944 Aug 16 09:29	9°♿08'13	1°28'21
evening rise	14943 Sep 14 02:31	15°♿30'52		evening rise	14944 Aug 27 08:27	28°♿37'12	
	14943 Sep 21 23:39	0°♿		asc. node	14944 Aug 27 09:37	28°♿42'27	
evening max el	14943 Sep 30 01:22	11°♿15'42	18°28'27		14944 Aug 28 02:43	0°♿	
retrograde	14943 Oct 07 21:09	15°♿13'32		evening max el	14944 Sep 12 11:50	24°♿04'41	18°06'07
evening set	14943 Oct 09 20:40	14°♿15'02		retrograde	14944 Sep 19 09:42	27°♿37'04	
desc. node	14943 Oct 13 04:06	13°♿13'43		evening set	14944 Sep 21 16:09	27°♿14'30	
inferior conj	14943 Oct 17 15:56	10°♿26'53	-1°26'14	inferior conj	14944 Sep 28 17:35	22°♿21'42	0°06'12
minimum elong	14943 Oct 17 12:33	10°♿33'32	1°24'18	minimum elong	14944 Sep 28 17:48	22°♿21'12	0°06'25
min. Earth dist.	14943 Oct 20 21:22	7°♿55'33	0.57822 AU	transit middle	14944 Sep 28 17:48	22°♿21'12	0°06'25
morning rise	14943 Oct 25 00:55	5°♿14'36		transit begin	14944 Sep 28 14:44	22°♿28'13	
direct	14943 Oct 31 05:21	3°♿36'56		transit end	14944 Sep 28 20:52	22°♿14'11	
morning max el	14943 Nov 14 12:18	11°♿09'55	27°04'07	desc. node	14944 Sep 29 01:31	22°♿03'31	
	14943 Nov 29 02:54	0°♿		min. Earth dist.	14944 Oct 01 22:57	19°♿26'16	0.60044 AU
asc. node	14943 Dec 07 14:19	14°♿45'13		morning rise	14944 Oct 05 16:11	16°♿37'19	
morning set	14943 Dec 14 16:36	29°♿07'29		direct	14944 Oct 12 05:53	14°♿33'38	
	14943 Dec 15 02:23	0°♿		morning max el	14944 Oct 26 12:35	22°♿23'43	27°50'08
superior conj	14943 Dec 21 12:35	14°♿11'29	1°36'24		14944 Nov 02 06:17	0°♿	
minimum elong	14943 Dec 21 11:49	14°♿07'12	1°37'20		14944 Nov 21 05:33	0°♿	
max. Earth dist.	14943 Dec 21 17:05	14°♿36'40	1.31134 AU	asc. node	14944 Nov 23 11:14	4°♿18'58	
evening rise	14943 Dec 28 08:12	29°♿11'28		morning set	14944 Nov 27 21:48	13°♿21'33	
	14943 Dec 28 17:20	0°♿		max. Earth dist.	14944 Dec 04 00:38	26°♿39'33	1.31148 AU
desc. node	14944 Jan 09 02:35	21°♿55'11		superior conj	14944 Dec 04 23:50	28°♿48'54	1°29'05
	14944 Jan 14 02:11	0°♿		minimum elong	14944 Dec 04 22:11	28°♿39'43	1°29'55
evening max el	14944 Jan 27 19:28	17°♿10'46	27°00'57		14944 Dec 05 12:34	0°♿	
retrograde	14944 Feb 10 19:37	24°♿25'48		evening rise	14944 Dec 11 16:30	13°♿37'28	
evening set	14944 Feb 17 11:26	22°♿31'45			14944 Dec 19 18:46	0°♿	
min. Earth dist.	14944 Feb 21 09:42	19°♿51'02	0.59700 AU	desc. node	14944 Dec 25 23:25	10°♿44'22	
inferior conj	14944 Feb 24 14:44	17°♿14'58	-2°49'48	evening max el	14945 Jan 08 16:05	28°♿20'41	25°55'24
minimum elong	14944 Feb 24 21:03	17°♿02'07	2°47'05		14945 Jan 10 12:23	0°♿	
morning rise	14944 Mar 03 10:05	12°♿32'30		retrograde	14945 Jan 22 14:41	5°♿23'35	
asc. node	14944 Mar 04 11:54	12°♿20'26		evening set	14945 Jan 28 17:20	3°♿56'13	
direct	14944 Mar 05 10:31	12°♿17'01		min. Earth dist.	14945 Feb 02 05:10	1°♿18'16	0.57572 AU
morning max el	14944 Mar 12 23:09	16°♿01'45	18°06'33		14945 Feb 04 01:59	30°♿	
	14944 Mar 22 17:00	0°♿		inferior conj	14945 Feb 05 04:44	29°♿12'33	-4°16'40

minimum elong	14945 Feb 05 13:41	28°  56'47	4°13'23	minimum elong	14946 Jan 17 05:25	10°  06'32	5°26'19
morning rise	14945 Feb 13 13:00	24°  51'29		morning rise	14946 Jan 25 12:21	6°  17'35	
direct	14945 Feb 15 13:29	24°  38'33		direct	14946 Jan 27 21:09	6°  02'47	
asc. node	14945 Feb 19 09:20	25°  27'46		asc. node	14946 Feb 06 06:45	10°  15'59	
morning max el	14945 Feb 24 05:31	28°  53'38	18°45'23	morning max el	14946 Feb 07 00:09	10°  56'42	19°46'47
	14945 Feb 25 07:11	0°  ✠			14946 Feb 19 19:06	0°  ✠	
morning set	14945 Mar 12 09:47	24°  ✠54'05		morning set	14946 Feb 24 13:52	9°  ✠25'57	
	14945 Mar 15 00:31	0°  Υ					
superior conj	14945 Mar 21 03:29	11°  Υ45'55	0°23'49	superior conj	14946 Mar 04 11:16	25°  ✠21'29	0°51'45
minimum elong	14945 Mar 21 05:01	11°  Υ53'08	0°23'26	minimum elong	14946 Mar 04 13:49	25°  ✠34'03	0°51'32
desc. node	14945 Mar 24 01:07	17°  Υ09'10		max. Earth dist.	14946 Mar 10 15:16	7°  Υ11'55	1.37398 AU
max. Earth dist.	14945 Mar 28 08:46	24°  Υ53'57	1.39672 AU	desc. node	14946 Mar 10 21:40	7°  Υ41'32	
	14945 Mar 31 07:32	0°  ♄		evening rise	14946 Mar 14 08:17	13°  Υ56'34	
evening rise	14945 Apr 01 08:14	1°  ♄44'43			14946 Mar 23 21:01	0°  ♄	
	14945 Apr 19 13:44	0°  ♄			14946 Apr 14 10:11	0°  ♄	
evening max el	14945 May 06 05:52	20°  ♄47'27	24°04'39	evening max el	14946 Apr 18 19:27	4°  ♄41'46	25°21'50
retrograde	14945 May 17 10:28	27°  ♄21'06		retrograde	14946 May 01 00:09	11°  ♄45'32	
asc. node	14945 May 18 06:06	27°  ♄18'11		asc. node	14946 May 05 03:21	10°  ♄34'16	
evening set	14945 May 22 20:22	25°  ♄03'34		evening set	14946 May 06 21:29	9°  ♄18'21	
min. Earth dist.	14945 May 27 11:49	19°  ♄40'29	0.68738 AU	min. Earth dist.	14946 May 11 05:24	4°  ♄31'50	0.67956 AU
inferior conj	14945 May 28 07:09	18°  ♄34'51	2°37'17	inferior conj	14946 May 12 13:32	2°  ♄47'44	2°05'44
minimum elong	14945 May 28 05:13	18°  ♄41'25	2°35'56	minimum elong	14946 May 12 11:22	2°  ♄54'45	2°04'16
morning rise	14945 Jun 02 14:06	12°  ♄32'25			14946 May 14 19:17	30°  ♄	
direct	14945 Jun 06 14:40	11°  ♄00'24		morning rise	14946 May 18 01:40	26°  ♄55'00	
morning max el	14945 Jun 14 08:45	15°  ♄22'08	20°11'22	direct	14946 May 21 14:47	25°  ♄42'48	
desc. node	14945 Jun 20 02:05	21°  ♄59'46		morning max el	14946 May 28 13:26	29°  ♄29'45	19°10'16
	14945 Jun 25 22:52	0°  ♄			14946 May 29 01:32	0°  ♄	
morning set	14945 Jul 12 07:03	24°  ♄22'54		desc. node	14946 Jun 06 23:07	11°  ♄22'12	
	14945 Jul 15 22:08	0°  ♄		greatest brilliancy	14946 Jun 10 10:35	16°  ♄28'16	-0.7m
max. Earth dist.	14945 Jul 22 02:29	9°  ♄44'11	1.44298 AU		14946 Jun 19 08:10	0°  ♄	
				morning set	14946 Jun 21 11:51	3°  ♄18'54	
superior conj	14945 Jul 27 22:09	19°  ♄07'49	-1°57'39	max. Earth dist.	14946 Jul 04 19:20	23°  ♄59'21	1.45477 AU
minimum elong	14945 Jul 28 05:22	19°  ♄37'23	1°57'49				
	14945 Aug 03 11:10	0°  ♄		superior conj	14946 Jul 07 19:35	28°  ♄43'35	-2°12'58
evening rise	14945 Aug 09 21:17	10°  ♄57'52		minimum elong	14946 Jul 07 22:02	28°  ♄53'17	2°13'50
asc. node	14945 Aug 14 06:12	18°  ♄28'46			14946 Jul 08 14:56	0°  ♄	
	14945 Aug 21 07:44	0°  ♄		evening rise	14946 Jul 22 11:59	22°  ♄21'33	
evening max el	14945 Aug 27 02:04	7°  ♄21'12	18°03'01		14946 Jul 27 03:56	0°  ♄	
retrograde	14945 Sep 02 12:35	10°  ♄42'07		asc. node	14946 Aug 01 02:51	7°  ♄58'43	
evening set	14945 Sep 05 03:18	10°  ♄07'53		evening max el	14946 Aug 10 16:30	20°  ♄56'16	18°18'05
inferior conj	14945 Sep 11 13:10	4°  ♄56'10	1°18'18	retrograde	14946 Aug 17 01:27	24°  ♄19'36	
minimum elong	14945 Sep 11 15:11	4°  ♄50'55	1°17'36	evening set	14946 Aug 20 00:52	23°  ♄30'59	
min. Earth dist.	14945 Sep 14 10:02	1°  ♄57'57	0.62333 AU	inferior conj	14946 Aug 25 22:41	18°  ♄02'36	2°10'07
desc. node	14945 Sep 15 23:02	0°  ♄29'59		minimum elong	14946 Aug 26 01:04	17°  ♄55'39	2°09'09
	14945 Sep 16 12:43	30°  ♄		min. Earth dist.	14946 Aug 28 06:52	15°  ♄20'21	0.64455 AU
morning rise	14945 Sep 18 00:41	28°  ♄49'12		morning rise	14946 Aug 31 23:47	11°  ♄42'31	
direct	14945 Sep 24 17:05	26°  ♄25'25		desc. node	14946 Sep 02 20:34	10°  ♄25'45	
	14945 Oct 03 17:34	0°  ♄		direct	14946 Sep 07 13:06	9°  ♄06'58	
morning max el	14945 Oct 08 19:07	4°  ♄24'11	27°57'00	morning max el	14946 Sep 21 05:27	17°  ♄04'25	27°27'47
	14945 Oct 27 23:42	0°  ♄			14946 Oct 02 00:04	0°  ♄	
asc. node	14945 Nov 10 08:03	24°  ♄08'48			14946 Oct 20 19:47	0°  ♄	
morning set	14945 Nov 11 20:50	27°  ♄14'55		morning set	14946 Oct 26 11:13	10°  ♄42'13	
	14945 Nov 13 04:49	0°  ♄		asc. node	14946 Oct 28 04:49	14°  ♄09'28	
max. Earth dist.	14945 Nov 17 04:32	8°  ♄29'27	1.31714 AU	max. Earth dist.	14946 Oct 31 01:16	20°  ♄00'07	1.32832 AU
superior conj	14945 Nov 19 09:03	13°  ♄16'45	1°15'52	superior conj	14946 Nov 03 14:12	27°  ♄29'39	0°56'43
minimum elong	14945 Nov 19 06:51	13°  ♄04'34	1°16'29	minimum elong	14946 Nov 03 11:56	27°  ♄17'26	0°57'07
evening rise	14945 Nov 26 03:00	28°  ♄07'07			14946 Nov 04 18:08	0°  ♄	
	14945 Nov 27 00:00	0°  ♄		evening rise	14946 Nov 10 13:55	12°  ♄36'01	
desc. node	14945 Dec 12 20:21	28°  ♄43'44			14946 Nov 19 07:03	0°  ♄	
	14945 Dec 13 18:08	0°  ♄		desc. node	14946 Nov 29 17:25	15°  ♄35'25	
evening max el	14945 Dec 21 04:45	8°  ♄42'32	24°23'15	evening max el	14946 Dec 02 14:30	18°  ♄40'12	22°40'14
retrograde	14946 Jan 03 20:30	15°  ♄30'28		retrograde	14946 Dec 15 13:44	25°  ♄05'51	
evening set	14946 Jan 09 00:25	14°  ♄32'08		evening set	14946 Dec 19 10:29	24°  ♄33'13	
min. Earth dist.	14946 Jan 14 16:29	11°  ♄40'13	0.55813 AU	min. Earth dist.	14946 Dec 26 22:53	21°  ♄07'59	0.54704 AU
inferior conj	14946 Jan 16 21:40	10°  ♄18'27	-5°28'30	inferior conj	14946 Dec 27 20:30	20°  ♄37'25	-6°00'15

minimum elong	14946 Dec 27 20:53	20° ♁ 36'53	5°59'16	minimum elong	14947 Dec 07 03:31	0° ♁ 44'06	5°30'13
morning rise	14947 Jan 05 08:33	16° ♁ 49'30		min. Earth dist.	14947 Dec 08 04:32	0° ♁ 08'36	0.54466 AU
direct	14947 Jan 08 11:29	16° ♁ 27'13			14947 Dec 08 10:37	30° ♁ ♂	
morning max el	14947 Jan 20 04:14	22° ♁ 04'18	21°11'20	morning rise	14947 Dec 15 15:59	26° ♁ ♂ 40'58	
asc. node	14947 Jan 24 04:07	26° ♁ 30'40		direct	14947 Dec 19 18:43	26° ♁ ♂ 04'34	
	14947 Jan 26 17:51	0° ♁			14947 Dec 30 00:02	0° ♁	
morning set	14947 Feb 08 22:43	24° ♁ 07'47		morning max el	14948 Jan 01 19:13	2° ♁ 23'20	22°54'36
	14947 Feb 11 17:53	0° ♁		asc. node	14948 Jan 11 01:25	13° ♁ 53'51	
					14948 Jan 20 03:01	0° ♁	
superior conj	14947 Feb 16 06:07	9° ♁ 26'04	1°13'00	morning set	14948 Jan 24 10:05	8° ♁ 53'14	
minimum elong	14947 Feb 16 08:39	9° ♁ 39'06	1°13'08				
max. Earth dist.	14947 Feb 21 01:03	19° ♁ 06'58	1.35285 AU	superior conj	14948 Jan 31 08:46	23° ♁ 50'38	1°27'36
evening rise	14947 Feb 25 01:28	26° ♁ 50'28		minimum elong	14948 Jan 31 10:39	24° ♁ 00'39	1°28'07
desc. node	14947 Feb 25 18:11	28° ♁ 08'29			14948 Feb 03 06:32	0° ♁	
	14947 Feb 26 18:21	0° ♁		max. Earth dist.	14948 Feb 03 17:36	0° ♁ 57'40	1.33515 AU
	14947 Mar 17 06:08	0° ♁		evening rise	14948 Feb 08 08:18	10° ♁ 17'53	
evening max el	14947 Apr 01 09:08	18° ♁ 30'18	26°27'27	desc. node	14948 Feb 12 14:44	18° ♁ 26'03	
retrograde	14947 Apr 14 08:45	25° ♁ 52'59			14948 Feb 19 04:35	0° ♁	
evening set	14947 Apr 20 16:23	23° ♁ 20'51			14948 Mar 11 21:10	0° ♁	
asc. node	14947 Apr 22 00:43	22° ♁ 08'31		evening max el	14948 Mar 13 22:35	2° ♁ 04'45	27°14'06
min. Earth dist.	14947 Apr 24 18:08	19° ♁ 09'32	0.66730 AU	retrograde	14948 Mar 27 11:25	9° ♁ 35'11	
inferior conj	14947 Apr 26 15:06	16° ♁ 53'23	1°22'49	evening set	14948 Apr 03 03:03	7° ♁ 04'16	
minimum elong	14947 Apr 26 13:15	16° ♁ 58'59	1°21'32	min. Earth dist.	14948 Apr 07 00:08	3° ♁ 25'29	0.65106 AU
morning rise	14947 May 02 11:08	11° ♁ 11'55		asc. node	14948 Apr 07 22:07	2° ♁ 25'13	
direct	14947 May 05 13:40	10° ♁ 17'49		inferior conj	14948 Apr 09 09:26	0° ♁ 46'32	0°27'43
morning max el	14947 May 12 00:49	13° ♁ 43'13	18°25'15	minimum elong	14948 Apr 09 08:41	0° ♁ 48'38	0°27'00
	14947 May 24 01:50	0° ♁			14948 Apr 10 02:16	30° ♁ ♂ ♂	
desc. node	14947 May 24 20:02	1° ♁ 10'36		morning rise	14948 Apr 15 16:06	25° ♁ ♂ 18'04	
morning set	14947 Jun 01 10:45	13° ♁ 09'48		direct	14948 Apr 18 09:06	24° ♁ ♂ 39'16	
	14947 Jun 12 03:34	0° ♁		morning max el	14948 Apr 24 16:46	27° ♁ 55'45	17°57'04
					14948 Apr 26 15:00	0° ♁	
superior conj	14947 Jun 17 04:38	7° ♁ 52'43	-2°08'57	desc. node	14948 May 10 16:50	21° ♁ 17'57	
minimum elong	14947 Jun 16 23:22	7° ♁ 32'09	2°09'45	morning set	14948 May 12 13:09	24° ♁ 20'26	
max. Earth dist.	14947 Jun 17 15:11	8° ♁ 33'52	1.45931 AU		14948 May 15 23:50	0° ♁	
	14947 Jul 01 08:18	0° ♁					
evening rise	14947 Jul 03 01:47	2° ♁ 42'57		superior conj	14948 May 26 18:15	17° ♁ 20'25	-1°45'59
greatest brilliancy	14947 Jul 12 07:41	17° ♁ 11'02	-0.8m	minimum elong	14948 May 26 09:22	16° ♁ 45'17	1°46'07
asc. node	14947 Jul 18 23:34	27° ♁ 05'31		max. Earth dist.	14948 May 30 11:07	23° ♁ 10'28	1.45637 AU
	14947 Jul 21 03:07	0° ♁			14948 Jun 03 20:08	0° ♁	
evening max el	14947 Jul 25 04:10	4° ♁ 41'50	18°50'36	evening rise	14948 Jun 11 19:13	12° ♁ 17'07	
retrograde	14947 Jul 31 20:27	8° ♁ 20'45			14948 Jun 23 11:29	0° ♁	
evening set	14947 Aug 04 04:58	7° ♁ 15'56		greatest brilliancy	14948 Jun 25 18:03	3° ♁ 21'15	-0.6m
inferior conj	14947 Aug 09 18:20	1° ♁ 33'01	2°44'14	asc. node	14948 Jul 04 20:22	15° ♁ 41'00	
minimum elong	14947 Aug 09 20:16	1° ♁ 26'55	2°43'18	evening max el	14948 Jul 07 10:58	18° ♁ 32'18	19°39'33
	14947 Aug 10 23:48	30° ♁ ♂ ♂		retrograde	14948 Jul 14 18:35	22° ♁ 39'01	
min. Earth dist.	14947 Aug 11 12:26	29° ♁ 20'39	0.66254 AU	evening set	14948 Jul 18 12:50	21° ♁ 17'02	
morning rise	14947 Aug 15 10:41	25° ♁ 07'31		inferior conj	14948 Jul 23 21:00	15° ♁ 21'06	3°03'30
desc. node	14947 Aug 20 18:04	22° ♁ 32'32		minimum elong	14948 Jul 23 22:05	15° ♁ 17'30	3°02'37
direct	14947 Aug 21 16:45	22° ♁ 29'09		min. Earth dist.	14948 Jul 25 00:57	13° ♁ 47'51	0.67643 AU
morning max el	14947 Sep 03 17:00	0° ♁ 12'21	26°29'39	morning rise	14948 Jul 29 06:50	8° ♁ 55'56	
	14947 Sep 03 12:05	0° ♁		direct	14948 Aug 04 02:53	6° ♁ 23'02	
	14947 Sep 25 22:47	0° ♁		desc. node	14948 Aug 06 15:31	6° ♁ 47'34	
morning set	14947 Oct 09 13:49	23° ♁ 36'07		morning max el	14948 Aug 16 03:56	13° ♁ 36'05	25°11'45
	14947 Oct 12 21:47	0° ♁			14948 Aug 29 11:46	0° ♁	
max. Earth dist.	14947 Oct 13 12:15	1° ♁ 11'03	1.34476 AU		14948 Sep 17 17:38	0° ♁	
asc. node	14947 Oct 15 01:29	4° ♁ 16'14		morning set	14948 Sep 21 00:48	5° ♁ 47'32	
				max. Earth dist.	14948 Sep 24 14:04	12° ♁ 15'55	1.36568 AU
superior conj	14947 Oct 18 12:52	11° ♁ 21'27	0°31'47	asc. node	14948 Sep 30 22:05	24° ♁ 25'08	
minimum elong	14947 Oct 18 11:13	11° ♁ 12'56	0°32'03				
evening rise	14947 Oct 25 23:18	26° ♁ 59'03		superior conj	14948 Oct 01 02:05	24° ♁ 44'55	0°01'32
	14947 Oct 27 10:03	0° ♁		minimum elong	14948 Oct 01 01:58	24° ♁ 44'19	0°01'50
evening max el	14947 Nov 14 07:06	28° ♁ 52'18	21°04'11	behind sun begin	14948 Sep 30 19:34	24° ♁ 12'42	
	14947 Nov 15 11:54	0° ♁		behind sun end	14948 Oct 01 08:21	25° ♁ 16'00	
desc. node	14947 Nov 16 14:34	0° ♁ 56'21			14948 Oct 03 17:06	0° ♁	
retrograde	14947 Nov 26 00:23	4° ♁ 41'17		evening rise	14948 Oct 09 04:57	11° ♁ 10'35	
evening set	14947 Nov 28 15:22	4° ♁ 25'01			14948 Oct 19 04:49	0° ♁	
inferior conj	14947 Dec 07 11:34	0° ♁ 32'41	-5°32'35	evening max el	14948 Oct 26 13:26	9° ♁ 47'11	19°46'26





































































































































desc. node	14948 Nov 02 11:50	14°♊20'20	evening set	14949 Oct 19 19:54	25°♍38'24	
retrograde	14948 Nov 05 15:30	14°♊49'09	desc. node	14949 Oct 20 09:12	25°♍30'36	
evening set	14948 Nov 07 14:47	14°♊38'31	inferior conj	14949 Oct 28 01:14	21°♍18'26	-2°26'29
inferior conj	14948 Nov 16 09:22	10°♊37'07 -4°11'40	minimum elong	14949 Oct 27 19:10	21°♍29'18	2°23'24
minimum elong	14948 Nov 15 23:33	10°♊52'20 4°07'42	min. Earth dist.	14949 Oct 31 01:20	19°♍09'48	0.56693 AU
min. Earth dist.	14948 Nov 18 12:34	9°♊17'46 0.55174 AU	morning rise	14949 Nov 04 15:23	16°♍28'00	
morning rise	14948 Nov 24 06:43	6°♊22'02	direct	14949 Nov 10 11:58	15°♍05'49	
direct	14948 Nov 29 08:38	5°♊25'00	morning max el	14949 Nov 24 16:17	22°♍25'15	26°20'51
morning max el	14948 Dec 13 04:14	12°♊18'12 24°44'00		14949 Dec 01 09:45	0°♊	
	14948 Dec 26 16:07	0°♊	asc. node	14949 Dec 14 19:40	21°♊01'26	
asc. node	14948 Dec 27 22:36	2°♊08'23		14949 Dec 19 10:53	0°♊	
morning set	14949 Jan 07 22:00	23°♊35'41	morning set	14949 Dec 23 08:45	8°♊10'47	
	14949 Jan 10 20:36	0°♊				
superior conj	14949 Jan 14 16:29	8°♋26'10 1°35'50	superior conj	14949 Dec 30 03:05	23°♊06'43	1°37'54
minimum elong	14949 Jan 14 17:23	8°♋31'07 1°36'37	minimum elong	14949 Dec 30 02:54	23°♊05'46	1°38'51
max. Earth dist.	14949 Jan 16 17:36	12°♋54'32 1.32196 AU	max. Earth dist.	14949 Dec 30 23:23	24°♊59'47	1.31380 AU
evening rise	14949 Jan 22 01:28	24°♋09'35		14950 Jan 02 05:39	0°♋	
	14949 Jan 24 23:33	0°♋	evening rise	14950 Jan 06 02:19	8°♋19'05	
desc. node	14949 Jan 29 11:20	8°♋28'25	desc. node	14950 Jan 16 08:01	28°♋09'27	
	14949 Feb 11 18:53	0°♌		14950 Jan 17 09:23	0°♋	
evening max el	14949 Feb 24 10:30	15°♌13'13 27°34'45	evening max el	14950 Feb 06 18:36	27°♋43'20	27°23'19
retrograde	14949 Mar 10 07:03	22°♌41'35		14950 Feb 09 08:20	0°♌	
evening set	14949 Mar 17 03:03	20°♌19'19	retrograde	14950 Feb 20 18:10	5°♌03'13	
min. Earth dist.	14949 Mar 20 21:31	17°♌08'47 0.63152 AU	evening set	14950 Feb 27 13:30	2°♌57'02	
inferior conj	14949 Mar 23 17:37	14°♌19'09 -0°40'12	min. Earth dist.	14950 Mar 03 08:52	0°♌08'11	0.60987 AU
minimum elong	14949 Mar 23 18:55	14°♌15'52 0°39'48		14950 Mar 03 12:44	30°♌	
asc. node	14949 Mar 25 19:33	12°♌18'33	inferior conj	14950 Mar 06 12:17	27°♌22'44	-1°59'58
morning rise	14949 Mar 30 13:25	9°♌06'04	minimum elong	14950 Mar 06 16:37	27°♌13'09	1°58'04
direct	14949 Apr 01 22:18	8°♌39'08	asc. node	14950 Mar 12 17:01	22°♌55'36	
morning max el	14949 Apr 08 10:28	11°♌58'06 17°46'14	morning rise	14950 Mar 13 22:56	22°♌27'58	
	14949 Apr 20 19:21	0°♍	direct	14950 Mar 16 01:42	22°♌09'15	
morning set	14949 Apr 24 17:19	6°♍44'12	morning max el	14950 Mar 23 02:41	25°♌41'25	17°53'33
desc. node	14949 Apr 27 13:30	11°♍38'01		14950 Mar 26 18:15	0°♌	
superior conj	14949 May 07 02:24	27°♍41'16 -1°10'51	morning set	14950 Apr 07 17:25	20°♌03'34	
minimum elong	14949 May 06 19:34	27°♍13'09 1°10'44		14950 Apr 13 05:39	0°♍	
	14949 May 08 12:18	0°♎	desc. node	14950 Apr 14 10:06	2°♍06'32	
max. Earth dist.	14949 May 13 05:08	7°♎34'44 1.44630 AU	superior conj	14950 Apr 18 10:21	9°♍07'46	-0°31'55
evening rise	14949 May 22 05:59	21°♎42'00	minimum elong	14950 Apr 18 07:28	8°♍55'21	0°32'00
	14949 May 27 17:02	0°♏	max. Earth dist.	14950 Apr 25 19:47	21°♍34'03	1.43017 AU
evening max el	14949 Jun 18 06:02	0°♏		14950 May 01 01:26	0°♎	
asc. node	14949 Jun 21 17:16	3°♏34'21	evening rise	14950 May 02 02:20	1°♎38'15	
retrograde	14949 Jun 28 17:32	7°♏08'43		14950 May 21 04:36	0°♏	
evening set	14949 Jul 02 22:15	5°♏29'22	evening max el	14950 Jun 03 07:15	16°♏16'12	21°57'28
	14949 Jul 07 17:02	30°♏	asc. node	14950 Jun 08 14:16	20°♏31'30	
inferior conj	14949 Jul 08 04:07	29°♏21'48 3°10'09	retrograde	14950 Jun 12 15:35	21°♏44'15	
minimum elong	14949 Jul 08 04:13	29°♏21'29 3°09'14	evening set	14950 Jun 17 07:26	19°♏48'16	
min. Earth dist.	14949 Jul 08 18:19	28°♏32'46 0.68569 AU	inferior conj	14950 Jun 22 13:31	13°♏30'33	3°05'37
morning rise	14949 Jul 13 09:53	23°♏00'41	minimum elong	14950 Jun 22 12:40	13°♏33'30	3°04'34
direct	14949 Jul 18 18:15	20°♏40'13	min. Earth dist.	14950 Jun 22 14:24	13°♏27'28	0.69015 AU
desc. node	14949 Jul 24 12:54	22°♏47'56	morning rise	14950 Jun 27 17:43	7°♏15'45	
morning max el	14949 Jul 29 14:29	27°♏08'47 23°43'54	direct	14950 Jul 02 13:37	5°♏12'31	
	14949 Aug 01 06:26	0°♐	desc. node	14950 Jul 11 10:10	10°♏08'08	
morning set	14949 Aug 02 15:49	17°♐06'17	morning max el	14950 Jul 12 02:57	10°♏49'20	22°15'12
max. Earth dist.	14949 Sep 06 12:13	23°♐44'42 1.38923 AU		14950 Jul 27 06:32	0°♐	
	14949 Sep 10 00:22	0°♑	morning set	14950 Aug 14 07:01	27°♐22'42	
superior conj	14949 Sep 14 02:16	7°♑31'54 -0°32'50		14950 Aug 15 21:48	0°♑	
minimum elong	14949 Sep 14 04:38	7°♑43'01 0°32'24	max. Earth dist.	14950 Aug 19 13:22	6°♑01'49	1.41272 AU
asc. node	14949 Sep 17 18:39	14°♑32'59	superior conj	14950 Aug 27 09:02	19°♑31'22	-1°08'52
evening rise	14949 Sep 23 04:15	25°♑04'25	minimum elong	14950 Aug 27 14:26	19°♑55'23	1°08'21
	14949 Sep 25 17:08	0°♒		14950 Sep 02 03:46	0°♑	
evening max el	14949 Oct 09 09:40	21°♒32'19 18°50'40	asc. node	14950 Sep 04 15:12	4°♑35'27	
retrograde	14949 Oct 17 22:31	25°♒50'15	evening rise	14950 Sep 06 17:43	8°♑31'00	
				14950 Sep 19 07:06	0°♒	
			evening max el	14950 Sep 22 16:07	4°♒00'13	18°16'30
			retrograde	14950 Sep 30 01:06	7°♒45'30	




































































































































evening set	14950 Oct 02 03:24	7° \mathbb{M} 27'57			14951 Aug 25 15:02	0° $\underline{\mathfrak{A}}$	
desc. node	14950 Oct 07 06:38	4° \mathbb{M} 40'00		evening max el	14951 Sep 06 04:34	17° $\underline{\mathfrak{A}}$ 01'20	18°02'28
inferior conj	14950 Oct 09 14:55	2° \mathbb{M} 46'30	-0°44'46	retrograde	14951 Sep 12 20:31	20° $\underline{\mathfrak{A}}$ 27'32	
minimum elong	14950 Oct 09 13:16	2° \mathbb{M} 49'58	0°43'39	evening set	14951 Sep 15 06:18	20° $\underline{\mathfrak{A}}$ 00'27	
	14950 Oct 12 22:51	30° \mathfrak{K} $\underline{\mathfrak{A}}$		inferior conj	14951 Sep 22 00:42	14° $\underline{\mathfrak{A}}$ 59'04	0°39'22
min. Earth dist.	14950 Oct 12 21:28	0° \mathbb{M} 02'46	0.58745 AU	minimum elong	14951 Sep 22 01:54	14° $\underline{\mathfrak{A}}$ 56'12	0°39'04
morning rise	14950 Oct 16 19:43	27° $\underline{\mathfrak{A}}$ 19'46		desc. node	14951 Sep 24 04:07	12° $\underline{\mathfrak{A}}$ 54'05	
direct	14950 Oct 23 04:52	25° $\underline{\mathfrak{A}}$ 30'57		min. Earth dist.	14951 Sep 25 03:05	11° $\underline{\mathfrak{A}}$ 59'59	0.61022 AU
	14950 Nov 02 21:18	0° \mathbb{M}		morning rise	14951 Sep 28 18:34	9° $\underline{\mathfrak{A}}$ 03'33	
morning max el	14950 Nov 06 12:05	3° \mathbb{M} 11'07	27°28'26	direct	14951 Oct 05 09:57	6° $\underline{\mathfrak{A}}$ 50'38	
	14950 Nov 26 00:42	0° \mathfrak{A}		morning max el	14951 Oct 19 15:34	14° $\underline{\mathfrak{A}}$ 45'42	27°57'50
asc. node	14950 Dec 01 16:38	10° \mathfrak{A} 22'17			14951 Nov 01 00:26	0° \mathbb{M}	
morning set	14950 Dec 07 16:32	22° \mathfrak{A} 33'33		asc. node	14951 Nov 18 13:31	0° \mathfrak{A} 03'21	
	14950 Dec 11 02:52	0° \mathfrak{B}			14951 Nov 18 12:51	0° \mathfrak{A}	
				morning set	14951 Nov 21 19:26	6° \mathfrak{A} 39'25	
superior conj	14950 Dec 14 14:37	7° \mathfrak{B} 46'16	1°34'01	max. Earth dist.	14951 Nov 27 14:04	19° \mathfrak{A} 05'00	1.31322 AU
minimum elong	14950 Dec 14 13:27	7° \mathfrak{B} 39'43	1°34'56				
max. Earth dist.	14950 Dec 14 07:29	7° \mathfrak{B} 06'17	1.31083 AU	superior conj	14951 Nov 29 01:15	22° \mathfrak{A} 19'51	1°24'12
evening rise	14950 Dec 21 08:29	22° \mathfrak{B} 40'06		minimum elong	14951 Nov 28 23:19	22° \mathfrak{A} 09'06	1°24'58
	14950 Dec 24 20:35	0° \approx			14951 Dec 02 11:59	0° \mathfrak{B}	
desc. node	14951 Jan 03 04:49	17° \approx 20'36		evening rise	14951 Dec 05 17:58	7° \mathfrak{B} 07'48	
	14951 Jan 11 15:07	0° \mathfrak{H}			14951 Dec 17 11:04	0° \approx	
evening max el	14951 Jan 19 19:56	9° \mathfrak{H} 23'24	26°36'55	desc. node	14951 Dec 21 01:43	5° \approx 50'27	
retrograde	14951 Feb 02 19:22	16° \mathfrak{H} 32'44		evening max el	14952 Jan 01 12:43	20° \approx 10'13	25°18'34
evening set	14951 Feb 09 06:58	14° \mathfrak{H} 49'25		retrograde	14952 Jan 15 09:11	27° \approx 07'52	
min. Earth dist.	14951 Feb 13 09:36	12° \mathfrak{H} 11'55	0.58775 AU	evening set	14952 Jan 21 03:32	25° \approx 52'30	
inferior conj	14951 Feb 16 13:42	9° \mathfrak{H} 46'58	-3°27'08	min. Earth dist.	14952 Jan 26 01:02	23° \approx 11'03	0.56759 AU
minimum elong	14951 Feb 16 21:22	9° \mathfrak{H} 32'19	3°24'01	inferior conj	14952 Jan 28 18:44	21° \approx 22'24	-4°50'22
morning rise	14951 Feb 24 15:02	5° \mathfrak{H} 13'31		minimum elong	14952 Jan 29 03:52	21° \approx 07'16	4°47'21
direct	14951 Feb 26 14:57	4° \mathfrak{H} 59'28		morning rise	14952 Feb 06 06:52	17° \approx 10'50	
asc. node	14951 Feb 27 14:27	5° \mathfrak{H} 02'58		direct	14952 Feb 08 09:39	16° \approx 57'45	
morning max el	14951 Mar 06 13:51	8° \mathfrak{H} 55'28	18°20'27	asc. node	14952 Feb 14 11:54	18° \approx 54'19	
	14951 Mar 20 04:43	0° \mathfrak{Y}		morning max el	14952 Feb 17 15:49	21° \approx 28'09	19°08'44
morning set	14951 Mar 22 07:48	4° \mathfrak{Y} 01'35			14952 Feb 24 06:53	0° \mathfrak{H}	
				morning set	14952 Mar 05 07:54	18° \mathfrak{H} 23'53	
superior conj	14951 Mar 31 16:25	21° \mathfrak{Y} 34'59	0°04'53		14952 Mar 11 04:32	0° \mathfrak{Y}	
minimum elong	14951 Mar 31 16:46	21° \mathfrak{Y} 36'31	0°04'34				
behind sun begin	14951 Mar 31 09:42	21° \mathfrak{Y} 04'17		superior conj	14952 Mar 13 16:09	4° \mathfrak{Y} 49'24	0°36'26
behind sun end	14951 Mar 31 23:49	22° \mathfrak{Y} 08'41		minimum elong	14952 Mar 13 18:15	4° \mathfrak{Y} 59'32	0°36'07
desc. node	14951 Apr 01 06:41	22° \mathfrak{Y} 39'49		desc. node	14952 Mar 18 03:13	13° \mathfrak{Y} 13'30	
	14951 Apr 05 09:28	0° \mathfrak{B}		max. Earth dist.	14952 Mar 20 12:20	17° \mathfrak{Y} 33'12	1.38693 AU
max. Earth dist.	14951 Apr 08 05:55	4° \mathfrak{B} 55'38	1.40961 AU	evening rise	14952 Mar 24 06:37	24° \mathfrak{Y} 10'35	
evening rise	14951 Apr 12 17:53	12° \mathfrak{B} 27'12			14952 Mar 27 17:05	0° \mathfrak{B}	
	14951 Apr 23 22:38	0° \mathbb{I}			14952 Apr 16 16:23	0° \mathbb{I}	
	14951 May 16 19:03	0° \mathfrak{E}		evening max el	14952 Apr 28 12:14	14° \mathbb{I} 02'38	24°38'21
evening max el	14951 May 16 22:39	0° \mathfrak{E} 09'01	23°17'56	retrograde	14952 May 10 03:47	20° \mathbb{I} 51'08	
asc. node	14951 May 26 11:22	6° \mathfrak{E} 16'13		asc. node	14952 May 12 08:35	20° \mathbb{I} 30'18	
retrograde	14951 May 27 11:25	6° \mathfrak{E} 20'39		evening set	14952 May 15 18:37	18° \mathbb{I} 28'47	
evening set	14951 Jun 01 14:46	4° \mathfrak{E} 09'57		min. Earth dist.	14952 May 20 06:34	13° \mathbb{I} 21'26	0.68460 AU
	14951 Jun 05 07:29	30° \mathfrak{K} \mathbb{I}		inferior conj	14952 May 21 07:26	11° \mathbb{I} 58'26	2°25'15
inferior conj	14951 Jun 06 23:15	27° \mathbb{I} 44'15	2°50'38	minimum elong	14952 May 21 05:21	12° \mathbb{I} 05'25	2°23'49
minimum elong	14951 Jun 06 21:39	27° \mathbb{I} 49'49	2°49'23	morning rise	14952 May 26 16:16	6° \mathbb{I} 00'03	
min. Earth dist.	14951 Jun 06 11:11	28° \mathbb{I} 25'56	0.68977 AU	direct	14952 May 30 11:46	4° \mathbb{I} 36'48	
morning rise	14951 Jun 12 04:29	21° \mathbb{I} 37'06		morning max el	14952 Jun 06 20:50	8° \mathbb{I} 42'29	19°43'29
direct	14951 Jun 16 11:54	19° \mathbb{I} 53'39		desc. node	14952 Jun 14 04:27	17° \mathbb{I} 30'22	
morning max el	14951 Jun 24 20:24	24° \mathbb{I} 40'31	20°53'16	greatest brilliancy	14952 Jun 19 19:29	25° \mathbb{I} 28'13	-0.6m
desc. node	14951 Jun 28 07:21	28° \mathbb{I} 27'42			14952 Jun 22 21:10	0° \mathfrak{E}	
	14951 Jun 29 13:53	0° \mathfrak{E}		morning set	14952 Jul 03 02:06	15° \mathfrak{E} 27'45	
	14951 Jul 20 15:04	0° \mathfrak{Q}			14952 Jul 12 10:54	0° \mathfrak{Q}	
morning set	14951 Jul 24 23:01	6° \mathfrak{Q} 40'25		max. Earth dist.	14952 Jul 14 09:51	3° \mathfrak{Q} 04'59	1.44878 AU
max. Earth dist.	14951 Aug 01 20:38	19° \mathfrak{Q} 11'55	1.43332 AU				
	14951 Aug 08 09:59	0° \mathfrak{P}		superior conj	14952 Jul 19 03:39	10° \mathfrak{Q} 38'17	-2°06'14
				minimum elong	14952 Jul 19 09:32	11° \mathfrak{Q} 01'56	2°06'45
superior conj	14951 Aug 08 18:09	0° \mathfrak{P} 34'22	-1°42'11		14952 Jul 30 22:14	0° \mathfrak{P}	
minimum elong	14951 Aug 09 01:40	1° \mathfrak{P} 06'01	1°41'58	evening rise	14952 Aug 01 21:01	3° \mathfrak{P} 16'48	
evening rise	14951 Aug 20 17:03	21° \mathfrak{P} 19'34		asc. node	14952 Aug 08 08:25	14° \mathfrak{P} 08'51	
asc. node	14951 Aug 22 11:47	24° \mathfrak{P} 28'59			14952 Aug 19 08:54	0° $\underline{\mathfrak{A}}$	

evening max el	14952 Aug 19 19:14	0° Ω 26'09	18°07'17			14953 Jul 05 03:12	0° Ω	
retrograde	14952 Aug 26 04:07	3° Ω 46'43		evening rise		14953 Jul 14 01:03	14° Ω 12'41	
evening set	14952 Aug 28 22:22	3° Ω 06'48				14953 Jul 23 22:25	0° \mathbb{N}	
	14952 Sep 02 00:31	30° \mathbb{N}		asc. node		14953 Jul 26 05:05	3° \mathbb{N} 29'28	
inferior conj	14952 Sep 04 02:42	27° \mathbb{N} 47'56	1°42'36	evening max el		14953 Aug 03 08:48	14° \mathbb{N} 06'13	18°29'55
minimum elong	14952 Sep 04 05:01	27° \mathbb{N} 41'37	1°41'44	retrograde		14953 Aug 09 19:50	17° \mathbb{N} 34'24	
min. Earth dist.	14952 Sep 06 18:35	24° \mathbb{N} 54'07	0.63260 AU	evening set		14953 Aug 12 23:04	16° \mathbb{N} 39'07	
morning rise	14952 Sep 10 09:35	21° \mathbb{N} 34'03		inferior conj		14953 Aug 18 16:53	11° \mathbb{N} 04'38	2°26'32
desc. node	14952 Sep 10 01:37	21° \mathbb{N} 49'25		minimum elong		14953 Aug 18 19:09	10° \mathbb{N} 57'48	2°25'35
direct	14952 Sep 17 01:16	19° \mathbb{N} 03'53		min. Earth dist.		14953 Aug 20 19:16	8° \mathbb{N} 33'27	0.65267 AU
morning max el	14952 Oct 01 00:10	27° \mathbb{N} 04'35	27°48'39	morning rise		14953 Aug 24 14:01	4° \mathbb{N} 41'34	
	14952 Oct 03 18:28	0° Ω		desc. node		14953 Aug 27 23:08	2° \mathbb{N} 38'11	
	14952 Oct 24 16:52	0° \mathbb{N}		direct		14953 Aug 31 00:52	2° \mathbb{N} 03'24	
asc. node	14952 Nov 04 10:20	19° \mathbb{N} 58'29		morning max el		14953 Sep 13 11:00	9° \mathbb{N} 56'41	27°06'02
morning set	14952 Nov 04 15:11	20° \mathbb{N} 22'54				14953 Sep 29 06:28	0° Ω	
	14952 Nov 09 06:27	0° \mathbb{N}				14953 Oct 17 03:38	0° \mathbb{N}	
max. Earth dist.	14952 Nov 09 15:14	0° \mathbb{N} 46'50	1.32113 AU	morning set		14953 Oct 19 00:54	3° \mathbb{N} 36'19	
				asc. node		14953 Oct 22 07:01	10° \mathbb{N} 01'50	
superior conj	14952 Nov 12 09:03	6° \mathbb{N} 42'20	1°08'28	max. Earth dist.		14953 Oct 23 07:37	12° \mathbb{N} 06'22	1.33463 AU
minimum elong	14952 Nov 12 06:44	6° \mathbb{N} 29'44	1°09'01					
evening rise	14952 Nov 19 04:53	21° \mathbb{N} 37'42		superior conj		14953 Oct 27 11:43	20° \mathbb{N} 46'44	0°46'51
	14952 Nov 23 04:32	0° \mathbb{Z}		minimum elong		14953 Oct 27 09:37	20° \mathbb{N} 35'36	0°47'11
desc. node	14952 Dec 06 22:43	23° \mathbb{Z} 24'02				14953 Oct 31 19:14	0° \mathbb{N}	
	14952 Dec 12 15:43	0° \approx		evening rise		14953 Nov 03 15:20	6° \mathbb{N} 04'07	
evening max el	14952 Dec 12 23:10	0° \approx 18'07	23°39'45			14953 Nov 16 07:58	0° \mathbb{Z}	
retrograde	14952 Dec 26 09:57	6° \approx 58'34		desc. node		14953 Nov 23 19:50	9° \mathbb{Z} 40'07	
evening set	14952 Dec 31 00:58	6° \approx 12'07		evening max el		14953 Nov 24 10:47	10° \mathbb{Z} 17'32	21°57'49
min. Earth dist.	14953 Jan 06 10:10	3° \approx 08'09	0.55240 AU	retrograde		14953 Dec 06 22:50	16° \mathbb{Z} 28'45	
inferior conj	14953 Jan 08 03:20	2° \approx 07'29	-5°48'26	evening set		14953 Dec 10 05:51	16° \mathbb{Z} 04'37	
minimum elong	14953 Jan 08 08:38	1° \approx 59'40	5°46'57	inferior conj		14953 Dec 18 21:12	12° \mathbb{Z} 12'28	-5°56'07
	14953 Jan 11 22:42	30° \mathbb{R} \mathbb{Z}		minimum elong		14953 Dec 18 17:33	12° \mathbb{Z} 17'35	5°54'52
morning rise	14953 Jan 16 17:56	28° \mathbb{Z} 13'22		min. Earth dist.		14953 Dec 18 16:00	12° \mathbb{Z} 19'44	0.54488 AU
direct	14953 Jan 19 08:59	27° \mathbb{Z} 56'19		morning rise		14953 Dec 27 06:07	8° \mathbb{Z} 25'04	
	14953 Jan 26 04:43	0° \approx		direct		14953 Dec 30 19:05	7° \mathbb{Z} 57'25	
morning max el	14953 Jan 30 04:37	3° \approx 08'55	20°19'57	morning max el		14954 Jan 12 02:27	13° \mathbb{Z} 53'13	21°53'22
asc. node	14953 Jan 31 09:17	4° \approx 21'43		asc. node		14954 Jan 18 06:37	21° \mathbb{Z} 07'15	
	14953 Feb 16 02:51	0° \mathbb{X}				14954 Jan 23 22:33	0° \approx	
morning set	14953 Feb 17 14:20	3° \mathbb{X} 00'51		morning set		14954 Feb 02 00:30	17° \approx 44'31	
						14954 Feb 07 18:58	0° \mathbb{X}	
superior conj	14953 Feb 25 05:07	18° \mathbb{X} 38'45	1°01'34					
minimum elong	14953 Feb 25 07:45	18° \mathbb{X} 52'02	1°01'28	superior conj		14954 Feb 09 03:37	2° \mathbb{X} 52'15	1°19'59
max. Earth dist.	14953 Mar 02 19:17	29° \mathbb{X} 37'25	1.36468 AU	minimum elong		14954 Feb 09 05:55	3° \mathbb{X} 04'21	1°20'16
	14953 Mar 03 00:02	0° \mathbb{Y}		max. Earth dist.		14954 Feb 13 07:42	11° \mathbb{X} 28'25	1.34489 AU
desc. node	14953 Mar 04 23:46	3° \mathbb{Y} 44'11		evening rise		14954 Feb 17 13:52	19° \mathbb{X} 50'56	
evening rise	14953 Mar 06 14:27	6° \mathbb{Y} 41'52		desc. node		14954 Feb 19 20:19	24° \mathbb{X} 07'31	
	14953 Mar 20 12:55	0° \mathbb{Z}				14954 Feb 23 02:03	0° \mathbb{Y}	
evening max el	14953 Apr 11 01:48	27° \mathbb{Z} 55'06	25°51'34			14954 Mar 14 13:11	0° \mathbb{Z}	
	14953 Apr 13 07:39	0° \mathbb{I}		evening max el		14954 Mar 24 15:43	11° \mathbb{Z} 39'28	26°50'05
retrograde	14953 Apr 23 15:34	5° \mathbb{I} 08'53		retrograde		14954 Apr 06 21:41	19° \mathbb{Z} 06'09	
asc. node	14953 Apr 29 05:53	3° \mathbb{I} 02'04		evening set		14954 Apr 13 08:58	16° \mathbb{Z} 34'06	
evening set	14953 Apr 29 17:19	2° \mathbb{I} 39'05		asc. node		14954 Apr 16 03:15	13° \mathbb{Z} 58'19	
	14953 May 02 08:58	30° \mathbb{R} \mathbb{Z}		min. Earth dist.		14954 Apr 17 08:40	12° \mathbb{Z} 36'44	0.66087 AU
min. Earth dist.	14953 May 03 22:28	28° \mathbb{Z} 07'28	0.67487 AU	inferior conj		14954 Apr 19 10:52	10° \mathbb{Z} 09'56	1°01'00
inferior conj	14953 May 05 12:03	26° \mathbb{Z} 08'48	1°48'58	minimum elong		14954 Apr 19 09:22	10° \mathbb{Z} 14'19	0°59'54
minimum elong	14953 May 05 09:56	26° \mathbb{Z} 15'29	1°47'33	morning rise		14954 Apr 25 11:04	4° \mathbb{Z} 33'26	
morning rise	14953 May 11 03:11	20° \mathbb{Z} 20'26		direct		14954 Apr 28 09:27	3° \mathbb{Z} 46'06	
direct	14953 May 14 11:37	19° \mathbb{Z} 16'17		morning max el		14954 May 04 18:03	7° \mathbb{Z} 06'12	18°11'05
morning max el	14953 May 21 04:30	22° \mathbb{Z} 52'49	18°48'57	desc. node		14954 May 18 22:16	27° \mathbb{Z} 01'43	
	14953 May 27 03:10	0° \mathbb{I}				14954 May 20 18:49	0° \mathbb{I}	
desc. node	14953 Jun 01 01:25	7° \mathbb{I} 04'35		morning set		14954 May 23 22:48	5° \mathbb{I} 05'03	
greatest brilliancy	14953 Jun 03 23:53	11° \mathbb{I} 30'30	-0.8m					
morning set	14953 Jun 12 12:28	24° \mathbb{I} 40'39		superior conj		14954 Jun 08 02:53	29° \mathbb{I} 09'13	-2°01'13
	14953 Jun 15 22:36	0° \mathbb{Z}		minimum elong		14954 Jun 07 19:17	28° \mathbb{I} 39'27	2°01'44
max. Earth dist.	14953 Jun 27 03:45	17° \mathbb{Z} 28'02	1.45763 AU			14954 Jun 08 15:52	0° \mathbb{Z}	
				max. Earth dist.		14954 Jun 10 00:12	2° \mathbb{Z} 06'21	1.45902 AU
superior conj	14953 Jun 28 18:03	19° \mathbb{Z} 57'49	-2°13'47	evening rise		14954 Jun 24 05:04	24° \mathbb{Z} 10'47	
minimum elong	14953 Jun 28 17:11	19° \mathbb{Z} 54'23	2°14'45			14954 Jun 27 23:12	0° Ω	

greatest brilliancy	14954 Jul 05 15:27	11°♌46'01	-0.7m	superior conj	14955 May 18 23:07	8°♊56'04	-1°32'02
asc. node	14954 Jul 13 01:51	22°♌24'11		minimum elong	14955 May 18 14:36	8°♊21'55	1°31'59
evening max el	14954 Jul 17 18:42	27°♌55'00	19°09'32	max. Earth dist.	14955 May 23 20:12	16°♊41'38	1.45293 AU
	14954 Jul 20 04:29	0°♎			14955 Jun 01 09:23	0°♊	
retrograde	14954 Jul 24 16:23	1°♎43'53		evening rise	14955 Jun 03 17:38	3°♊35'47	
evening set	14954 Jul 28 05:05	0°♎31'41		greatest brilliancy	14955 Jun 18 13:41	25°♊48'32	-0.6m
	14954 Jul 28 22:07	30°♋♌			14955 Jun 21 12:17	0°♌	
inferior conj	14954 Aug 02 15:51	24°♌43'08	2°54'02	asc. node	14955 Jun 29 22:42	10°♌43'04	
minimum elong	14954 Aug 02 17:27	24°♌37'57	2°53'08	evening max el	14955 Jun 30 23:02	11°♌46'08	20°04'54
min. Earth dist.	14954 Aug 04 03:53	22°♌46'43	0.66905 AU	retrograde	14955 Jul 08 15:11	16°♌07'48	
morning rise	14954 Aug 08 05:11	18°♌17'30		evening set	14955 Jul 12 13:52	14°♌38'10	
direct	14954 Aug 14 07:20	15°♌40'35		inferior conj	14955 Jul 17 20:42	8°♌36'55	3°07'44
desc. node	14954 Aug 14 20:36	15°♌41'45		minimum elong	14955 Jul 17 21:22	8°♌34'39	3°06'52
morning max el	14954 Aug 26 22:12	23°♌11'57	25°58'21	min. Earth dist.	14955 Jul 18 18:38	7°♌22'26	0.68097 AU
	14954 Sep 01 23:05	0°♎		morning rise	14955 Jul 23 04:31	2°♌13'14	
	14954 Sep 22 14:25	0°♊			14955 Jul 26 23:48	30°♋♊	
morning set	14954 Oct 01 21:18	16°♊12'41		direct	14955 Jul 28 19:39	29°♊45'14	
max. Earth dist.	14954 Oct 05 14:27	23°♊12'18	1.35326 AU		14955 Jul 30 17:28	0°♌	
asc. node	14954 Oct 09 03:40	0°♎09'49		desc. node	14955 Aug 01 18:00	0°♌44'33	
	14954 Oct 09 01:41	0°♎		morning max el	14955 Aug 09 09:00	6°♌40'27	24°35'04
					14955 Aug 27 12:51	0°♎	
superior conj	14954 Oct 11 06:44	4°♎27'13	0°19'34	morning set	14955 Sep 14 00:16	28°♎02'30	
minimum elong	14954 Oct 11 05:38	4°♎21'33	0°19'49		14955 Sep 15 03:02	0°♊	
evening rise	14954 Oct 18 23:23	20°♎22'48		max. Earth dist.	14955 Sep 17 14:19	4°♊25'10	1.37559 AU
	14954 Oct 23 17:44	0°♊					
evening max el	14954 Nov 06 08:44	20°♊44'50	20°28'27	superior conj	14955 Sep 24 14:51	17°♊35'44	-0°12'40
desc. node	14954 Nov 10 17:02	24°♊13'55		minimum elong	14955 Sep 24 15:41	17°♊39'45	0°12'19
retrograde	14954 Nov 17 09:23	26°♊14'01		behind sun begin	14955 Sep 24 11:18	17°♊18'31	
evening set	14954 Nov 19 16:00	26°♊01'04		behind sun end	14955 Sep 24 20:04	18°♊01'00	
inferior conj	14954 Nov 28 13:11	22°♊06'12	-5°03'16	asc. node	14955 Sep 26 00:15	20°♊18'29	
minimum elong	14954 Nov 28 03:25	22°♊20'26	4°59'59		14955 Sep 30 21:18	0°♎	
min. Earth dist.	14954 Nov 29 21:52	21°♊18'35	0.54661 AU	evening rise	14955 Oct 03 02:42	4°♎27'36	
morning rise	14954 Dec 06 14:31	18°♊07'10			14955 Oct 18 01:09	0°♊	
direct	14954 Dec 11 03:45	17°♊22'39		evening max el	14955 Oct 19 21:07	2°♊00'18	19°19'53
morning max el	14954 Dec 24 13:30	23°♊56'14	23°41'29	desc. node	14955 Oct 28 14:19	6°♊41'37	
	14954 Dec 30 00:17	0°♊		retrograde	14955 Oct 29 06:41	6°♊43'03	
asc. node	14955 Jan 05 03:50	8°♊53'23		evening set	14955 Oct 31 03:47	6°♊32'33	
	14955 Jan 16 08:17	0°♋		inferior conj	14955 Nov 08 17:41	2°♊23'36	-3°28'06
morning set	14955 Jan 17 12:19	2°♋28'55		minimum elong	14955 Nov 08 09:06	2°♊37'44	3°24'13
				min. Earth dist.	14955 Nov 11 07:26	0°♊42'15	0.55733 AU
superior conj	14955 Jan 24 08:40	17°♋21'36	1°31'52		14955 Nov 12 10:26	30°♋♎	
minimum elong	14955 Jan 24 10:09	17°♋29'40	1°32'30	morning rise	14955 Nov 16 12:09	27°♎54'12	
max. Earth dist.	14955 Jan 27 03:47	23°♋21'52	1.32899 AU	direct	14955 Nov 21 22:24	26°♎47'12	
	14955 Jan 30 08:07	0°♋			14955 Dec 01 05:00	0°♊	
evening rise	14955 Feb 01 01:25	3°♋28'59		morning max el	14955 Dec 05 23:03	3°♊52'17	25°28'04
desc. node	14955 Feb 06 16:54	14°♋19'02		asc. node	14955 Dec 23 00:58	27°♊25'25	
	14955 Feb 15 21:19	0°♎			14955 Dec 24 11:09	0°♊	
evening max el	14955 Mar 07 04:51	25°♎04'27	27°26'28	morning set	14956 Jan 01 23:58	17°♊09'01	
	14955 Mar 13 07:21	0°♋			14956 Jan 07 20:12	0°♋	
retrograde	14955 Mar 20 21:13	2°♋34'08					
evening set	14955 Mar 27 15:23	0°♋06'00		superior conj	14956 Jan 08 17:52	2°♋00'04	1°37'27
	14955 Mar 27 18:38	30°♋♎		minimum elong	14956 Jan 08 18:19	2°♋02'33	1°38'20
min. Earth dist.	14955 Mar 31 11:06	26°♎40'01	0.64314 AU	max. Earth dist.	14956 Jan 10 06:37	5°♋22'53	1.31779 AU
inferior conj	14955 Apr 03 01:15	23°♎55'05	0°00'28	evening rise	14956 Jan 15 22:09	17°♋28'48	
minimum elong	14955 Apr 03 01:15	23°♎55'06	0°00'10		14956 Jan 22 06:20	0°♋	
transit middle	14955 Apr 03 01:15	23°♎55'06	0°00'10	desc. node	14956 Jan 24 13:32	4°♋13'18	
transit begin	14955 Apr 02 22:09	24°♎03'21			14956 Feb 10 10:48	0°♎	
transit end	14955 Apr 03 04:21	23°♎46'51		evening max el	14956 Feb 17 15:16	7°♎57'41	27°34'03
asc. node	14955 Apr 03 00:40	23°♎56'40		retrograde	14956 Mar 02 13:24	15°♎23'25	
morning rise	14955 Apr 09 13:14	18°♎32'49		evening set	14956 Mar 09 10:04	13°♎06'41	
direct	14955 Apr 12 02:42	17°♎59'22		min. Earth dist.	14956 Mar 13 04:10	10°♎06'46	0.62247 AU
morning max el	14955 Apr 18 11:06	21°♎15'10	17°50'19	inferior conj	14956 Mar 16 04:09	7°♎16'41	-1°12'41
	14955 Apr 25 06:10	0°♋		minimum elong	14956 Mar 16 06:38	7°♎10'45	1°11'41
morning set	14955 May 05 12:46	16°♋48'44		asc. node	14956 Mar 19 22:06	4°♎01'24	
desc. node	14955 May 05 19:00	17°♋14'54		morning rise	14956 Mar 23 06:10	2°♎11'24	
	14955 May 13 11:00	0°♊		direct	14956 Mar 25 12:11	1°♎48'25	
				morning max el	14956 Apr 01 04:42	5°♎11'25	17°47'10

morning set	14956 Apr 17 02:13	29° Υ 38'44		morning set	14957 Mar 31 09:02	13° Υ 16'06	
	14956 Apr 17 07:03	0° \mathcal{B}		desc. node	14957 Apr 08 12:16	28° Υ 10'11	
desc. node	14956 Apr 21 15:40	7° \mathcal{B} 39'23			14957 Apr 09 12:52	0° \mathcal{B}	
superior conj	14956 Apr 28 17:26	19° \mathcal{B} 45'42	-0°54'24	superior conj	14957 Apr 10 11:15	1° \mathcal{B} 39'16	-0°15'51
minimum elong	14956 Apr 28 12:15	19° \mathcal{B} 23'59	0°54'20	minimum elong	14957 Apr 10 09:54	1° \mathcal{B} 33'19	0°16'03
	14956 May 04 22:48	0° Π		max. Earth dist.	14957 Apr 18 01:08	14° \mathcal{B} 39'15	1.42180 AU
max. Earth dist.	14956 May 05 12:58	0° Π 57'08	1.44008 AU	evening rise	14957 Apr 23 10:39	23° \mathcal{B} 27'19	
evening rise	14956 May 13 06:50	13° Π 10'05			14957 Apr 27 14:22	0° Π	
	14956 May 24 10:38	0° \mathcal{E}			14957 May 18 11:09	0° \mathcal{E}	
evening max el	14956 Jun 12 21:21	25° \mathcal{E} 37'32	21°13'29	evening max el	14957 May 26 14:46	9° \mathcal{E} 29'46	22°31'19
asc. node	14956 Jun 15 19:37	28° \mathcal{E} 14'19		asc. node	14957 Jun 02 16:41	14° \mathcal{E} 42'54	
	14956 Jun 18 16:12	0° Ω		retrograde	14957 Jun 05 11:27	15° \mathcal{E} 17'09	
retrograde	14956 Jun 21 14:05	0° Ω 40'39		evening set	14957 Jun 10 08:01	13° \mathcal{E} 14'52	
	14956 Jun 24 07:38	30° $\mathcal{R}\mathcal{E}$		inferior conj	14957 Jun 15 14:53	6° \mathcal{E} 53'21	3°00'33
evening set	14956 Jun 25 23:25	28° \mathcal{E} 54'02		minimum elong	14957 Jun 15 13:41	6° \mathcal{E} 57'31	2°59'25
inferior conj	14956 Jul 01 05:04	22° \mathcal{E} 41'39	3°09'33	min. Earth dist.	14957 Jun 15 10:17	7° \mathcal{E} 09'22	0.69056 AU
minimum elong	14956 Jul 01 04:45	22° \mathcal{E} 42'45	3°08'35	morning rise	14957 Jun 20 19:11	0° \mathcal{E} 41'23	
min. Earth dist.	14956 Jul 01 13:31	22° \mathcal{E} 12'15	0.68819 AU		14957 Jun 21 16:57	30° $\mathcal{R}\Pi$	
morning rise	14956 Jul 06 09:51	16° \mathcal{E} 22'49		direct	14957 Jun 25 09:44	28° Π 46'15	
direct	14956 Jul 11 12:49	14° \mathcal{E} 09'24			14957 Jun 29 10:43	0° \mathcal{E}	
desc. node	14956 Jul 18 15:21	17° \mathcal{E} 21'33		morning max el	14957 Jul 04 10:23	4° \mathcal{E} 01'34	21°39'01
morning max el	14956 Jul 21 20:12	20° \mathcal{E} 16'53	23°05'41	desc. node	14957 Jul 05 12:36	5° \mathcal{E} 09'13	
	14956 Jul 30 03:09	0° Ω			14957 Jul 24 04:14	0° Ω	
	14956 Aug 19 17:23	0° \mathcal{M}		morning set	14957 Aug 05 10:22	18° Ω 45'50	
morning set	14956 Aug 25 05:30	8° \mathcal{M} 55'32		max. Earth dist.	14957 Aug 11 15:54	28° Ω 49'43	1.42197 AU
max. Earth dist.	14956 Aug 29 12:51	16° \mathcal{M} 11'24	1.39940 AU		14957 Aug 12 08:55	0° \mathcal{M}	
superior conj	14956 Sep 06 08:08	0° \mathcal{A} 03'10	-0°48'10	superior conj	14957 Aug 19 06:13	11° \mathcal{M} 40'06	-1°23'42
minimum elong	14956 Sep 06 11:46	0° \mathcal{A} 19'54	0°47'39	minimum elong	14957 Aug 19 12:46	12° \mathcal{M} 08'33	1°23'14
	14956 Sep 06 07:26	0° \mathcal{A}		asc. node	14957 Aug 29 17:23	0° \mathcal{A} 23'39	
asc. node	14956 Sep 11 20:49	10° \mathcal{A} 24'16			14957 Aug 29 12:13	0° \mathcal{A}	
evening rise	14956 Sep 15 22:17	18° \mathcal{A} 10'47		evening rise	14957 Aug 30 06:21	1° \mathcal{A} 22'50	
	14956 Sep 22 05:48	0° \mathcal{M}		evening max el	14957 Sep 15 07:50	26° \mathcal{A} 48'44	18°08'14
evening max el	14956 Oct 01 22:11	14° \mathcal{M} 04'30	18°33'34		14957 Sep 20 00:31	0° \mathcal{M}	
retrograde	14956 Oct 09 22:05	18° \mathcal{M} 07'08		retrograde	14957 Sep 22 08:10	0° \mathcal{M} 23'52	
evening set	14956 Oct 11 20:53	17° \mathcal{M} 53'29		evening set	14957 Sep 24 13:32	0° \mathcal{M} 02'42	
desc. node	14956 Oct 14 11:43	16° \mathcal{M} 55'48			14957 Sep 24 16:53	30° $\mathcal{R}\mathcal{A}$	
inferior conj	14956 Oct 19 18:50	13° \mathcal{M} 24'39	-1°41'43	desc. node	14957 Oct 01 09:11	25° \mathcal{A} 31'24	
minimum elong	14956 Oct 19 14:46	13° \mathcal{M} 32'28	1°39'28	inferior conj	14957 Oct 01 17:32	25° \mathcal{A} 12'49	-0°06'33
min. Earth dist.	14956 Oct 22 23:24	10° \mathcal{M} 58'33	0.57515 AU	minimum elong	14957 Oct 01 17:19	25° \mathcal{A} 13'18	0°06'09
morning rise	14956 Oct 27 05:12	8° \mathcal{M} 17'52		transit middle	14957 Oct 01 17:19	25° \mathcal{A} 13'18	0°06'09
direct	14956 Nov 02 07:48	6° \mathcal{M} 44'06		transit begin	14957 Oct 01 14:12	25° \mathcal{A} 20'16	
morning max el	14956 Nov 16 14:17	14° \mathcal{M} 14'03	26°53'58	transit end	14957 Oct 01 20:26	25° \mathcal{A} 06'19	
	14956 Nov 29 04:45	0° \mathcal{A}		min. Earth dist.	14957 Oct 04 23:31	22° \mathcal{A} 19'48	0.59705 AU
asc. node	14956 Dec 08 22:00	16° \mathcal{A} 31'12		morning rise	14957 Oct 08 17:47	19° \mathcal{A} 32'51	
	14956 Dec 15 15:02	0° \mathcal{B}		direct	14957 Oct 15 06:37	17° \mathcal{A} 32'49	
morning set	14956 Dec 16 09:39	1° \mathcal{B} 39'16		morning max el	14957 Oct 29 13:24	25° \mathcal{A} 20'21	27°45'42
					14957 Nov 02 21:08	0° \mathcal{M}	
superior conj	14956 Dec 23 05:05	16° \mathcal{B} 40'50	1°36'59		14957 Nov 22 14:59	0° \mathcal{A}	
minimum elong	14956 Dec 23 04:29	16° \mathcal{B} 37'24	1°37'57	asc. node	14957 Nov 25 18:57	6° \mathcal{A} 01'44	
max. Earth dist.	14956 Dec 23 13:37	17° \mathcal{B} 28'29	1.31179 AU	morning set	14957 Nov 30 15:36	15° \mathcal{A} 55'32	
	14956 Dec 29 06:07	0° \approx		max. Earth dist.	14957 Dec 06 21:26	29° \mathcal{A} 32'27	1.31118 AU
evening rise	14956 Dec 30 01:30	1° \approx 43'32			14957 Dec 07 02:22	0° \mathcal{B}	
desc. node	14957 Jan 10 10:16	23° \approx 42'35					
	14957 Jan 14 05:14	0° \mathcal{H}		superior conj	14957 Dec 07 16:30	1° \mathcal{B} 18'52	1°30'34
evening max el	14957 Jan 29 20:37	20° \mathcal{H} 06'46	27°07'54	minimum elong	14957 Dec 07 14:58	1° \mathcal{B} 10'19	1°31'27
retrograde	14957 Feb 12 20:53	27° \mathcal{H} 23'20		evening rise	14957 Dec 14 09:20	16° \mathcal{B} 08'20	
evening set	14957 Feb 19 13:45	25° \mathcal{H} 26'01			14957 Dec 21 04:00	0° \approx	
min. Earth dist.	14957 Feb 23 11:02	22° \mathcal{H} 43'29	0.60030 AU	desc. node	14957 Dec 28 07:07	12° \approx 37'42	
inferior conj	14957 Feb 26 15:53	20° \mathcal{H} 04'23	-2°36'31		14958 Jan 10 08:20	0° \mathcal{H}	
minimum elong	14957 Feb 26 21:41	19° \mathcal{H} 52'20	2°34'01	evening max el	14958 Jan 11 18:35	1° \mathcal{H} 24'23	26°07'05
morning rise	14957 Mar 06 09:01	15° \mathcal{H} 18'39		retrograde	14958 Jan 25 17:30	8° \mathcal{H} 28'42	
asc. node	14957 Mar 06 19:33	15° \mathcal{H} 12'29		evening set	14958 Jan 31 22:44	6° \mathcal{H} 57'13	
direct	14957 Mar 08 09:53	15° \mathcal{H} 02'28		min. Earth dist.	14958 Feb 05 07:52	4° \mathcal{H} 19'47	0.57875 AU
morning max el	14957 Mar 15 19:18	18° \mathcal{H} 43'46	18°02'34	inferior conj	14958 Feb 08 08:55	2° \mathcal{H} 08'47	-4°04'01
	14957 Mar 23 23:32	0° Υ		minimum elong	14958 Feb 08 17:37	1° \mathcal{H} 53'07	4°00'42

	14958 Feb 11 12:17	30° 		minimum elong	14959 Jan 20 13:17	13°  09'19	5°17'12
morning rise	14958 Feb 16 15:33	27°  44'21		morning rise	14959 Jan 28 19:18	9°  18'57	
direct	14958 Feb 18 15:40	27°  31'14		direct	14959 Jan 31 02:16	9°  04'43	
asc. node	14958 Feb 21 17:00	28°  03'21		asc. node	14959 Feb 08 14:24	12°  37'05	
	14958 Feb 25 04:32	0° 		morning max el	14959 Feb 09 23:38	13°  52'13	19°36'12
morning max el	14958 Feb 27 02:59	1°  41'09	18°38'13		14959 Feb 21 03:45	0° 	
morning set	14958 Mar 15 04:00	27°  25'30		morning set	14959 Feb 27 07:09	11°  55'23	
	14958 Mar 16 11:54	0° 					
				superior conj	14959 Mar 07 07:09	27°  57'57	0°47'56
superior conj	14958 Mar 24 01:18	14°  27'20	0°19'00	minimum elong	14959 Mar 07 09:36	28°  10'02	0°47'40
minimum elong	14958 Mar 24 02:34	14°  33'15	0°18'39		14959 Mar 08 08:07	0° 	
desc. node	14958 Mar 26 08:50	18°  43'46		desc. node	14959 Mar 13 05:23	9°  16'43	
max. Earth dist.	14958 Mar 31 09:15	27°  41'09	1.40010 AU	max. Earth dist.	14959 Mar 13 15:45	10°  04'36	1.37728 AU
	14958 Apr 01 17:20	0° 		evening rise	14959 Mar 17 08:30	16°  44'37	
evening rise	14958 Apr 04 11:16	4°  39'48			14959 Mar 25 04:48	0° 	
	14958 Apr 20 18:03	0° 			14959 Apr 15 04:56	0° 	
evening max el	14958 May 09 05:18	23°  23'33	23°52'41	evening max el	14959 Apr 21 18:50	7°  17'52	25°10'52
retrograde	14958 May 20 05:49	29°  21'33		retrograde	14959 May 03 20:13	14°  17'58	
asc. node	14958 May 20 13:50	29°  21'04		asc. node	14959 May 07 11:04	13°  22'49	
evening set	14958 May 25 14:04	27°  23'54		evening set	14959 May 09 15:56	11°  21'48	
min. Earth dist.	14958 May 30 06:46	22°  07'16	0.68815 AU	min. Earth dist.	14959 May 14 00:48	7°  00'02	0.68102 AU
inferior conj	14958 May 31 00:12	21°  07'48	2°41'11	inferior conj	14959 May 15 07:06	5°  21'07	2°11'14
minimum elong	14958 May 30 22:20	21°  14'08	2°39'50	minimum elong	14959 May 15 04:56	5°  28'12	2°09'48
morning rise	14958 Jun 05 06:37	15°  04'06			14959 May 20 00:52	30°  R 	
direct	14958 Jun 09 08:58	13°  29'04		morning rise	14959 May 20 18:17	29°  R 	27'01
morning max el	14958 Jun 17 06:31	17°  25'48	20°21'49	direct	14959 May 24 09:03	28°  R 	12'00
desc. node	14958 Jun 22 09:45	23°  24'37			14959 May 29 00:37	0° 	
	14958 Jun 27 01:23	0° 		morning max el	14959 May 31 10:08	2°  03'18	19°18'25
morning set	14958 Jul 15 18:53	27°  44'58		desc. node	14959 Jun 09 06:47	13°  21'06'07	
	14958 Jul 17 05:49	0° 		greatest brilliancy	14959 Jun 13 03:14	18°  21'41'49	-0.7m
max. Earth dist.	14958 Jul 25 02:02	12°  20'37	1.44068 AU		14959 Jun 20 14:59	0° 	
				morning set	14959 Jun 24 22:35	6°  23'07	
superior conj	14958 Jul 31 05:20	22°  20'09	-1°53'57	max. Earth dist.	14959 Jul 07 18:12	26°  23'11'19	1.45346 AU
minimum elong	14958 Jul 31 12:48	22°  20'54	1°54'02		14959 Jul 09 23:12	0° 	
	14958 Aug 04 20:11	0° 					
evening rise	14958 Aug 12 22:06	13°  20'10		superior conj	14959 Jul 11 05:40	2°  00'32	-2°11'48
asc. node	14958 Aug 16 14:00	20°  20'12'02		minimum elong	14959 Jul 11 09:11	2°  01'42'27	2°12'36
	14958 Aug 22 10:24	0° 		evening rise	14959 Jul 25 16:24	25°  02'44'04	
evening max el	14958 Aug 29 21:43	10°  01'25	18°02'16		14959 Jul 28 11:16	0° 	
retrograde	14958 Sep 05 09:17	13°  02'31'4		asc. node	14959 Aug 03 10:40	9°  20'44'55	
evening set	14958 Sep 07 22:43	12°  05'50'55		evening max el	14959 Aug 13 12:16	23°  23'33'52	18°14'39
inferior conj	14958 Sep 14 10:42	7°  04'41'40	1°08'42	retrograde	14959 Aug 19 20:57	26°  26'56'08	
minimum elong	14958 Sep 14 12:33	7°  06'36'57	1°08'05	evening set	14959 Aug 22 18:59	26°  27'09'52	
min. Earth dist.	14958 Sep 17 09:06	4°  02'42'46	0.62000 AU	inferior conj	14959 Aug 28 18:22	20°  28'43'47	2°03'24
desc. node	14958 Sep 18 06:42	3°  05'11'17		minimum elong	14959 Aug 28 20:46	20°  29'36'55	2°02'28
morning rise	14958 Sep 20 23:51	1°  03'37'26		min. Earth dist.	14959 Aug 31 04:35	17°  29'58'03	0.64156 AU
	14958 Sep 23 22:31	30°  R 		morning rise	14959 Sep 03 20:55	14°  29'24'55	
direct	14958 Sep 27 16:09	29°  29'16'19		desc. node	14959 Sep 05 04:11	13°  29'29'18	
	14958 Oct 01 14:12	0° 		direct	14959 Sep 10 10:56	11°  29'50'34	
morning max el	14958 Oct 11 19:13	7°  05'14'04	27°58'24	morning max el	14959 Sep 24 05:17	19°  29'49'20	27°34'10
	14958 Oct 29 04:36	0° 			14959 Oct 02 22:33	0° 	
asc. node	14958 Nov 12 15:48	25°  25'49'20			14959 Oct 22 05:19	0° 	
morning set	14958 Nov 14 15:43	29°  25'52'11		morning set	14959 Oct 29 07:34	13°  25'23'47	
	14958 Nov 14 17:14	0° 		asc. node	14959 Oct 30 12:34	15°  25'48'36	
max. Earth dist.	14958 Nov 20 02:13	11°  25'25'04	1.31598 AU	max. Earth dist.	14959 Nov 03 00:14	22°  25'58'47	1.32628 AU
superior conj	14958 Nov 22 02:09	15°  25'48'11	1°18'15	superior conj	14959 Nov 06 08:02	0°  25'03'32	1°00'01
minimum elong	14958 Nov 21 24:00	15°  26'36'18	1°18'55	minimum elong	14959 Nov 06 05:43	29°  25'51'06	1°00'26
evening rise	14958 Nov 28 19:38	0°  23'37'34			14959 Nov 06 07:23	0° 	
	14958 Nov 28 12:42	0° 		evening rise	14959 Nov 13 06:36	15°  25'06'42	
	14958 Dec 14 15:39	0° 			14959 Nov 20 14:35	0° 	
desc. node	14958 Dec 15 04:04	0°  24'45'36		desc. node	14959 Dec 02 01:07	17°  25'34'8'59	
evening max el	14958 Dec 24 08:14	11°  25'52'07	24°38'02	evening max el	14959 Dec 05 17:45	21°  25'50'52	22°55'31
retrograde	14959 Jan 07 01:18	18°  25'42'35		retrograde	14959 Dec 08 20:29	28°  25'31'04	
evening set	14959 Jan 12 09:22	17°  25'39'50		evening set	14959 Dec 22 22:02	27°  25'34'5'06	
min. Earth dist.	14959 Jan 17 20:03	14°  25'51'20	0.56040 AU	min. Earth dist.	14959 Dec 30 02:58	24°  25'25'57	0.54813 AU
inferior conj	14959 Jan 20 04:58	13°  25'22'21	-5°19'38	inferior conj	14959 Dec 31 06:01	23°  25'47'23	-5°59'02

minimum elong	14959 Dec 31 07:49	23°  44'50	5°58'02	minimum elong	14960 Dec 09 14:17	3°  54'33	5°38'39
morning rise	14960 Jan 08 18:59	19°  58'27		min. Earth dist.	14960 Dec 10 08:44	3°  28'34	0.54439 AU
direct	14960 Jan 11 18:31	19°  37'48			14960 Dec 17 19:17	30°  R 	
morning max el	14960 Jan 23 06:00	25°  08'33	20°57'23	morning rise	14960 Dec 18 02:56	29°  54'30	
asc. node	14960 Jan 26 11:46	28°  39'56		direct	14960 Dec 22 02:01	29°  20'34	
	14960 Jan 27 13:17	0° 			14960 Dec 26 05:47	0° 	
morning set	14960 Feb 11 15:25	26°  36'11		morning max el	14961 Jan 03 22:36	5°  33'50	22°38'21
	14960 Feb 13 06:32	0° 		asc. node	14961 Jan 12 09:03	15°  35'54	
					14961 Jan 20 13:07	0° 	
superior conj	14960 Feb 19 00:34	11°  59'02	1°10'12	morning set	14961 Jan 26 02:32	11°  21'23	
minimum elong	14960 Feb 19 03:09	12°  12'15	1°10'15				
max. Earth dist.	14960 Feb 24 00:37	22°  01'16	1.35578 AU	superior conj	14961 Feb 02 02:14	26°  21'04	1°25'48
evening rise	14960 Feb 27 23:20	29°  32'53		minimum elong	14961 Feb 02 04:14	26°  31'43	1°26'14
desc. node	14960 Feb 28 01:53	29°  44'48			14961 Feb 03 19:34	0° 	
	14960 Feb 28 05:10	0° 		max. Earth dist.	14961 Feb 05 15:54	3°  51'02	1.33754 AU
	14960 Mar 17 09:30	0° 		evening rise	14961 Feb 10 04:21	12°  55'57	
evening max el	14960 Apr 03 08:22	21°  07'16	26°18'41	desc. node	14961 Feb 13 22:28	20°  04'12	
retrograde	14960 Apr 16 05:40	28°  28'20			14961 Feb 19 12:41	0° 	
evening set	14960 Apr 22 11:51	25°  56'30			14961 Mar 12 10:22	0° 	
asc. node	14960 Apr 23 08:24	25°  11'35		evening max el	14961 Mar 16 21:56	4°  44'26	27°08'39
min. Earth dist.	14960 Apr 26 14:24	21°  40'03	0.66939 AU	retrograde	14961 Mar 30 09:19	12°  14'24	
inferior conj	14960 Apr 28 09:29	19°  28'02	1°30'05	evening set	14961 Apr 05 23:51	9°  43'02	
minimum elong	14960 Apr 28 07:33	19°  34'00	1°28'46	min. Earth dist.	14961 Apr 09 21:33	5°  59'27	0.65372 AU
morning rise	14960 May 04 04:10	13°  44'47		asc. node	14961 Apr 10 05:45	5°  36'49	
direct	14960 May 07 08:09	12°  48'14		inferior conj	14961 Apr 12 05:03	3°  23'14	0°36'53
morning max el	14960 May 13 20:36	16°  16'12	18°30'52	minimum elong	14961 Apr 12 04:04	3°  26'00	0°36'03
	14960 May 24 06:53	0° 			14961 Apr 15 10:38	30°  R 	
desc. node	14960 May 26 03:40	2°  15'05		morning rise	14961 Apr 18 09:57	27°  05'23	
morning set	14960 Jun 03 17:45	16°  16'45		direct	14961 Apr 21 04:17	27°  01'43	
	14960 Jun 12 11:37	0° 			14961 Apr 26 23:42	0° 	
				morning max el	14961 Apr 27 11:58	0°  28'51	18°00'05
superior conj	14960 Jun 19 15:32	11°  05'52	-2°10'53	desc. node	14961 May 13 00:27	22°  55'30	
minimum elong	14960 Jun 19 11:19	10°  05'42	2°11'44	morning set	14961 May 15 15:54	27°  14'55	
max. Earth dist.	14960 Jun 19 13:25	11°  02'37	1.45910 AU		14961 May 17 08:18	0° 	
	14960 Jul 01 16:01	0° 					
evening rise	14960 Jul 05 09:47	5°  53'59		superior conj	14961 May 30 03:17	20°  12'32	-1°50'25
greatest brilliancy	14960 Jul 13 19:48	19°  09'33	-0.8m	minimum elong	14961 May 29 18:32	19°  12'01	1°50'39
asc. node	14960 Jul 20 07:22	28°  55'45		max. Earth dist.	14961 Jun 02 09:16	25°  13'54	1.45728 AU
	14960 Jul 21 01:32	0° 			14961 Jun 05 04:10	0° 	
evening max el	14960 Jul 27 00:28	7°  18'12	18°44'42	evening rise	14961 Jun 15 05:25	15°  03'34	
retrograde	14960 Aug 02 15:12	10°  15'03			14961 Jun 24 16:42	0° 	
evening set	14960 Aug 05 22:17	9°  15'50		greatest brilliancy	14961 Jun 28 14:33	5°  50'08	-0.7m
inferior conj	14960 Aug 11 12:42	4°  11'05	2°40'01	asc. node	14961 Jul 07 04:09	17°  03'32	
minimum elong	14960 Aug 11 14:44	4°  10'43	2°39'05	evening max el	14961 Jul 10 08:06	21°  08'17	19°31'23
min. Earth dist.	14960 Aug 13 08:59	1°  15'32	0.66009 AU	retrograde	14961 Jul 17 12:56	25°  01'00	
	14960 Aug 14 23:47	30°  R 		evening set	14961 Jul 21 05:43	23°  50'36	
morning rise	14960 Aug 17 06:13	27°  55'55		inferior conj	14961 Jul 26 14:28	17°  56'40	3°01'24
desc. node	14960 Aug 22 01:39	25°  51'41		minimum elong	14961 Jul 26 15:41	17°  52'37	3°00'32
direct	14960 Aug 23 13:36	25°  07'15		min. Earth dist.	14961 Jul 27 20:33	16°  17'07	0.67464 AU
	14960 Sep 02 14:31	0° 		morning rise	14961 Aug 01 01:08	11°  03'16	
morning max el	14960 Sep 05 16:43	2°  15'54	26°39'48	direct	14961 Aug 06 22:52	8°  56'59	
	14960 Sep 26 04:48	0° 		desc. node	14961 Aug 08 23:05	9°  12'30	
morning set	14960 Oct 11 12:10	26°  23'33		morning max el	14961 Aug 19 03:38	16°  15'20	25°24'14
	14960 Oct 13 09:19	0° 			14961 Aug 30 13:06	0° 	
max. Earth dist.	14960 Oct 15 12:34	4°  11'42	1.34195 AU		14961 Sep 19 02:40	0° 	
asc. node	14960 Oct 16 09:15	5°  15'50		morning set	14961 Sep 24 01:42	8°  41'48	
				max. Earth dist.	14961 Sep 27 15:27	15°  41'54	1.36233 AU
superior conj	14960 Oct 20 07:50	13°  15'14	0°35'57	asc. node	14961 Oct 03 05:51	26°  40'01	
minimum elong	14960 Oct 20 06:02	13°  14'54	0°36'13				
evening rise	14960 Oct 27 16:19	29°  13'05		superior conj	14961 Oct 03 22:39	27°  42'32	0°06'27
	14960 Oct 27 21:50	0° 		minimum elong	14961 Oct 03 22:15	27°  42'30	0°06'44
	14960 Nov 14 11:54	0° 		behind sun begin	14961 Oct 03 16:27	26°  45'39	
evening max el	14960 Nov 16 08:49	1°  59'04	21°17'34	behind sun end	14961 Oct 04 04:02	27°  45'26	
desc. node	14960 Nov 17 22:15	3°  25'36			14961 Oct 05 05:05	0° 	
retrograde	14960 Nov 28 07:28	7°  54'16		evening rise	14961 Oct 11 22:40	13°  14'46	
evening set	14960 Dec 01 02:06	7°  36'23			14961 Oct 20 08:55	0° 	
inferior conj	14960 Dec 09 21:23	3°  44'33	-5°40'40	evening max el	14961 Oct 29 13:00	12°  46'51	19°56'39

desc. node	14961 Nov 04 19:31	17°♊08'56	evening set	14962 Oct 22 22:17	28°♍37'08	
retrograde	14961 Nov 08 20:50	17°♊55'41	desc. node	14962 Oct 22 16:50	28°♍39'41	
evening set	14961 Nov 10 21:36	17°♊44'39	inferior conj	14962 Oct 31 06:01	24°♍20'01	-2°42'41
inferior conj	14961 Nov 19 17:17	13°♊45'25 -4°26'16	minimum elong	14962 Oct 30 23:15	24°♍31'53	2°39'20
minimum elong	14961 Nov 19 07:15	14°♊00'41 4°22'22	min. Earth dist.	14962 Nov 03 03:51	22°♍18'12	0.56429 AU
min. Earth dist.	14961 Nov 21 16:08	12°♊34'09 0.55015 AU	morning rise	14962 Nov 07 21:21	19°♍35'14	
morning rise	14961 Nov 27 15:38	9°♊35'00	direct	14962 Nov 13 15:30	18°♍17'07	
direct	14961 Dec 02 14:30	8°♊41'18	morning max el	14962 Nov 27 18:57	25°♍32'40	26°08'00
morning max el	14961 Dec 16 07:48	15°♊29'38 24°27'59		14962 Dec 01 23:20	0°♊	
	14961 Dec 27 18:55	0°♊	asc. node	14962 Dec 17 03:21	22°♊49'29	
asc. node	14961 Dec 30 06:14	4°♊01'31		14962 Dec 20 21:44	0°♊	
morning set	14962 Jan 10 14:30	26°♊04'35	morning set	14962 Dec 26 01:34	10°♊41'12	
	14962 Jan 12 09:58	0°♊				
superior conj	14962 Jan 17 09:20	10°♋55'21 1°34'58	superior conj	14963 Jan 01 19:39	25°♊35'30	1°37'58
minimum elong	14962 Jan 17 10:24	11°♋01'10 1°35'44	minimum elong	14963 Jan 01 19:39	25°♊35'28	1°38'55
max. Earth dist.	14962 Jan 19 14:59	15°♋47'12 1.32366 AU	max. Earth dist.	14963 Jan 02 20:11	27°♊51'54	1.31469 AU
evening rise	14962 Jan 24 20:12	26°♋44'38		14963 Jan 03 19:19	0°♋	
	14962 Jan 26 11:06	0°♋	evening rise	14963 Jan 08 20:05	10°♋51'53	
desc. node	14962 Jan 31 19:06	10°♋09'27	desc. node	14963 Jan 18 15:47	29°♋54'21	
	14962 Feb 12 20:36	0°♋		14963 Jan 18 17:04	0°♋	
evening max el	14962 Feb 27 10:22	17°♋58'12 27°33'36	evening max el	14963 Feb 09 04:45	0°♋	
retrograde	14962 Mar 13 05:59	25°♋26'54		14963 Feb 09 19:12	0°♋34'55	27°27'12
evening set	14962 Mar 20 01:37	23°♋03'01	retrograde	14963 Feb 23 18:23	7°♋56'12	
min. Earth dist.	14962 Mar 23 20:23	19°♋48'35 0.63461 AU	evening set	14963 Mar 02 14:19	5°♋47'06	
inferior conj	14962 Mar 26 14:59	16°♋59'49 -0°29'02	min. Earth dist.	14963 Mar 06 09:13	2°♋55'43	0.61316 AU
minimum elong	14962 Mar 26 15:54	16°♋57'27 0°28'52	inferior conj	14963 Mar 09 11:55	0°♋08'37	-1°47'11
asc. node	14962 Mar 28 03:10	15°♋29'41	minimum elong	14963 Mar 09 15:45	29°♋59'59	1°45'33
morning rise	14962 Apr 02 08:40	11°♋44'08		14963 Mar 09 15:45	30°♋	
direct	14962 Apr 04 18:42	11°♋15'36	asc. node	14963 Mar 15 00:37	25°♋56'39	
morning max el	14962 Apr 11 05:36	14°♋33'25 17°46'42	morning rise	14963 Mar 16 20:19	25°♋11'02	
	14962 Apr 22 02:48	0°♋	direct	14963 Mar 18 23:54	24°♋51'17	
morning set	14962 Apr 27 16:39	9°♋29'28	morning max el	14963 Mar 25 22:19	28°♋20'36	17°51'20
desc. node	14962 Apr 29 21:11	13°♋14'20		14963 Mar 27 11:31	0°♋	
	14962 May 09 21:18	0°♋	morning set	14963 Apr 10 14:14	22°♋42'15	
superior conj	14962 May 10 08:11	0°♋44'27 -1°16'35		14963 Apr 14 15:47	0°♋	
minimum elong	14962 May 10 00:49	0°♋14'22 1°16'28	desc. node	14963 Apr 16 17:51	3°♋42'15	
max. Earth dist.	14962 May 16 04:04	10°♋07'31 1.44823 AU	superior conj	14963 Apr 21 12:42	12°♋01'57	-0°37'49
evening rise	14962 May 25 16:12	24°♋56'42	minimum elong	14963 Apr 21 09:14	11°♋47'06	0°37'50
	14962 May 28 23:48	0°♋	max. Earth dist.	14963 Apr 28 19:32	24°♋12'31	1.43290 AU
evening max el	14962 Jun 18 23:43	0°♋		14963 May 02 09:45	0°♋	
asc. node	14962 Jun 23 09:59	5°♌00'37 20°32'47	evening rise	14963 May 05 10:23	4°♋46'51	
retrograde	14962 Jun 24 01:01	5°♌37'19		14963 May 22 07:50	0°♋	
evening set	14962 Jul 01 11:53	9°♌38'43	evening max el	14963 Jun 06 06:04	18°♋52'34	21°45'48
inferior conj	14962 Jul 05 15:03	8°♌01'50	asc. node	14963 Jun 10 22:00	22°♋44'12	
minimum elong	14962 Jul 10 21:20	1°♌55'05 3°08'58	retrograde	14963 Jun 15 10:14	24°♋14'04	
min. Earth dist.	14962 Jul 11 13:16	1°♌00'15 0.68463 AU	evening set	14963 Jun 20 00:24	22°♋20'21	
	14962 Jul 12 07:00	30°♌	inferior conj	14963 Jun 25 06:18	16°♋03'55	3°07'00
morning rise	14962 Jul 16 03:19	25°♌34'10	minimum elong	14963 Jun 25 05:35	16°♋06'24	3°05'58
direct	14962 Jul 21 13:29	23°♌11'34	min. Earth dist.	14963 Jun 25 09:06	15°♌54'08	0.68982 AU
desc. node	14962 Jul 26 20:27	24°♌58'50	morning rise	14963 Jun 30 10:35	9°♌48'06	
morning max el	14962 Aug 01 14:10	29°♌47'08 23°57'16	direct	14963 Jul 05 08:18	7°♌42'14	
	14962 Aug 01 19:14	0°♌	desc. node	14963 Jul 13 17:46	12°♌08'33	
morning set	14962 Aug 24 08:29	0°♌	morning max el	14963 Jul 15 02:17	13°♌26'54	22°28'08
	14962 Sep 05 19:56	20°♌08'53		14963 Jul 28 09:43	0°♌	
max. Earth dist.	14962 Sep 09 13:56	26°♌40'03 1.38569 AU	morning set	14963 Aug 17 06:13	0°♌	
	14962 Sep 11 10:44	0°♌		14963 Aug 17 14:49	0°♌34'54	
superior conj	14962 Sep 17 01:03	10°♌20'39 -0°27'27	max. Earth dist.	14963 Aug 22 14:22	8°♌49'13	1.40935 AU
minimum elong	14962 Sep 17 02:59	10°♌29'49 0°27'01				
asc. node	14962 Sep 20 02:27	16°♌12'29	superior conj	14963 Aug 30 10:40	22°♌27'32	-1°03'28
evening rise	14962 Sep 25 23:07	27°♌41'51	minimum elong	14963 Aug 30 15:37	22°♌49'45	1°02'56
	14962 Sep 27 03:17	0°♌		14963 Sep 03 14:10	0°♌	
evening max el	14962 Oct 12 07:18	24°♌24'31 18°57'32	asc. node	14963 Sep 06 23:02	6°♌16'07	
retrograde	14962 Oct 21 01:10	28°♌48'31	evening rise	14963 Sep 09 14:18	11°♌13'08	
				14963 Sep 20 05:23	0°♌	
			evening max el	14963 Sep 25 12:27	6°♌46'25	18°20'17
			retrograde	14963 Oct 03 01:03	10°♌35'58	

evening set	14963 Oct 05 02:18	10° \mathbb{M} 19'35		14964 Aug 25 22:59	0° $\underline{\mathfrak{L}}$	
desc. node	14963 Oct 09 14:15	8° \mathbb{M} 04'42		evening max el	14964 Sep 08 00:16	19° $\underline{\mathfrak{L}}$ 43'13 18°03'23
inferior conj	14963 Oct 12 16:30	5° \mathbb{M} 41'18	-0°59'14	retrograde	14964 Sep 14 18:07	23° $\underline{\mathfrak{L}}$ 11'23
minimum elong	14963 Oct 12 14:16	5° \mathbb{M} 45'53	0°57'50	evening set	14964 Sep 17 02:41	22° $\underline{\mathfrak{L}}$ 46'00
min. Earth dist.	14963 Oct 15 22:52	3° \mathbb{M} 01'33	0.58413 AU	inferior conj	14964 Sep 23 23:30	17° $\underline{\mathfrak{L}}$ 47'38 0°27'56
morning rise	14963 Oct 19 22:47	0° \mathbb{M} 19'29		minimum elong	14964 Sep 24 00:23	17° $\underline{\mathfrak{L}}$ 45'34 0°27'48
	14963 Oct 20 13:47	30° \mathfrak{R} $\underline{\mathfrak{L}}$		desc. node	14964 Sep 25 11:43	16° $\underline{\mathfrak{L}}$ 21'08
direct	14963 Oct 26 06:21	28° $\underline{\mathfrak{L}}$ 34'34		min. Earth dist.	14964 Sep 27 03:05	14° $\underline{\mathfrak{L}}$ 49'19 0.60676 AU
	14963 Nov 01 03:18	0° \mathbb{M}		morning rise	14964 Sep 30 19:00	11° $\underline{\mathfrak{L}}$ 55'44
morning max el	14963 Nov 09 13:39	6° \mathbb{M} 12'22	27°20'46	direct	14964 Oct 07 09:54	9° $\underline{\mathfrak{L}}$ 45'53
	14963 Nov 27 06:41	0° \mathfrak{X}		morning max el	14964 Oct 21 16:05	17° $\underline{\mathfrak{L}}$ 39'42 27°56'01
asc. node	14963 Dec 04 00:22	12° \mathfrak{X} 07'09			14964 Oct 31 23:37	0° \mathbb{M}
morning set	14963 Dec 10 09:57	25° \mathfrak{X} 06'43			14964 Nov 18 23:43	0° \mathfrak{X}
	14963 Dec 12 16:15	0° \mathfrak{Z}		asc. node	14964 Nov 19 21:17	1° \mathfrak{X} 45'50
				morning set	14964 Nov 23 13:40	9° \mathfrak{X} 15'29
superior conj	14963 Dec 17 07:12	10° \mathfrak{Z} 16'04	1°34'59	max. Earth dist.	14964 Nov 29 11:09	21° \mathfrak{X} 59'27 1.31245 AU
minimum elong	14963 Dec 17 06:10	10° \mathfrak{Z} 10'19	1°35'56			
max. Earth dist.	14963 Dec 17 04:12	9° \mathfrak{Z} 59'17	1.31088 AU	superior conj	14964 Nov 30 18:04	24° \mathfrak{X} 51'03 1°26'05
evening rise	14963 Dec 24 01:36	25° \mathfrak{Z} 11'54		minimum elong	14964 Nov 30 16:13	24° \mathfrak{X} 40'49 1°26'53
	14963 Dec 26 08:17	0° \approx			14964 Dec 03 01:30	0° \mathfrak{Z}
desc. node	14964 Jan 05 12:34	19° \approx 11'01		evening rise	14964 Dec 07 10:40	9° \mathfrak{Z} 38'56
	14964 Jan 12 11:55	0° \mathfrak{H}			14964 Dec 17 17:00	0° \approx
evening max el	14964 Jan 22 21:39	12° \mathfrak{H} 23'07	26°46'01	desc. node	14964 Dec 22 09:27	7° \approx 48'10
retrograde	14964 Feb 05 21:21	19° \mathfrak{H} 34'32		evening max el	14965 Jan 03 15:43	23° \approx 17'47 25°32'01
evening set	14964 Feb 12 10:38	17° \mathfrak{H} 47'15			14965 Jan 14 19:26	0° \mathfrak{H}
min. Earth dist.	14964 Feb 16 11:28	15° \mathfrak{H} 09'00	0.59096 AU	retrograde	14965 Jan 17 13:08	0° \mathfrak{H} 17'33
inferior conj	14964 Feb 19 16:10	12° \mathfrak{H} 39'45	-3°13'49		14965 Jan 20 06:49	30° \mathfrak{R} \approx
minimum elong	14964 Feb 19 23:23	12° \mathfrak{H} 25'40	3°10'49	evening set	14965 Jan 23 10:34	28° \approx 57'56
morning rise	14964 Feb 27 15:29	8° \mathfrak{H} 03'11		min. Earth dist.	14965 Jan 28 04:19	26° \approx 18'03 0.57034 AU
direct	14964 Feb 29 15:28	7° \mathfrak{H} 48'43		inferior conj	14965 Jan 31 00:23	24° \approx 23'05 -4°38'49
asc. node	14964 Feb 29 22:05	7° \mathfrak{H} 49'00		minimum elong	14965 Jan 31 09:33	24° \approx 07'34 4°35'39
morning max el	14964 Mar 08 10:35	11° \mathfrak{H} 40'28	18°15'11	morning rise	14965 Feb 08 11:20	20° \approx 08'17
	14964 Mar 20 14:11	0° \mathfrak{Y}		direct	14965 Feb 10 13:04	19° \approx 55'23
morning set	14964 Mar 24 02:50	6° \mathfrak{Y} 35'43		asc. node	14965 Feb 15 19:32	21° \approx 24'39
				morning max el	14965 Feb 19 14:11	24° \approx 20'16 19°00'03
superior conj	14964 Apr 02 15:47	24° \mathfrak{Y} 21'24	-0°00'28		14965 Feb 24 06:49	0° \mathfrak{H}
minimum elong	14964 Apr 02 15:43	24° \mathfrak{Y} 21'06	0°00'46	morning set	14965 Mar 08 01:41	20° \mathfrak{H} 54'58
behind sun begin	14964 Apr 02 08:16	23° \mathfrak{Y} 47'24			14965 Mar 12 16:16	0° \mathfrak{Y}
behind sun end	14964 Apr 02 23:10	24° \mathfrak{Y} 54'44				
desc. node	14964 Apr 02 14:27	24° \mathfrak{Y} 15'23		superior conj	14965 Mar 16 13:06	7° \mathfrak{Y} 29'24 0°32'02
	14964 Apr 05 19:40	0° \mathfrak{B}		minimum elong	14965 Mar 16 15:02	7° \mathfrak{Y} 38'36 0°31'41
max. Earth dist.	14964 Apr 10 06:10	7° \mathfrak{B} 39'55	1.41287 AU	desc. node	14965 Mar 20 11:00	14° \mathfrak{Y} 49'19
evening rise	14964 Apr 14 22:50	15° \mathfrak{B} 27'43		max. Earth dist.	14965 Mar 23 12:43	20° \mathfrak{Y} 22'53 1.39037 AU
	14964 Apr 24 04:59	0° \mathbb{I}		evening rise	14965 Mar 27 08:27	27° \mathfrak{Y} 03'23
	14964 May 16 07:27	0° \mathfrak{E}			14965 Mar 29 02:05	0° \mathfrak{B}
evening max el	14964 May 18 21:53	2° \mathfrak{E} 45'09	23°05'43		14965 Apr 17 17:55	0° \mathbb{I}
asc. node	14964 May 27 19:05	8° \mathfrak{E} 41'11		evening max el	14965 May 01 11:38	16° \mathbb{I} 39'01 24°26'40
retrograde	14964 May 29 06:32	8° \mathfrak{E} 50'50		retrograde	14965 May 12 23:31	23° \mathbb{I} 22'42
evening set	14964 Jun 03 08:07	6° \mathfrak{E} 42'10		asc. node	14965 May 14 16:17	23° \mathbb{I} 10'14
min. Earth dist.	14964 Jun 08 05:58	0° \mathfrak{E} 52'34	0.69016 AU	evening set	14965 May 18 12:36	21° \mathbb{I} 01'58
inferior conj	14964 Jun 08 16:07	0° \mathfrak{E} 17'21	2°53'35	min. Earth dist.	14965 May 23 01:45	15° \mathbb{I} 49'03 0.68567 AU
minimum elong	14964 Jun 08 14:37	0° \mathfrak{E} 22'35	2°52'21	inferior conj	14965 May 24 00:39	14° \mathbb{I} 32'05 2°29'47
	14964 Jun 08 21:08	30° \mathfrak{R} \mathbb{I}		minimum elong	14965 May 23 22:37	14° \mathbb{I} 38'56 2°28'24
morning rise	14964 Jun 13 21:02	24° \mathbb{I} 08'53		morning rise	14965 May 29 08:47	8° \mathbb{I} 32'10
direct	14964 Jun 18 06:15	22° \mathbb{I} 22'28		direct	14965 Jun 02 06:00	7° \mathbb{I} 05'52
morning max el	14964 Jun 26 18:51	27° \mathbb{I} 16'35	21°04'42	morning max el	14965 Jun 09 18:08	11° \mathbb{I} 17'04 19°52'54
	14964 Jun 29 07:54	0° \mathfrak{E}		desc. node	14965 Jun 16 12:05	19° \mathbb{I} 17'32
desc. node	14964 Jun 29 15:00	0° \mathfrak{E} 20'21			14965 Jun 24 02:02	0° \mathfrak{E}
	14964 Jul 20 21:48	0° \mathfrak{Q}		morning set	14965 Jul 06 13:48	18° \mathfrak{E} 49'30
morning set	14964 Jul 27 09:54	10° \mathfrak{Q} 00'19			14965 Jul 13 18:48	0° \mathfrak{Q}
max. Earth dist.	14964 Aug 03 20:23	21° \mathfrak{Q} 50'46	1.43054 AU	max. Earth dist.	14965 Jul 17 08:44	5° \mathfrak{Q} 38'26 1.44690 AU
	14964 Aug 08 19:08	0° \mathfrak{P}				
superior conj	14964 Aug 10 23:12	3° \mathfrak{P} 39'12	-1°37'34	superior conj	14965 Jul 22 12:13	13° \mathfrak{Q} 52'25 -2°03'30
minimum elong	14964 Aug 11 06:33	4° \mathfrak{P} 10'27	1°37'17	minimum elong	14965 Jul 22 18:41	14° \mathfrak{Q} 18'37 2°03'54
evening rise	14964 Aug 22 16:02	24° \mathfrak{P} 08'01			14965 Aug 01 06:46	0° \mathfrak{P}
asc. node	14964 Aug 23 19:36	26° \mathfrak{P} 11'13		evening rise	14965 Aug 04 23:16	6° \mathfrak{P} 14'10
				asc. node	14965 Aug 10 16:13	15° \mathfrak{P} 53'46

	14965 Aug 19 21:32	0°♄		evening rise	14966 Jul 17 07:03	17°♄19'52	
evening max el	14965 Aug 22 14:51	3°♄05'38	18°05'24		14966 Jul 25 03:35	0°♄	
retrograde	14965 Aug 29 00:07	6°♄25'59		asc. node	14966 Jul 28 12:53	5°♄17'58	
evening set	14965 Aug 31 17:07	5°♄48'08		evening max el	14966 Aug 06 04:48	16°♄44'18	18°25'22
inferior conj	14965 Sep 06 23:19	0°♄31'46	1°34'16	retrograde	14966 Aug 12 14:51	20°♄10'22	
minimum elong	14965 Sep 07 01:33	0°♄25'47	1°33'27	evening set	14966 Aug 15 16:46	19°♄17'25	
	14965 Sep 07 11:06	30°♄		inferior conj	14966 Aug 21 11:55	13°♄45'04	2°20'58
min. Earth dist.	14965 Sep 09 17:03	27°♄36'01	0.62942 AU	minimum elong	14966 Aug 21 14:15	13°♄38'08	2°20'00
desc. node	14965 Sep 12 09:12	25°♄04'45		min. Earth dist.	14966 Aug 23 16:21	11°♄09'46	0.64995 AU
morning rise	14965 Sep 13 07:48	24°♄20'10		morning rise	14966 Aug 27 10:25	7°♄22'56	
direct	14965 Sep 19 23:54	21°♄51'56		desc. node	14966 Aug 30 06:41	5°♄34'07	
morning max el	14965 Oct 03 23:57	29°♄52'13	27°52'16	direct	14966 Sep 02 22:14	4°♄45'31	
	14965 Oct 04 03:03	0°♄		morning max el	14966 Sep 16 10:35	12°♄40'18	27°14'09
	14965 Oct 26 00:04	0°♄			14966 Sep 30 08:52	0°♄	
asc. node	14965 Nov 06 18:05	21°♄39'08			14966 Oct 18 14:05	0°♄	
morning set	14965 Nov 07 10:35	23°♄02'20		morning set	14966 Oct 21 21:58	6°♄20'30	
	14965 Nov 10 19:16	0°♄		asc. node	14966 Oct 24 14:48	11°♄41'34	
max. Earth dist.	14965 Nov 12 13:12	3°♄43'28	1.31959 AU	max. Earth dist.	14966 Oct 26 07:08	15°♄06'39	1.33233 AU
superior conj	14965 Nov 15 02:22	9°♄15'20	1°11'16	superior conj	14966 Oct 30 05:57	23°♄22'44	0°50'31
minimum elong	14965 Nov 15 00:05	9°♄02'50	1°11'49	minimum elong	14966 Oct 30 03:46	23°♄11'07	0°50'51
evening rise	14965 Nov 21 21:26	24°♄08'35			14966 Nov 02 08:03	0°♄	
	14965 Nov 24 15:42	0°♄		evening rise	14966 Nov 06 08:04	8°♄35'50	
desc. node	14965 Dec 09 06:24	25°♄31'08			14966 Nov 17 09:50	0°♄	
	14965 Dec 12 19:38	0°♄		desc. node	14966 Nov 26 03:29	12°♄00'05	
evening max el	14965 Dec 16 02:47	3°♄29'47	23°55'11	evening max el	14966 Nov 27 13:29	13°♄27'28	22°12'24
retrograde	14965 Dec 29 15:36	10°♄13'01		retrograde	14966 Dec 10 05:40	19°♄43'54	
evening set	14966 Jan 03 11:14	9°♄22'34		evening set	14966 Dec 13 17:26	19°♄17'01	
min. Earth dist.	14966 Jan 09 14:10	6°♄23'11	0.55424 AU	inferior conj	14966 Dec 22 07:00	15°♄24'01	-5°58'54
inferior conj	14966 Jan 11 11:45	5°♄15'05	-5°42'20	minimum elong	14966 Dec 22 04:45	15°♄27'10	5°57'50
minimum elong	14966 Jan 11 18:03	5°♄05'39	5°40'38	min. Earth dist.	14966 Dec 21 20:00	15°♄39'26	0.54541 AU
morning rise	14966 Jan 20 02:34	1°♄18'42		morning rise	14966 Dec 30 17:05	11°♄36'53	
direct	14966 Jan 22 15:12	1°♄02'35		direct	14967 Jan 03 02:31	11°♄11'14	
morning max el	14966 Feb 02 05:01	6°♄08'43	20°07'50	morning max el	14967 Jan 15 04:54	17°♄00'36	21°38'23
asc. node	14966 Feb 02 16:55	6°♄38'08		asc. node	14967 Jan 20 14:14	23°♄12'49	
	14966 Feb 17 13:48	0°♄			14967 Jan 25 03:06	0°♄	
morning set	14966 Feb 20 07:18	5°♄30'10		morning set	14967 Feb 04 17:04	20°♄13'35	
					14967 Feb 09 07:54	0°♄	
superior conj	14966 Feb 28 00:17	21°♄13'55	0°58'11				
minimum elong	14966 Feb 28 02:54	21°♄27'02	0°58'02	superior conj	14967 Feb 11 21:34	5°♄24'40	1°17'36
	14966 Mar 04 11:32	0°♄		minimum elong	14967 Feb 11 23:58	5°♄37'10	1°17'50
max. Earth dist.	14966 Mar 05 19:20	2°♄31'17	1.36791 AU	max. Earth dist.	14967 Feb 16 06:54	14°♄24'14	1.34757 AU
desc. node	14966 Mar 07 07:32	5°♄20'38		evening rise	14967 Feb 20 10:53	22°♄32'13	
evening rise	14966 Mar 09 13:35	9°♄28'00		desc. node	14967 Feb 22 04:04	25°♄45'38	
	14966 Mar 21 19:10	0°♄			14967 Feb 24 11:44	0°♄	
	14966 Apr 13 12:11	0°♄			14967 Mar 15 12:42	0°♄	
evening max el	14966 Apr 14 01:13	0°♄32'21	25°41'27	evening max el	14967 Mar 27 15:06	14°♄18'57	26°42'36
retrograde	14966 Apr 26 11:57	7°♄42'46		retrograde	14967 Apr 09 18:54	21°♄44'15	
asc. node	14966 May 01 13:33	5°♄57'42		evening set	14967 Apr 16 04:59	19°♄12'02	
evening set	14966 May 02 12:09	5°♄13'53		asc. node	14967 Apr 18 10:52	17°♄07'20	
min. Earth dist.	14966 May 06 18:16	0°♄37'02	0.67661 AU	min. Earth dist.	14967 Apr 20 05:23	15°♄09'53	0.66323 AU
	14966 May 07 05:57	30°♄		inferior conj	14967 Apr 22 05:46	12°♄46'38	1°09'06
inferior conj	14966 May 08 05:55	28°♄43'22	1°55'13	minimum elong	14967 Apr 22 04:07	12°♄51'31	1°07'56
minimum elong	14966 May 08 03:46	28°♄50'13	1°53'47	morning rise	14967 Apr 28 04:26	7°♄08'21	
morning rise	14966 May 13 19:56	22°♄53'23		direct	14967 May 01 04:17	6°♄18'39	
direct	14966 May 17 06:00	21°♄46'25		morning max el	14967 May 07 13:33	9°♄40'15	18°15'40
morning max el	14966 May 24 00:42	25°♄26'18	18°56'02	desc. node	14967 May 21 05:56	28°♄42'01	
	14966 May 28 01:04	0°♄			14967 May 22 01:37	0°♄	
desc. node	14966 Jun 03 09:04	8°♄47'39		morning set	14967 May 27 04:02	8°♄08'05	
greatest brilliancy	14966 Jun 06 09:30	13°♄18'13	-0.7m		14967 Jun 09 23:48	0°♄	
morning set	14966 Jun 15 21:48	27°♄55'22					
	14966 Jun 17 05:58	0°♄		superior conj	14967 Jun 11 13:20	2°♄26'43	-2°04'21
max. Earth dist.	14966 Jun 30 02:19	19°♄59'13	1.45680 AU	minimum elong	14967 Jun 11 06:26	1°♄59'46	2°04'58
				max. Earth dist.	14967 Jun 12 22:47	4°♄37'18	1.45931 AU
superior conj	14966 Jul 02 04:49	23°♄17'01	-2°13'56	evening rise	14967 Jun 27 14:20	27°♄25'51	
minimum elong	14966 Jul 02 05:09	23°♄18'22	2°14'52		14967 Jun 29 05:56	0°♄	
	14966 Jul 06 11:09	0°♄		greatest brilliancy	14967 Jul 08 06:49	13°♄57'46	-0.8m

asc. node	14967 Jul 15 09:37	24°♎17'16		minimum elong	14968 May 20 22:16	11°♊31'28	1°37'13
	14967 Jul 20 02:43	0°♎		max. Earth dist.	14968 May 25 18:48	19°♊13'25	1.45430 AU
evening max el	14967 Jul 20 15:22	0°♎32'09	19°02'33		14968 Jun 01 16:48	0°♊	
retrograde	14967 Jul 27 10:58	4°♎17'16		evening rise	14968 Jun 06 04:16	6°♊53'11	
evening set	14967 Jul 30 22:12	3°♎07'37		greatest brilliancy	14968 Jun 20 22:32	29°♊02'00	-0.6m
	14967 Aug 03 06:20	30°♎			14968 Jun 21 14:37	0°♎	
inferior conj	14967 Aug 05 09:48	27°♎20'56	2°50'47	asc. node	14968 Jul 01 06:26	12°♎42'17	
minimum elong	14967 Aug 05 11:32	27°♎15'22	2°49'53	evening max el	14968 Jul 02 20:33	14°♎23'03	19°55'44
min. Earth dist.	14967 Aug 06 23:55	25°♎18'52	0.66689 AU	retrograde	14968 Jul 10 09:37	18°♎39'23	
morning rise	14967 Aug 11 00:09	20°♎55'15		evening set	14968 Jul 14 06:43	17°♎12'26	
direct	14967 Aug 17 03:43	18°♎17'46		inferior conj	14968 Jul 19 13:58	11°♎12'58	3°06'27
desc. node	14967 Aug 17 04:09	18°♎17'46		minimum elong	14968 Jul 19 14:47	11°♎10'12	3°05'35
morning max el	14967 Aug 29 21:59	25°♎53'26	26°09'37	min. Earth dist.	14968 Jul 20 14:00	9°♎51'49	0.67947 AU
	14967 Sep 02 16:44	0°♎		morning rise	14968 Jul 24 22:27	4°♎48'36	
	14967 Sep 23 21:47	0°♎		direct	14968 Jul 30 15:16	2°♎18'50	
morning set	14967 Oct 04 20:36	19°♎03'11		desc. node	14968 Aug 03 01:34	3°♎04'02	
max. Earth dist.	14967 Oct 08 15:28	26°♎14'23	1.35023 AU	morning max el	14968 Aug 11 08:53	9°♎20'41	24°48'02
	14967 Oct 10 13:30	0°♎			14968 Aug 27 16:43	0°♎	
asc. node	14967 Oct 11 11:27	1°♎49'16			14968 Sep 15 12:34	0°♎	
				morning set	14968 Sep 16 02:31	1°♎01'14	
superior conj	14967 Oct 14 02:18	7°♎07'19	0°24'02	max. Earth dist.	14968 Sep 19 15:58	7°♎24'26	1.37206 AU
minimum elong	14967 Oct 14 00:58	7°♎00'33	0°24'18				
evening rise	14967 Oct 21 16:39	22°♎56'16		superior conj	14968 Sep 26 12:18	20°♎21'36	-0°07'32
	14967 Oct 25 03:30	0°♎		minimum elong	14968 Sep 26 12:46	20°♎23'54	0°07'11
evening max el	14967 Nov 09 09:25	23°♎48'43	20°40'27	behind sun begin	14968 Sep 26 06:48	19°♎54'47	
desc. node	14967 Nov 13 00:40	26°♎51'08		behind sun end	14968 Sep 26 18:44	20°♎53'04	
retrograde	14967 Nov 20 15:59	29°♎25'02		asc. node	14968 Sep 27 08:04	21°♎58'29	
evening set	14967 Nov 23 01:14	29°♎11'07			14968 Oct 01 08:45	0°♎	
inferior conj	14967 Dec 01 22:19	25°♎17'19	-5°14'41	evening rise	14968 Oct 04 20:52	7°♎04'02	
minimum elong	14967 Dec 01 12:59	25°♎30'46	5°11'42		14968 Oct 17 16:37	0°♎	
min. Earth dist.	14967 Dec 03 01:39	24°♎37'56	0.54572 AU	evening max el	14968 Oct 21 19:47	4°♎57'35	19°28'43
morning rise	14967 Dec 10 00:41	21°♎21'19		desc. node	14968 Oct 29 21:57	9°♎39'49	
direct	14967 Dec 14 10:18	20°♎39'49		retrograde	14968 Oct 31 11:06	9°♎47'02	
morning max el	14967 Dec 27 17:07	27°♎08'19	23°25'09	evening set	14968 Nov 02 08:40	9°♎36'38	
	14967 Dec 30 11:31	0°♎		inferior conj	14968 Nov 11 00:24	5°♎30'28	-3°43'55
asc. node	14968 Jan 07 11:29	10°♎50'56		minimum elong	14968 Nov 10 15:18	5°♎45'08	3°39'58
	14968 Jan 17 20:06	0°♎		min. Earth dist.	14968 Nov 13 10:46	3°♎56'37	0.55521 AU
morning set	14968 Jan 20 04:46	4°♎58'21		morning rise	14968 Nov 18 19:52	1°♎06'10	
				direct	14968 Nov 24 03:15	0°♎02'44	
superior conj	14968 Jan 27 01:49	19°♎52'17	1°30'27	morning max el	14968 Dec 08 02:26	7°♎03'57	25°13'00
minimum elong	14968 Jan 27 03:27	20°♎01'06	1°31'03	asc. node	14968 Dec 24 08:40	29°♎17'12	
max. Earth dist.	14968 Jan 30 01:44	26°♎16'16	1.33100 AU		14968 Dec 24 18:21	0°♎	
	14968 Jan 31 20:35	0°♎		morning set	14969 Jan 03 16:34	19°♎39'30	
evening rise	14968 Feb 03 20:50	6°♎06'25			14969 Jan 08 09:46	0°♎	
desc. node	14968 Feb 09 00:39	15°♎59'20					
	14968 Feb 17 03:07	0°♎		superior conj	14969 Jan 10 10:34	4°♎30'04	1°36'59
evening max el	14968 Mar 09 04:19	27°♎47'13	27°22'44	minimum elong	14969 Jan 10 11:11	4°♎33'27	1°37'51
	14968 Mar 11 14:54	0°♎		max. Earth dist.	14969 Jan 12 03:36	8°♎15'43	1.31913 AU
retrograde	14968 Mar 22 19:31	5°♎17'27		evening rise	14969 Jan 17 16:25	20°♎03'37	
evening set	14968 Mar 29 12:56	2°♎48'09			14969 Jan 22 16:30	0°♎	
	14968 Apr 01 16:41	30°♎		desc. node	14969 Jan 25 21:19	5°♎56'39	
min. Earth dist.	14968 Apr 02 09:03	29°♎17'54	0.64597 AU		14969 Feb 10 06:19	0°♎	
asc. node	14968 Apr 04 08:16	27°♎10'52		evening max el	14969 Feb 19 15:17	10°♎45'45	27°34'58
inferior conj	14968 Apr 04 21:35	26°♎34'41	0°10'32	retrograde	14969 Mar 05 13:02	18°♎12'44	
minimum elong	14968 Apr 04 21:18	26°♎35'29	0°10'04	evening set	14969 Mar 12 09:32	15°♎53'52	
transit middle	14968 Apr 04 21:18	26°♎35'29	0°10'04	min. Earth dist.	14969 Mar 16 03:39	12°♎50'25	0.62566 AU
transit begin	14968 Apr 04 18:54	26°♎41'57		inferior conj	14969 Mar 19 02:23	10°♎00'05	-1°00'48
transit end	14968 Apr 04 23:41	26°♎29'02		minimum elong	14969 Mar 19 04:26	9°♎55'07	1°00'02
morning rise	14968 Apr 11 07:40	21°♎10'18		asc. node	14969 Mar 22 05:42	7°♎09'46	
direct	14968 Apr 13 22:21	20°♎35'03		morning rise	14969 Mar 26 02:13	4°♎52'04	
morning max el	14968 Apr 20 06:19	23°♎50'46	17°52'20	direct	14969 Mar 28 09:09	4°♎27'48	
	14968 Apr 25 07:26	0°♎		morning max el	14969 Apr 04 00:01	7°♎49'15	17°46'29
desc. node	14968 May 07 02:43	18°♎53'16			14969 Apr 18 16:01	0°♎	
morning set	14968 May 07 14:03	19°♎40'31		morning set	14969 Apr 20 00:22	2°♎21'32	
	14968 May 13 19:34	0°♎		desc. node	14969 Apr 23 23:26	9°♎16'15	
superior conj	14968 May 21 07:00	12°♎06'22	-1°37'13	superior conj	14969 May 01 21:44	22°♎45'50	-1°00'19

minimum elong	14969 May 01 15:57	22°♄21'44	1°00'13	superior conj	14970 Apr 13 12:11	4°♄30'11	-0°21'31
	14969 May 06 07:25	0°♄		minimum elong	14970 Apr 13 10:19	4°♄21'59	0°21'42
max. Earth dist.	14969 May 08 11:56	3°♄31'47	1.44237 AU	max. Earth dist.	14970 Apr 21 00:57	17°♄20'05	1.42479 AU
evening rise	14969 May 16 16:18	16°♄23'17		evening rise	14970 Apr 26 17:24	26°♄33'10	
	14969 May 25 16:09	0°♄			14970 Apr 28 21:51	0°♄	
evening max el	14969 Jun 15 19:47	28°♄14'41	21°02'38		14970 May 19 10:50	0°♄	
	14969 Jun 17 16:59	0°♄		evening max el	14970 May 29 13:53	12°♄07'15	22°19'22
asc. node	14969 Jun 18 03:22	0°♄21'46		asc. node	14970 Jun 05 00:22	17°♄01'17	
retrograde	14969 Jun 24 08:36	3°♄11'15		retrograde	14970 Jun 08 06:13	17°♄47'50	
evening set	14969 Jun 28 16:17	1°♄27'12		evening set	14970 Jun 13 01:08	15°♄47'45	
	14969 Jun 30 05:10	30°♄		inferior conj	14970 Jun 18 07:41	9°♄27'35	3°02'34
inferior conj	14969 Jul 03 21:58	25°♄16'28	3°09'58	minimum elong	14970 Jun 18 06:36	9°♄31'20	3°01'28
minimum elong	14969 Jul 03 21:48	25°♄17'04	3°09'02	min. Earth dist.	14970 Jun 18 05:01	9°♄36'51	0.69054 AU
min. Earth dist.	14969 Jul 04 08:26	24°♄40'06	0.68742 AU	morning rise	14970 Jun 23 11:54	3°♄14'34	
morning rise	14969 Jul 09 03:02	18°♄56'43		direct	14970 Jun 28 04:21	1°♄16'30	
direct	14969 Jul 14 07:54	16°♄40'43		morning max el	14970 Jul 07 09:20	6°♄39'12	21°51'30
desc. node	14969 Jul 20 22:57	19°♄28'23		desc. node	14970 Jul 07 20:14	7°♄06'52	
morning max el	14969 Jul 24 19:49	22°♄55'51	23°18'58		14970 Jul 25 09:04	0°♄	
	14969 Jul 31 00:53	0°♄		morning set	14970 Aug 08 19:43	22°♄02'53	
	14969 Aug 21 00:36	0°♄			14970 Aug 13 17:33	0°♄	
morning set	14969 Aug 28 11:14	12°♄03'21		max. Earth dist.	14970 Aug 14 16:27	1°♄34'30	1.41885 AU
max. Earth dist.	14969 Sep 01 14:07	19°♄03'30	1.39585 AU				
	14969 Sep 07 17:48	0°♄		superior conj	14970 Aug 22 09:20	14°♄41'15	-1°18'29
superior conj	14969 Sep 09 08:05	2°♄55'58	-0°42'41	minimum elong	14970 Aug 22 15:31	15°♄08'16	1°17'59
minimum elong	14969 Sep 09 11:16	3°♄10'42	0°42'11		14970 Aug 30 21:52	0°♄	
asc. node	14969 Sep 14 04:39	12°♄05'02		asc. node	14970 Sep 01 01:14	2°♄05'41	
evening rise	14969 Sep 18 17:50	20°♄50'58		evening rise	14970 Sep 02 03:54	4°♄08'24	
	14969 Sep 23 13:21	0°♄		evening max el	14970 Sep 18 03:53	29°♄33'58	18°10'41
evening max el	14969 Oct 04 19:16	16°♄55'19	18°39'08		14970 Sep 18 14:39	0°♄	
retrograde	14969 Oct 12 23:29	21°♄02'59		retrograde	14970 Sep 25 06:58	3°♄12'16	
evening set	14969 Oct 14 21:40	20°♄50'02		evening set	14970 Sep 27 11:16	2°♄52'24	
desc. node	14969 Oct 16 19:20	20°♄13'33			14970 Oct 02 11:20	30°♄	
inferior conj	14969 Oct 22 22:17	16°♄24'26	-1°57'28	desc. node	14970 Oct 03 16:45	28°♄59'34	
minimum elong	14969 Oct 22 17:31	16°♄33'22	1°54'55	inferior conj	14970 Oct 04 17:51	28°♄05'24	-0°19'49
min. Earth dist.	14969 Oct 26 01:36	14°♄04'05	0.57219 AU	minimum elong	14970 Oct 04 17:10	28°♄06'54	0°19'09
morning rise	14969 Oct 30 09:59	11°♄23'20		min. Earth dist.	14970 Oct 08 00:14	25°♄15'15	0.59370 AU
direct	14969 Nov 05 10:42	9°♄53'31		morning rise	14970 Oct 11 19:43	22°♄29'58	
morning max el	14969 Nov 19 16:28	17°♄20'01	26°43'02	direct	14970 Oct 18 07:28	20°♄33'45	
	14969 Nov 30 04:04	0°♄		morning max el	14970 Nov 01 14:22	28°♄18'35	27°40'29
asc. node	14969 Dec 11 05:45	18°♄18'40			14970 Nov 03 06:13	0°♄	
	14969 Dec 17 03:10	0°♄			14970 Nov 23 23:30	0°♄	
morning set	14969 Dec 19 02:40	4°♄11'29		asc. node	14970 Nov 28 02:44	7°♄45'58	
				morning set	14970 Dec 03 09:17	18°♄29'52	
superior conj	14969 Dec 25 21:38	19°♄10'52	1°37'26		14970 Dec 08 16:01	0°♄	
minimum elong	14969 Dec 25 21:11	19°♄08'19	1°38'24	superior conj	14970 Dec 10 09:07	3°♄49'21	1°31'56
max. Earth dist.	14969 Dec 26 10:13	20°♄21'06	1.31239 AU	minimum elong	14970 Dec 10 07:42	3°♄41'29	1°32'49
	14969 Dec 30 19:05	0°♄		max. Earth dist.	14970 Dec 09 18:12	2°♄25'59	1.31094 AU
evening rise	14970 Jan 01 18:57	4°♄16'39		evening rise	14970 Dec 17 02:13	18°♄40'04	
desc. node	14970 Jan 12 18:02	25°♄30'07			14970 Dec 22 13:54	0°♄	
	14970 Jan 15 09:46	0°♄		desc. node	14970 Dec 30 14:50	14°♄30'55	
evening max el	14970 Feb 01 21:41	23°♄02'22	27°14'02		14971 Jan 10 15:23	0°♄	
	14970 Feb 13 02:21	0°♄		evening max el	14971 Jan 14 20:54	4°♄27'55	26°18'11
retrograde	14970 Feb 15 21:51	0°♄20'12		retrograde	14971 Jan 28 20:02	11°♄33'49	
	14970 Feb 18 16:02	30°♄		evening set	14971 Feb 04 03:41	9°♄58'12	
evening set	14970 Feb 22 15:40	28°♄19'44		min. Earth dist.	14971 Feb 08 10:20	7°♄21'02	0.58182 AU
min. Earth dist.	14970 Feb 26 12:11	25°♄35'07	0.60361 AU	inferior conj	14971 Feb 11 12:39	5°♄04'56	-3°51'05
inferior conj	14970 Mar 01 16:38	22°♄53'29	-2°23'22	minimum elong	14971 Feb 11 21:03	4°♄49'30	3°47'48
minimum elong	14970 Mar 01 21:55	22°♄42'16	2°21'05	morning rise	14971 Feb 19 17:32	0°♄37'17	
morning rise	14970 Mar 09 07:30	18°♄04'30		direct	14971 Feb 21 17:29	0°♄23'53	
asc. node	14970 Mar 09 03:10	18°♄07'33		asc. node	14971 Feb 24 00:38	0°♄42'28	
direct	14970 Mar 11 08:56	17°♄47'32		morning max el	14971 Mar 02 00:13	4°♄28'45	18°31'34
morning max el	14970 Mar 18 15:15	21°♄25'31	17°59'03	morning set	14971 Mar 17 22:23	29°♄58'31	
	14970 Mar 25 03:56	0°♄			14971 Mar 17 22:42	0°♄	
morning set	14970 Apr 03 04:58	15°♄53'01					
desc. node	14970 Apr 10 20:04	29°♄46'28		superior conj	14971 Mar 26 23:29	17°♄10'52	0°14'05
	14970 Apr 10 23:06	0°♄		minimum elong	14971 Mar 27 00:27	17°♄15'20	0°13'43

behind sun begin	14971 Mar 26 20:48	16° Υ 58'28		superior conj	14972 Mar 09 03:16	0° Υ 36'12	0°43'57
behind sun end	14971 Mar 27 04:05	17° Υ 32'10		minimum elong	14972 Mar 09 05:37	0° Υ 47'42	0°43'39
desc. node	14971 Mar 28 16:37	20° Υ 19'50		desc. node	14972 Mar 14 13:08	10° Υ 53'06	
	14971 Apr 03 03:05	0° B		max. Earth dist.	14972 Mar 15 16:16	12° Υ 57'36	1.38064 AU
max. Earth dist.	14971 Apr 03 09:47	0° B 29'03	1.40344 AU	evening rise	14972 Mar 19 09:05	19° Υ 34'37	
evening rise	14971 Apr 07 14:47	7° B 37'09			14972 Mar 25 12:48	0° B	
	14971 Apr 21 22:45	0° II			14972 Apr 15 02:01	0° II	
evening max el	14971 May 12 04:41	26° II 00'38	23°40'34	evening max el	14972 Apr 23 18:09	9° II 54'25	24°59'38
	14971 May 16 20:10	0° E		retrograde	14972 May 05 16:09	16° II 50'43	
asc. node	14971 May 22 21:29	2° E 22'49		asc. node	14972 May 08 18:42	16° II 09'45	
retrograde	14971 May 23 01:04	2° E 22'55		evening set	14972 May 11 10:13	14° II 25'42	
evening set	14971 May 28 07:38	0° E 08'45		min. Earth dist.	14972 May 15 20:06	9° II 28'34	0.68239 AU
	14971 May 28 11:37	30° R II		inferior conj	14972 May 17 00:31	7° II 55'02	2°16'30
min. Earth dist.	14971 Jun 02 01:35	24° II 34'57	0.68883 AU	minimum elong	14972 May 16 22:22	8° II 02'06	2°15'03
inferior conj	14971 Jun 02 17:09	23° II 41'37	2°44'46	morning rise	14972 May 22 10:50	1° II 59'28	
minimum elong	14971 Jun 02 15:22	23° II 47'43	2°43'29	direct	14972 May 26 03:13	0° II 41'38	
morning rise	14971 Jun 07 23:06	17° II 36'46		morning max el	14972 Jun 02 06:57	4° II 37'40	19°26'51
direct	14971 Jun 12 03:15	15° II 58'45		desc. node	14972 Jun 10 14:26	14° II 51'33	
morning max el	14971 Jun 20 04:27	20° II 32'51	20°32'35	greatest brilliancy	14972 Jun 14 22:00	21° II 03'55	-0.7m
desc. node	14971 Jun 24 17:24	25° II 39'21			14972 Jun 20 21:15	0° E	
	14971 Jun 28 02:08	0° E		morning set	14972 Jun 27 09:34	9° E 56'45	
	14971 Jul 18 13:00	0° Ω		max. Earth dist.	14972 Jul 09 16:56	29° E 03'44	1.45198 AU
morning set	14971 Jul 19 06:35	1° Ω 07'50			14972 Jul 10 07:13	0° Ω	
max. Earth dist.	14971 Jul 28 01:46	14° Ω 59'03	1.43827 AU				
				superior conj	14972 Jul 13 15:19	5° Ω 17'11	-2°10'12
superior conj	14971 Aug 03 11:58	25° Ω 28'03	-1°50'00	minimum elong	14972 Jul 13 19:47	5° Ω 34'58	2°10'54
minimum elong	14971 Aug 03 19:33	25° Ω 59'30	1°49'57	evening rise	14972 Jul 27 20:09	28° Ω 25'35	
	14971 Aug 06 05:04	0° I			14972 Jul 28 18:53	0° I	
evening rise	14971 Aug 15 22:24	16° I 44'07		asc. node	14972 Aug 04 18:24	11° I 31'11	
asc. node	14971 Aug 18 21:48	21° I 55'55		evening max el	14972 Aug 15 07:56	26° I 12'24	18°11'40
	14971 Aug 23 14:59	0° A		retrograde	14972 Aug 21 16:32	29° I 33'52	
evening max el	14971 Sep 01 17:19	12° A 42'39	18°01'54	evening set	14972 Aug 24 13:12	28° I 49'55	
retrograde	14971 Sep 08 06:11	16° A 05'45		inferior conj	14972 Aug 30 14:15	23° I 26'17	1°56'19
evening set	14971 Sep 10 18:20	15° A 35'19		minimum elong	14972 Aug 30 16:38	23° I 19'33	1°55'24
inferior conj	14971 Sep 17 08:30	10° A 28'39	0°58'36	min. Earth dist.	14972 Sep 02 02:28	20° I 37'23	0.63849 AU
minimum elong	14971 Sep 17 10:09	10° A 24'32	0°58'06	morning rise	14972 Sep 05 18:17	17° I 08'53	
min. Earth dist.	14971 Sep 20 08:22	7° A 29'20	0.61662 AU	desc. node	14972 Sep 06 11:43	16° I 36'49	
desc. node	14971 Sep 20 14:14	7° A 15'23		direct	14972 Sep 12 08:56	14° I 35'50	
morning rise	14971 Sep 23 23:18	4° A 27'16		morning max el	14972 Sep 26 05:06	22° I 35'41	27°39'53
direct	14971 Sep 30 15:22	2° A 08'56			14972 Oct 02 18:20	0° A	
morning max el	14971 Oct 14 19:27	10° A 05'48	27°59'02		14972 Oct 22 14:07	0° I	
	14971 Oct 30 08:06	0° I		morning set	14972 Oct 31 03:40	16° I 05'36	
asc. node	14971 Nov 14 23:36	27° I 31'30		asc. node	14972 Oct 31 20:21	17° I 29'10	
	14971 Nov 16 05:08	0° J		max. Earth dist.	14972 Nov 04 22:54	25° I 57'37	1.32435 AU
morning set	14971 Nov 17 10:25	2° J 29'56			14972 Nov 06 20:25	0° J	
max. Earth dist.	14971 Nov 22 23:46	14° J 21'22	1.31487 AU				
				superior conj	14972 Nov 08 01:42	2° J 37'56	1°03'10
superior conj	14971 Nov 24 19:08	18° J 20'17	1°20'31	minimum elong	14972 Nov 07 23:23	2° J 25'22	1°03'38
minimum elong	14971 Nov 24 17:03	18° J 08'45	1°21'13	evening rise	14972 Nov 14 23:13	17° J 38'07	
	14971 Nov 30 01:33	0° Z			14972 Nov 20 23:16	0° Z	
evening rise	14971 Dec 01 12:15	3° Z 08'58		desc. node	14972 Dec 03 08:44	20° Z 01'24	
	14971 Dec 15 16:02	0° \approx		evening max el	14972 Dec 07 21:10	25° Z 02'51	23°10'59
desc. node	14971 Dec 17 11:43	2° \approx 47'05			14972 Dec 14 14:44	0° \approx	
evening max el	14971 Dec 27 11:37	15° \approx 02'18	24°52'39	retrograde	14972 Dec 21 03:04	1° \approx 37'08	
retrograde	14972 Jan 10 05:57	21° \approx 55'23		evening set	14972 Dec 25 09:24	0° \approx 57'38	
evening set	14972 Jan 15 17:53	20° \approx 48'09			14972 Dec 27 22:55	30° R Z	
min. Earth dist.	14972 Jan 20 23:31	18° \approx 02'37	0.56279 AU	min. Earth dist.	14973 Jan 01 07:08	27° Z 44'10	0.54942 AU
inferior conj	14972 Jan 23 11:53	16° \approx 26'29	-5°09'52	inferior conj	14973 Jan 02 15:21	26° Z 57'46	-5°56'29
minimum elong	14972 Jan 23 20:37	16° \approx 12'32	5°07'12	minimum elong	14973 Jan 02 18:29	26° Z 53'15	5°55'22
morning rise	14972 Feb 01 01:40	12° \approx 20'23		morning rise	14973 Jan 11 05:04	23° Z 07'19	
direct	14972 Feb 03 06:57	12° \approx 06'40		direct	14973 Jan 14 01:21	22° Z 48'09	
asc. node	14972 Feb 10 22:04	15° \approx 01'37		morning max el	14973 Jan 25 07:28	28° Z 12'35	20°43'51
morning max el	14972 Feb 12 22:50	16° \approx 47'54	19°26'05		14973 Jan 27 01:07	0° \approx	
	14972 Feb 22 10:42	0° K		asc. node	14973 Jan 27 19:27	0° \approx 51'54	
morning set	14972 Mar 01 00:31	14° K 26'04		morning set	14973 Feb 13 08:12	29° \approx 05'26	
	14972 Mar 08 19:51	0° Υ			14973 Feb 13 18:44	0° K	

superior conj	14973 Feb 20 19:12	14° H 33'14	1°07'13	morning set	14974 Jan 28 19:01	13° \approx 49'51	
minimum elong	14973 Feb 20 21:49	14° H 46'32	1°07'14				
max. Earth dist.	14973 Feb 26 00:14	24° H 55'48	1.35883 AU	superior conj	14974 Feb 04 19:50	28° \approx 52'09	1°23'50
	14973 Feb 28 16:05	0° Y		minimum elong	14974 Feb 04 21:57	29° \approx 03'22	1°24'13
desc. node	14973 Mar 01 09:40	1° Y 21'58			14974 Feb 05 08:39	0° H	
evening rise	14973 Mar 01 21:32	2° Y 16'55		max. Earth dist.	14974 Feb 08 14:25	6° H 45'02	1.34002 AU
	14973 Mar 18 13:44	0° B		evening rise	14974 Feb 13 00:40	15° H 35'04	
evening max el	14973 Apr 06 07:37	23° B 44'38	26°09'31	desc. node	14974 Feb 16 06:13	21° H 42'33	
	14973 Apr 14 16:39	0° II			14974 Feb 20 21:16	0° Y	
retrograde	14973 Apr 19 02:29	1° II 03'37			14974 Mar 13 03:32	0° B	
	14973 Apr 23 03:49	30° R B		evening max el	14974 Mar 19 21:23	7° B 24'29	27°02'41
evening set	14973 Apr 25 07:08	28° B 32'20		retrograde	14974 Apr 02 07:04	14° B 53'34	
asc. node	14973 Apr 25 16:01	28° B 13'27		evening set	14974 Apr 08 20:28	12° B 21'53	
min. Earth dist.	14973 Apr 29 10:33	24° B 10'36	0.67139 AU	asc. node	14974 Apr 12 13:24	8° B 48'36	
inferior conj	14973 May 01 03:44	22° B 03'01	1°37'08	min. Earth dist.	14974 Apr 12 18:51	8° B 33'29	0.65627 AU
minimum elong	14973 May 01 01:43	22° B 09'17	1°35'45	inferior conj	14974 Apr 15 00:30	6° B 00'20	0°45'49
morning rise	14973 May 06 21:07	16° B 17'57		minimum elong	14974 Apr 14 23:19	6° B 03'43	0°44'52
direct	14973 May 10 02:36	15° B 18'49		morning rise	14974 Apr 21 03:42	0° B 27'31	
morning max el	14973 May 16 16:29	18° B 49'36	18°36'50		14974 Apr 22 06:50	30° R Y	
	14973 May 25 10:34	0° II		direct	14974 Apr 23 23:25	29° Y 44'27	
desc. node	14973 May 28 11:22	4° II 32'34			14974 Apr 25 16:20	0° B	
morning set	14973 Jun 07 01:21	19° II 26'02		morning max el	14974 Apr 30 07:16	3° B 02'28	18°03'34
	14973 Jun 13 19:26	0° B		desc. node	14974 May 15 08:13	24° B 34'31	
max. Earth dist.	14973 Jun 22 11:33	13° B 31'44	1.45871 AU	morning set	14974 May 18 19:22	0° II 12'11	
					14974 May 18 16:22	0° II	
superior conj	14973 Jun 23 02:27	14° B 29'52	-2°12'20				
minimum elong	14973 Jun 22 23:23	14° B 17'54	2°13'16	superior conj	14974 Jun 02 12:50	23° II 46'47	-1°54'35
	14973 Jul 02 23:45	0° B		minimum elong	14974 Jun 02 04:20	23° II 13'24	1°54'54
evening rise	14973 Jul 08 17:15	9° B 04'27		max. Earth dist.	14974 Jun 05 07:39	28° II 08'43	1.45802 AU
greatest brilliancy	14973 Jul 16 05:30	20° B 59'10	-0.9m		14974 Jun 06 12:09	0° B	
	14973 Jul 22 02:35	0° B		evening rise	14974 Jun 18 15:32	18° B 48'43	
asc. node	14973 Jul 22 15:05	0° B 45'46			14974 Jun 25 22:25	0° B	
evening max el	14973 Jul 29 20:41	9° B 55'33	18°39'11	greatest brilliancy	14974 Jul 01 09:21	8° B 13'36	-0.7m
retrograde	14973 Aug 05 09:59	13° B 28'30		asc. node	14974 Jul 09 11:51	19° B 31'32	
evening set	14973 Aug 08 15:41	12° B 28'48		evening max el	14974 Jul 13 05:11	23° B 45'09	19°23'28
inferior conj	14973 Aug 14 07:14	6° B 50'16	2°35'29	retrograde	14974 Jul 20 07:20	27° B 42'03	
minimum elong	14973 Aug 14 09:21	6° B 43'41	2°34'32	evening set	14974 Jul 23 22:41	26° B 25'11	
min. Earth dist.	14973 Aug 16 05:41	4° B 27'33	0.65756 AU	inferior conj	14974 Jul 29 08:05	20° B 33'12	2°59'01
morning rise	14973 Aug 20 01:58	0° B 25'40		minimum elong	14974 Jul 29 09:27	20° B 28'43	2°58'08
	14973 Aug 20 14:40	30° R B		min. Earth dist.	14974 Jul 30 16:15	18° B 47'35	0.67276 AU
desc. node	14973 Aug 24 09:13	28° B 02'47		morning rise	14974 Aug 03 19:39	14° B 07'39	
direct	14973 Aug 26 10:38	27° B 46'54		direct	14974 Aug 09 19:00	11° B 32'17	
	14973 Sep 01 23:21	0° B		desc. node	14974 Aug 11 06:42	11° B 40'46	
morning max el	14973 Sep 08 16:22	5° B 36'21	26°49'26	morning max el	14974 Aug 22 03:22	18° B 55'26	25°36'26
	14973 Sep 27 09:53	0° B			14974 Aug 31 12:52	0° B	
morning set	14973 Oct 14 10:09	29° B 10'31			14974 Sep 20 11:16	0° B	
	14973 Oct 14 20:29	0° B		morning set	14974 Sep 27 02:11	11° B 35'12	
max. Earth dist.	14973 Oct 18 12:39	7° B 12'39	1.33931 AU	max. Earth dist.	14974 Sep 30 16:49	18° B 16'39	1.35911 AU
asc. node	14973 Oct 18 17:01	7° B 34'37		asc. node	14974 Oct 05 13:39	27° B 43'15	
superior conj	14973 Oct 23 02:36	16° B 36'59	0°39'58	superior conj	14974 Oct 06 18:59	0° B 09'47	0°11'15
minimum elong	14973 Oct 23 00:40	16° B 26'55	0°40'16	minimum elong	14974 Oct 06 18:18	0° B 06'21	0°11'31
	14973 Oct 29 09:57	0° B		behind sun begin	14974 Oct 06 13:54	29° B 44'16	
evening rise	14973 Oct 30 09:16	2° B 03'24		behind sun end	14974 Oct 06 22:42	0° B 28'28	
	14973 Nov 15 00:13	0° B			14974 Oct 06 17:02	0° B	
evening max el	14973 Nov 19 10:50	5° B 07'07	21°31'16	evening rise	14974 Oct 14 16:16	16° B 18'55	
desc. node	14973 Nov 20 05:51	5° B 52'28			14974 Oct 21 15:15	0° B	
retrograde	14973 Dec 01 14:27	11° B 08'05		evening max el	14974 Nov 01 12:51	15° B 47'41	20°07'18
evening set	14973 Dec 04 13:09	10° B 48'17		desc. node	14974 Nov 07 03:06	19° B 54'25	
inferior conj	14973 Dec 13 07:16	6° B 56'41	-5°47'27	retrograde	14974 Nov 12 02:31	21° B 03'27	
minimum elong	14973 Dec 13 01:16	7° B 05'06	5°45'44	evening set	14974 Nov 14 05:04	20° B 51'53	
min. Earth dist.	14973 Dec 13 12:55	6° B 48'45	0.54438 AU	inferior conj	14974 Nov 23 01:32	16° B 54'25	-4°40'06
morning rise	14973 Dec 21 13:58	3° B 07'53		minimum elong	14974 Nov 22 15:27	17° B 09'31	4°36'23
direct	14973 Dec 25 09:32	2° B 36'14		min. Earth dist.	14974 Nov 24 19:42	15° B 51'21	0.54877 AU
morning max el	14974 Jan 07 01:46	8° B 43'45	22°22'23	morning rise	14974 Dec 01 00:55	12° B 48'22	
asc. node	14974 Jan 14 16:45	17° B 55'48		direct	14974 Dec 05 20:37	11° B 57'54	
	14974 Jan 21 22:04	0° \approx		morning max el	14974 Dec 19 11:23	18° B 41'08	24°11'51

	14974 Dec 28 19:05	0°♁	morning max el	14975 Nov 30 21:51	28°♎41'02	25°54'34
asc. node	14975 Jan 01 13:58	5°♁56'03		14975 Dec 02 05:42	0°♈	
morning set	14975 Jan 13 07:01	28°♁33'37	asc. node	14975 Dec 19 11:06	24°♈38'36	
	14975 Jan 13 23:04	0°♊		14975 Dec 22 07:48	0°♁	
			morning set	14975 Dec 28 18:18	13°♁11'30	
superior conj	14975 Jan 20 02:17	13°♊24'50 1°33'59				
minimum elong	14975 Jan 20 03:30	13°♊31'28 1°34'42	superior conj	14976 Jan 04 12:14	28°♁04'22	1°37'55
max. Earth dist.	14975 Jan 22 12:33	18°♊40'27 1.32542 AU	minimum elong	14976 Jan 04 12:24	28°♁05'14	1°38'50
evening rise	14975 Jan 27 15:07	29°♊20'18		14976 Jan 05 09:04	0°♊	
	14975 Jan 27 23:00	0°♋	max. Earth dist.	14976 Jan 05 17:03	0°♊44'10	1.31568 AU
desc. node	14975 Feb 03 02:50	11°♋50'10	evening rise	14976 Jan 11 13:56	13°♊24'55	
	14975 Feb 13 23:44	0°♌		14976 Jan 20 01:37	0°♋	
evening max el	14975 Mar 02 10:12	20°♌42'53 27°31'47	desc. node	14976 Jan 20 23:30	1°♋38'23	
retrograde	14975 Mar 16 04:45	28°♌11'55		14976 Feb 09 11:49	0°♌	
evening set	14975 Mar 22 23:58	25°♌46'30	evening max el	14976 Feb 12 19:39	3°♌25'20	27°30'18
min. Earth dist.	14975 Mar 26 19:02	22°♌28'07 0.63763 AU	retrograde	14976 Feb 26 18:26	10°♌48'10	
inferior conj	14975 Mar 29 12:07	19°♌40'28 -0°18'11	evening set	14976 Mar 04 14:48	8°♌36'15	
minimum elong	14975 Mar 29 12:41	19°♌38'59 0°18'11	min. Earth dist.	14976 Mar 08 09:18	5°♌42'09 0.61644 AU	
asc. node	14975 Mar 30 10:50	18°♌42'19	inferior conj	14976 Mar 11 11:12	2°♌53'39 -1°34'40	
morning rise	14975 Apr 05 03:45	14°♌22'21	minimum elong	14976 Mar 11 14:32	2°♌45'59 1°33'15	
direct	14975 Apr 07 14:59	13°♌52'08		14976 Mar 14 20:47	30°♎♋	
morning max el	14975 Apr 14 00:48	17°♌08'59 17°47'37	asc. node	14976 Mar 16 08:19	28°♋59'41	
	14975 Apr 23 09:10	0°♍	morning rise	14976 Mar 18 17:21	27°♋53'22	
morning set	14975 Apr 30 16:32	12°♍16'43	direct	14976 Mar 20 21:46	27°♋32'32	
desc. node	14975 May 02 04:58	14°♍51'35		14976 Mar 26 15:45	0°♌	
	14975 May 11 06:15	0°♎	morning max el	14976 Mar 27 17:53	0°♌59'20	17°49'30
			morning set	14976 Apr 12 11:23	25°♌21'40	
superior conj	14975 May 13 14:36	3°♎49'46 -1°22'14		14976 Apr 15 01:44	0°♍	
minimum elong	14975 May 13 06:46	3°♎17'59 1°22'07	desc. node	14976 Apr 18 01:37	5°♍18'11	
max. Earth dist.	14975 May 19 03:04	12°♎40'37 1.45004 AU				
evening rise	14975 May 29 02:40	28°♎12'34	superior conj	14976 Apr 23 15:33	14°♍57'27 -0°43'43	
	14975 May 30 06:47	0°♏	minimum elong	14976 Apr 23 11:29	14°♍40'09 0°43'43	
	14975 Jun 19 21:07	0°♐	max. Earth dist.	14976 Apr 30 19:08	26°♍49'51 1.43553 AU	
asc. node	14975 Jun 26 08:44	7°♐39'02		14976 May 02 18:17	0°♎	
evening max el	14975 Jun 26 07:57	7°♐37'05 20°22'46	evening rise	14976 May 07 18:51	7°♎56'25	
retrograde	14975 Jul 04 06:16	12°♐09'09		14976 May 22 11:55	0°♏	
evening set	14975 Jul 08 07:53	10°♐34'42	evening max el	14976 Jun 08 04:46	21°♏28'38 21°34'16	
inferior conj	14975 Jul 13 14:09	4°♐30'25 3°09'19	asc. node	14976 Jun 12 05:43	24°♏54'56	
minimum elong	14975 Jul 13 14:33	4°♐29'03 3°08'26	retrograde	14976 Jun 17 04:51	26°♏43'38	
min. Earth dist.	14975 Jul 14 08:20	3°♐28'09 0.68347 AU	evening set	14976 Jun 21 17:20	24°♏52'19	
	14975 Jul 17 01:18	30°♎♏	inferior conj	14976 Jun 26 23:05	18°♏37'12 3°08'05	
morning rise	14975 Jul 18 20:54	28°♏07'58	minimum elong	14976 Jun 26 22:31	18°♏39'11 3°07'06	
direct	14975 Jul 24 08:50	25°♏43'25	min. Earth dist.	14976 Jun 27 03:51	18°♏20'37 0.68937 AU	
desc. node	14975 Jul 29 04:06	27°♏11'55	morning rise	14976 Jul 02 03:31	12°♏20'16	
	14975 Aug 02 00:07	0°♑	direct	14976 Jul 07 03:03	10°♏11'48	
morning max el	14975 Aug 04 13:57	2°♑25'50 24°10'32	desc. node	14976 Jul 15 01:26	14°♏10'16	
	14975 Aug 25 14:19	0°♒	morning max el	14976 Jul 17 01:43	16°♏04'27 22°41'09	
morning set	14975 Sep 08 23:31	23°♒09'58		14976 Jul 28 11:58	0°♑	
max. Earth dist.	14975 Sep 12 15:41	29°♒36'12 1.38215 AU		14976 Aug 17 14:26	0°♒	
	14975 Sep 12 21:01	0°♓	morning set	14976 Aug 19 22:05	3°♒45'30	
			max. Earth dist.	14976 Aug 24 15:24	11°♒37'13 1.40589 AU	
superior conj	14975 Sep 19 23:26	13°♓08'06 -0°22'06				
minimum elong	14975 Sep 20 00:58	13°♓15'23 0°21'42	superior conj	14976 Sep 01 11:49	25°♒22'15 -0°58'02	
asc. node	14975 Sep 22 10:14	17°♓51'35	minimum elong	14976 Sep 01 16:19	25°♒42'34 0°57'30	
evening rise	14975 Sep 28 17:46	0°♔18'35		14976 Sep 04 00:43	0°♓	
	14975 Sep 28 14:01	0°♕	asc. node	14976 Sep 08 06:49	7°♓56'03	
evening max el	14975 Oct 15 05:09	27°♕17'25 19°04'54	evening rise	14976 Sep 11 10:35	13°♓54'15	
	14975 Oct 18 12:10	0°♈		14976 Sep 20 07:44	0°♔	
retrograde	14975 Oct 24 04:20	1°♈47'52	evening max el	14976 Sep 27 08:56	9°♔33'16 18°24'32	
desc. node	14975 Oct 25 00:26	1°♈45'38	retrograde	14976 Oct 05 01:21	13°♔27'17	
evening set	14975 Oct 26 01:17	1°♈36'52	evening set	14976 Oct 07 01:37	13°♔11'58	
	14975 Oct 30 07:29	30°♎♕	desc. node	14976 Oct 10 21:49	11°♔27'31	
inferior conj	14975 Nov 03 11:18	27°♕22'36 -2°58'53	inferior conj	14976 Oct 14 18:32	8°♕36'58 -1°14'07	
minimum elong	14975 Nov 03 03:51	27°♕35'22 2°55'20	minimum elong	14976 Oct 14 15:41	8°♕42'42 1°12'24	
min. Earth dist.	14975 Nov 06 06:33	25°♕27'47 0.56173 AU	min. Earth dist.	14976 Oct 18 00:30	6°♕01'35 0.58087 AU	
morning rise	14975 Nov 11 03:45	22°♕43'20	morning rise	14976 Oct 22 02:15	3°♕20'15	
direct	14975 Nov 16 19:14	21°♕29'14	direct	14976 Oct 28 08:10	1°♕39'14	

morning max el	14976 Nov 11 15:23	9°♍14'34	27°12'12	desc. node	14977 Sep 27 19:17	19°♌48'24	
	14976 Nov 27 11:23	0°♊		min. Earth dist.	14977 Sep 30 03:15	17°♌39'42	0.60334 AU
asc. node	14976 Dec 05 08:06	13°♊52'23		morning rise	14977 Oct 03 19:48	14°♌48'44	
morning set	14976 Dec 12 03:11	27°♊39'05		direct	14977 Oct 10 10:08	12°♌42'04	
	14976 Dec 13 05:24	0°♊		morning max el	14977 Oct 24 16:39	20°♌34'05	27°53'17
					14977 Nov 01 20:23	0°♍	
superior conj	14976 Dec 18 23:43	12°♊45'21	1°35'50		14977 Nov 20 10:12	0°♊	
minimum elong	14976 Dec 18 22:50	12°♊40'25	1°36'47	asc. node	14977 Nov 22 05:01	3°♊28'00	
max. Earth dist.	14976 Dec 19 00:49	12°♊51'34	1.31108 AU	morning set	14977 Nov 26 07:43	11°♊50'17	
evening rise	14976 Dec 25 18:44	27°♊43'22		max. Earth dist.	14977 Dec 02 08:02	24°♊52'26	1.31184 AU
	14976 Dec 26 20:31	0°♋					
desc. node	14977 Jan 06 20:15	20°♋59'50		superior conj	14977 Dec 03 10:47	27°♊21'15	1°27'50
	14977 Jan 12 11:39	0°♋		minimum elong	14977 Dec 03 09:02	27°♊11'35	1°28'38
evening max el	14977 Jan 24 23:04	15°♋20'47	26°54'19		14977 Dec 04 15:14	0°♋	
retrograde	14977 Feb 07 23:02	22°♋34'09		evening rise	14977 Dec 10 03:21	12°♋09'20	
evening set	14977 Feb 14 13:44	20°♋43'09			14977 Dec 19 00:29	0°♋	
min. Earth dist.	14977 Feb 18 13:07	18°♋03'41	0.59424 AU	desc. node	14977 Dec 24 17:05	9°♋43'27	
inferior conj	14977 Feb 21 18:06	15°♋30'35	-3°00'30	evening max el	14978 Jan 06 18:27	26°♋23'16	25°44'52
minimum elong	14977 Feb 22 00:50	15°♋17'09	2°57'39		14978 Jan 11 03:56	0°♋	
morning rise	14977 Mar 01 15:19	10°♋50'49		retrograde	14978 Jan 20 16:36	3°♋24'49	
asc. node	14977 Mar 03 05:45	10°♋36'29		evening set	14978 Jan 26 16:55	2°♋01'02	
direct	14977 Mar 03 15:29	10°♋35'51			14978 Jan 30 08:20	30°♋	
morning max el	14977 Mar 11 07:01	14°♋23'41	18°10'19	min. Earth dist.	14978 Jan 31 07:22	29°♋22'18	0.57320 AU
	14977 Mar 21 22:54	0°♌		inferior conj	14978 Feb 03 05:25	27°♋21'26	-4°26'45
morning set	14977 Mar 26 21:59	9°♌09'20		minimum elong	14978 Feb 03 14:31	27°♋05'42	4°23'31
desc. node	14977 Apr 04 22:13	25°♌50'22		morning rise	14978 Feb 11 15:02	23°♋03'16	
				direct	14978 Feb 13 15:58	22°♋50'25	
superior conj	14977 Apr 05 15:26	27°♌07'47	-0°05'52	asc. node	14978 Feb 18 03:11	23°♋56'07	
minimum elong	14977 Apr 05 14:56	27°♌05'34	0°06'09	morning max el	14978 Feb 22 12:09	27°♋09'58	18°51'55
behind sun begin	14977 Apr 05 07:52	26°♌33'51			14978 Feb 25 01:31	0°♋	
behind sun end	14977 Apr 05 22:00	27°♌37'14		morning set	14978 Mar 10 19:32	23°♋25'26	
	14977 Apr 07 06:05	0°♌			14978 Mar 14 04:01	0°♌	
max. Earth dist.	14977 Apr 13 06:08	10°♌21'42	1.41605 AU				
evening rise	14977 Apr 18 04:07	18°♌28'26		superior conj	14978 Mar 19 10:17	10°♌09'05	0°27'30
	14977 Apr 25 11:56	0°♍		minimum elong	14978 Mar 19 12:00	10°♌17'13	0°27'08
	14977 May 17 00:53	0°♍		desc. node	14978 Mar 22 18:45	16°♌24'15	
evening max el	14977 May 21 21:01	5°♍20'43	22°53'38	max. Earth dist.	14978 Mar 26 13:00	23°♌10'44	1.39379 AU
asc. node	14977 May 30 02:47	11°♍03'28		evening rise	14978 Mar 30 10:37	29°♌56'16	
retrograde	14977 Jun 01 01:34	11°♍20'17			14978 Mar 30 11:30	0°♍	
evening set	14977 Jun 06 01:23	9°♍13'47			14978 Apr 18 20:48	0°♍	
inferior conj	14977 Jun 11 08:56	2°♍50'01	2°56'16	evening max el	14978 May 04 11:01	19°♍14'48	24°14'54
minimum elong	14977 Jun 11 07:32	2°♍54'53	2°55'05	retrograde	14978 May 15 19:04	25°♍53'15	
min. Earth dist.	14977 Jun 11 00:43	3°♍18'34	0.69039 AU	asc. node	14978 May 16 23:56	25°♍46'58	
	14977 Jun 13 11:15	30°♋♍		evening set	14978 May 21 06:26	23°♍34'14	
morning rise	14977 Jun 16 13:34	26°♍40'14		min. Earth dist.	14978 May 25 20:48	18°♍15'49	0.68663 AU
direct	14977 Jun 21 00:37	24°♍50'46		inferior conj	14978 May 26 17:47	17°♍04'57	2°34'07
morning max el	14977 Jun 29 17:24	29°♍52'20	21°16'28	minimum elong	14978 May 26 15:48	17°♍11'39	2°32'44
	14977 Jun 29 20:28	0°♍		morning rise	14978 Jun 01 01:14	11°♍03'38	
desc. node	14977 Jul 01 22:40	2°♍13'45		direct	14978 Jun 05 00:15	9°♍34'15	
	14977 Jul 22 04:15	0°♎		morning max el	14978 Jun 12 15:32	13°♍51'03	20°02'43
morning set	14977 Jul 30 20:27	13°♎19'16		desc. node	14978 Jun 18 19:46	21°♍05'01	
max. Earth dist.	14977 Aug 06 20:15	24°♎30'17	1.42763 AU		14978 Jun 25 06:15	0°♍	
	14977 Aug 10 04:15	0°♎		morning set	14978 Jul 10 01:37	22°♍11'08	
					14978 Jul 15 02:43	0°♎	
superior conj	14977 Aug 14 03:45	6°♎42'44	-1°32'47	max. Earth dist.	14978 Jul 20 07:49	8°♎12'28	1.44488 AU
minimum elong	14977 Aug 14 10:53	7°♎13'14	1°32'25				
evening rise	14977 Aug 25 14:38	26°♎55'15		superior conj	14978 Jul 25 20:18	17°♎04'54	-2°00'25
asc. node	14977 Aug 26 03:22	27°♎52'37		minimum elong	14978 Jul 26 03:15	17°♎33'11	2°00'41
	14977 Aug 27 07:41	0°♏			14978 Aug 02 15:36	0°♎	
evening max el	14977 Sep 10 20:02	22°♏25'31	18°04'40	evening rise	14978 Aug 08 00:58	9°♎09'37	
retrograde	14977 Sep 17 15:58	25°♏55'50		asc. node	14978 Aug 12 23:58	17°♎37'28	
evening set	14977 Sep 19 23:21	25°♏32'02			14978 Aug 20 18:10	0°♏	
inferior conj	14977 Sep 26 22:39	20°♏36'41	0°16'02	evening max el	14978 Aug 25 10:28	5°♏44'56	18°03'53
minimum elong	14977 Sep 26 23:10	20°♏35'28	0°16'05	retrograde	14978 Aug 31 20:18	9°♏05'24	
transit middle	14977 Sep 26 23:10	20°♏35'28	0°16'05	evening set	14978 Sep 03 12:03	8°♏29'32	
transit begin	14977 Sep 26 22:48	20°♏36'19		inferior conj	14978 Sep 09 20:13	3°♏15'38	1°25'31
transit end	14977 Sep 26 23:32	20°♏34'36		minimum elong	14978 Sep 09 22:20	3°♏10'02	1°24'46

min. Earth dist.	14978 Sep 12 15:41	0° $\underline{\text{A}}$ 18'23	0.62621 AU	inferior conj	14979 Aug 24 07:12	16° M 25'17	2°15'00
	14978 Sep 12 23:00	30° R M		minimum elong	14979 Aug 24 09:34	16° M 18'20	2°14'03
desc. node	14978 Sep 14 16:46	28° M 21'54		min. Earth dist.	14979 Aug 26 13:39	13° M 46'11	0.64711 AU
morning rise	14978 Sep 16 06:20	27° M 06'28		morning rise	14979 Aug 30 07:06	10° M 04'12	
direct	14978 Sep 22 22:40	24° M 40'29		desc. node	14979 Sep 01 14:17	8° M 32'24	
	14978 Oct 04 02:55	0° $\underline{\text{A}}$		direct	14979 Sep 05 19:45	7° M 27'45	
morning max el	14978 Oct 06 23:47	2° $\underline{\text{A}}$ 39'55	27°55'07	morning max el	14979 Sep 19 10:18	15° M 23'58	27°21'43
	14978 Oct 27 06:38	0° M			14979 Oct 01 10:09	0° $\underline{\text{A}}$	
asc. node	14978 Nov 09 01:50	23° M 19'09			14979 Oct 20 00:18	0° M	
morning set	14978 Nov 10 05:46	25° M 40'15		morning set	14979 Oct 24 18:48	9° M 03'28	
	14978 Nov 12 08:04	0° A		asc. node	14979 Oct 26 22:34	13° M 20'40	
max. Earth dist.	14978 Nov 15 11:03	6° A 39'00	1.31820 AU	max. Earth dist.	14979 Oct 29 06:31	18° M 06'19	1.33011 AU
superior conj	14978 Nov 17 19:35	11° A 47'07	1°13'53	superior conj	14979 Nov 02 00:03	25° M 57'43	0°54'02
minimum elong	14978 Nov 17 17:20	11° A 34'46	1°14'29	minimum elong	14979 Nov 01 21:48	25° M 45'44	0°54'25
evening rise	14978 Nov 24 13:59	26° A 38'38			14979 Nov 03 21:09	0° A	
	14978 Nov 26 03:38	0° B		evening rise	14979 Nov 09 00:49	11° A 07'00	
desc. node	14978 Dec 11 14:01	27° B 35'22			14979 Nov 18 14:24	0° B	
	14978 Dec 13 08:54	0° \approx		desc. node	14979 Nov 28 11:06	14° B 17'20	
evening max el	14978 Dec 19 06:22	6° \approx 40'09	24°10'25	evening max el	14979 Nov 30 16:30	16° B 37'46	22°27'21
retrograde	14979 Jan 01 20:53	13° \approx 25'57		retrograde	14979 Dec 13 12:35	22° B 59'17	
evening set	14979 Jan 06 21:02	12° \approx 31'22		evening set	14979 Dec 17 05:12	22° B 29'23	
min. Earth dist.	14979 Jan 12 17:58	9° \approx 36'12	0.55621 AU	min. Earth dist.	14979 Dec 25 00:05	18° B 58'39	0.54615 AU
inferior conj	14979 Jan 14 19:45	8° \approx 20'44	-5°35'12	inferior conj	14979 Dec 25 16:51	18° B 35'05	-6°00'19
minimum elong	14979 Jan 15 02:54	8° \approx 09'51	5°33'15	minimum elong	14979 Dec 25 16:03	18° B 36'13	5°59'19
morning rise	14979 Jan 23 10:36	4° \approx 22'00		morning rise	14980 Jan 03 04:02	14° B 47'45	
direct	14979 Jan 25 21:03	4° \approx 06'39		direct	14980 Jan 06 09:54	14° B 23'59	
morning max el	14979 Feb 05 05:03	9° \approx 06'19	19°56'18	morning max el	14980 Jan 18 07:11	20° B 06'48	21°23'42
asc. node	14979 Feb 05 00:35	8° \approx 55'37		asc. node	14980 Jan 22 21:56	25° B 19'33	
	14979 Feb 19 00:08	0° H			14980 Jan 26 05:10	0° \approx	
morning set	14979 Feb 23 00:22	7° H 59'03		morning set	14980 Feb 07 09:43	22° \approx 42'11	
					14980 Feb 10 20:51	0° H	
superior conj	14979 Mar 02 19:40	23° H 49'01	0°54'38	superior conj	14980 Feb 14 15:44	7° H 56'57	1°15'04
minimum elong	14979 Mar 02 22:15	24° H 01'51	0°54'27	minimum elong	14980 Feb 14 18:12	8° H 09'47	1°15'14
	14979 Mar 05 23:19	0° Y		max. Earth dist.	14980 Feb 19 06:19	17° H 19'25	1.35037 AU
max. Earth dist.	14979 Mar 08 19:37	5° Y 24'44	1.37114 AU	evening rise	14980 Feb 23 08:15	25° H 13'32	
desc. node	14979 Mar 09 15:15	6° Y 56'10		desc. node	14980 Feb 24 11:48	27° H 22'30	
evening rise	14979 Mar 12 13:04	12° Y 14'18			14980 Feb 25 22:02	0° Y	
	14979 Mar 23 02:08	0° B			14980 Mar 15 14:04	0° B	
	14979 Apr 14 00:16	0° II		evening max el	14980 Mar 29 14:26	16° B 56'54	26°34'34
evening max el	14979 Apr 17 00:38	3° II 08'53	25°31'01	retrograde	14980 Apr 11 16:00	24° B 20'49	
retrograde	14979 Apr 29 08:09	10° II 15'45		evening set	14980 Apr 18 00:48	21° B 48'34	
asc. node	14979 May 03 21:12	8° II 50'23		asc. node	14980 Apr 19 18:32	20° B 13'45	
evening set	14979 May 05 06:50	7° II 47'44		min. Earth dist.	14980 Apr 22 01:55	17° B 41'32	0.66553 AU
min. Earth dist.	14979 May 09 13:54	3° II 05'43	0.67827 AU	inferior conj	14980 Apr 24 00:29	15° B 22'00	1°16'56
inferior conj	14979 May 10 23:40	1° II 17'08	2°01'14	minimum elong	14980 Apr 23 22:43	15° B 27'18	1°15'41
minimum elong	14979 May 10 21:30	1° II 24'06	1°59'47	morning rise	14980 Apr 29 21:42	9° B 42'00	
	14979 May 11 23:52	30° R B		direct	14980 May 02 23:01	8° B 49'56	
morning rise	14979 May 16 12:38	25° B 25'39		morning max el	14980 May 09 09:10	12° B 13'21	18°20'36
direct	14979 May 20 00:21	24° B 15'50			14980 May 22 08:04	0° II	
morning max el	14979 May 26 21:04	27° B 59'23	19°03'30	desc. node	14980 May 22 13:41	0° II 21'57	
	14979 May 28 18:41	0° II		morning set	14980 May 29 09:53	11° II 11'47	
desc. node	14979 Jun 05 16:46	10° II 30'46			14980 Jun 10 07:58	0° B	
greatest brilliancy	14979 Jun 08 22:49	15° II 19'25	-0.7m	superior conj	14980 Jun 13 23:58	5° B 43'47	-2°07'04
	14979 Jun 18 13:17	0° B		minimum elong	14980 Jun 13 17:54	5° B 20'09	2°07'47
morning set	14979 Jun 19 07:39	1° B 10'55		max. Earth dist.	14980 Jun 14 21:12	7° B 06'39	1.45944 AU
max. Earth dist.	14979 Jul 03 01:04	22° B 30'28	1.45581 AU	evening rise	14980 Jun 29 23:11	0° B 38'49	
superior conj	14979 Jul 05 15:21	26° B 34'57	-2°13'35		14980 Jun 29 13:15	0° B	
minimum elong	14979 Jul 05 16:53	26° B 40'58	2°14'30	greatest brilliancy	14980 Jul 09 21:18	16° B 05'13	-0.8m
	14979 Jul 07 19:20	0° B		asc. node	14980 Jul 16 17:21	26° B 08'23	
evening rise	14979 Jul 20 12:27	20° B 24'51			14980 Jul 19 16:19	0° M	
	14979 Jul 26 09:51	0° M		evening max el	14980 Jul 22 11:53	3° M 08'17	18°55'58
asc. node	14979 Jul 30 20:37	7° M 04'54		retrograde	14980 Jul 29 05:38	6° M 49'58	
evening max el	14979 Aug 09 00:43	19° M 21'45	18°21'16	evening set	14980 Aug 01 15:24	5° M 42'56	
retrograde	14979 Aug 15 10:04	22° M 46'10		inferior conj	14980 Aug 07 03:55	29° B 58'12	2°47'11
evening set	14979 Aug 18 10:39	21° M 55'33					

minimum elong	14980 Aug 07 05:46	29°Ω52'19	2°46'17	evening max el	14981 Jul 05 17:57	16°Ω59'15	19°46'54
	14980 Aug 07 03:21	30°κΩ		retrograde	14981 Jul 13 04:02	21°Ω10'22	
min. Earth dist.	14980 Aug 08 20:10	27°Ω50'33	0.66460 AU	evening set	14981 Jul 16 23:36	19°Ω46'05	
morning rise	14980 Aug 12 19:20	23°Ω32'34		inferior conj	14981 Jul 22 07:19	13°Ω48'31	3°04'52
desc. node	14980 Aug 18 11:47	20°Ω55'36		minimum elong	14981 Jul 22 08:17	13°Ω45'17	3°04'00
direct	14980 Aug 19 00:14	20°Ω54'35		min. Earth dist.	14981 Jul 23 09:28	12°Ω20'47	0.67787 AU
morning max el	14980 Aug 31 21:47	28°Ω34'27	26°20'33	morning rise	14981 Jul 27 16:31	7°Ω23'38	
	14980 Sep 02 06:42	0°൬		direct	14981 Aug 02 11:03	4°Ω52'10	
	14980 Sep 24 04:48	0°Ω		desc. node	14981 Aug 05 09:15	5°Ω25'04	
morning set	14980 Oct 06 19:36	21°Ω52'18		morning max el	14981 Aug 14 08:45	12°Ω00'16	25°00'52
max. Earth dist.	14980 Oct 10 16:19	29°Ω15'54	1.34724 AU		14981 Aug 28 19:54	0°൬	
	14980 Oct 11 01:19	0°൬			14981 Sep 16 22:02	0°Ω	
asc. node	14980 Oct 12 19:14	3°൬27'57		morning set	14981 Sep 19 04:18	3°Ω58'00	
				max. Earth dist.	14981 Sep 22 17:32	10°Ω23'23	1.36861 AU
superior conj	14980 Oct 15 21:41	9°൬46'16	0°28'25				
minimum elong	14980 Oct 15 20:10	9°൬38'29	0°28'41	superior conj	14981 Sep 29 09:27	23°Ω05'50	-0°02'27
evening rise	14980 Oct 23 09:52	25°൬29'00		minimum elong	14981 Sep 29 09:36	23°Ω06'32	0°02'09
	14980 Oct 25 14:16	0°♂		behind sun begin	14981 Sep 29 03:08	22°Ω34'45	
evening max el	14980 Nov 11 10:32	26°♂53'34	20°53'01	behind sun end	14981 Sep 29 16:04	23°Ω38'23	
desc. node	14980 Nov 14 08:18	29°♂25'10		asc. node	14981 Sep 29 15:51	23°Ω37'21	
	14980 Nov 15 03:54	0°♂			14981 Oct 02 20:34	0°൬	
retrograde	14980 Nov 22 22:55	2°♂36'50		evening rise	14981 Oct 07 14:54	9°൬39'07	
evening set	14980 Nov 25 11:09	2°♂21'43			14981 Oct 18 14:52	0°♂	
	14980 Dec 01 14:15	30°κ♂		evening max el	14981 Oct 24 18:45	7°♂55'09	19°38'01
inferior conj	14980 Dec 04 07:50	28°♂28'49	-5°25'01	desc. node	14981 Nov 01 05:35	12°♂33'54	
minimum elong	14980 Dec 03 23:08	28°♂41'15	5°22'23	retrograde	14981 Nov 03 15:49	12°♂51'17	
min. Earth dist.	14980 Dec 05 05:41	27°♂57'38	0.54504 AU	evening set	14981 Nov 05 14:12	12°♂40'48	
morning rise	14980 Dec 12 11:17	24°♂35'18		inferior conj	14981 Nov 14 07:34	8°♂37'18	-3°59'25
direct	14980 Dec 16 17:10	23°♂56'38		minimum elong	14981 Nov 13 22:01	8°♂52'21	3°55'25
	14980 Dec 29 12:15	0°♂		min. Earth dist.	14981 Nov 16 14:13	7°♂11'09	0.55329 AU
morning max el	14980 Dec 29 20:48	0°♂20'01	23°08'45	morning rise	14981 Nov 22 04:00	4°♂18'01	
asc. node	14981 Jan 08 19:13	12°♂49'11		direct	14981 Nov 27 08:33	3°♂18'01	
	14981 Jan 18 07:28	0°≈		morning max el	14981 Dec 11 05:54	10°♂15'04	24°57'33
morning set	14981 Jan 21 21:15	7°≈27'04			14981 Dec 26 00:19	0°♂	
				asc. node	14981 Dec 26 16:24	1°♂09'05	
superior conj	14981 Jan 28 19:08	22°≈22'42	1°28'55	morning set	14982 Jan 06 09:08	22°♂08'50	
minimum elong	14981 Jan 28 20:55	22°≈32'13	1°29'27		14982 Jan 09 23:25	0°≈	
max. Earth dist.	14981 Jan 31 23:50	29°≈09'56	1.33316 AU				
	14981 Feb 01 09:25	0°κ		superior conj	14982 Jan 13 03:20	6°≈59'13	1°36'24
evening rise	14981 Feb 05 16:32	8°κ43'46		minimum elong	14982 Jan 13 04:07	7°≈03'29	1°37'13
desc. node	14981 Feb 10 08:23	17°κ38'06		max. Earth dist.	14982 Jan 15 00:41	11°≈07'43	1.32060 AU
	14981 Feb 17 10:03	0°Υ		evening rise	14982 Jan 20 10:50	22°≈37'57	
	14981 Mar 11 16:10	0°♂			14982 Jan 24 03:22	0°κ	
evening max el	14981 Mar 12 03:45	0°♂28'17	27°18'20	desc. node	14982 Jan 28 05:00	7°κ38'07	
retrograde	14981 Mar 25 17:45	7°♂58'48			14982 Feb 11 04:48	0°Υ	
evening set	14981 Apr 01 10:14	5°♂28'32		evening max el	14982 Feb 22 15:15	13°Υ32'09	27°35'12
min. Earth dist.	14981 Apr 05 06:49	1°♂53'47	0.64875 AU	retrograde	14982 Mar 08 12:27	21°Υ00'06	
asc. node	14981 Apr 06 15:57	0°♂23'41		evening set	14982 Mar 15 08:41	18°Υ39'20	
	14981 Apr 07 00:31	30°κΥ		min. Earth dist.	14982 Mar 19 02:58	15°Υ32'08	0.62879 AU
inferior conj	14981 Apr 07 17:41	29°Υ12'39	0°20'16	inferior conj	14982 Mar 22 00:19	12°Υ41'59	-0°49'14
minimum elong	14981 Apr 07 17:07	29°Υ14'12	0°19'39	minimum elong	14982 Mar 22 01:57	12°Υ37'58	0°48'40
morning rise	14981 Apr 14 01:53	23°Υ46'06		asc. node	14982 Mar 24 13:24	10°Υ18'36	
direct	14981 Apr 16 17:49	23°Υ08'59		morning rise	14982 Mar 28 21:58	7°Υ31'15	
morning max el	14981 Apr 23 01:32	26°Υ24'58	17°54'43	direct	14982 Mar 31 05:54	7°Υ05'36	
	14981 Apr 26 05:16	0°♂		morning max el	14982 Apr 06 19:16	10°Υ25'39	17°46'12
desc. node	14981 May 09 10:28	20°♂30'59			14982 Apr 20 00:38	0°♂	
morning set	14981 May 10 15:51	22°♂32'40		morning set	14982 Apr 22 22:55	5°♂04'42	
	14981 May 15 04:17	0°Π		desc. node	14982 Apr 26 07:09	10°♂52'24	
superior conj	14981 May 24 15:21	15°Π16'57	-1°42'10	superior conj	14982 May 05 02:33	25°♂46'34	-1°06'11
minimum elong	14981 May 24 06:30	14°Π41'44	1°42'14	minimum elong	14982 May 04 20:10	25°♂20'12	1°06'04
max. Earth dist.	14981 May 28 17:13	21°Π43'20	1.45548 AU		14982 May 07 16:19	0°Π	
	14981 Jun 03 00:37	0°♂		max. Earth dist.	14982 May 11 10:50	6°Π05'12	1.44452 AU
evening rise	14981 Jun 09 14:51	10°♂09'37		evening rise	14982 May 20 02:03	19°Π36'45	
	14981 Jun 22 18:21	0°Ω			14982 May 26 22:18	0°♂	
greatest brilliancy	14981 Jun 23 23:59	1°Ω48'20	-0.6m		14982 Jun 17 22:08	0°Ω	
asc. node	14981 Jul 03 14:10	14°Ω39'37		evening max el	14982 Jun 18 18:05	0°Ω51'16	20°51'58

asc. node	14982 Jun 20 11:04	2°♎27'13		evening max el	14983 Jun 01 12:54	14°♏44'01	22°07'28
retrograde	14982 Jun 27 03:02	5°♎41'15		asc. node	14983 Jun 07 08:06	19°♏17'15	
evening set	14982 Jul 01 09:06	3°♎59'45		retrograde	14983 Jun 11 00:52	20°♏17'45	
	14982 Jul 05 00:52	30°♎		evening set	14983 Jun 15 18:09	18°♏19'51	
inferior conj	14982 Jul 06 14:51	27°♏50'43	3°10'08	inferior conj	14983 Jun 21 00:25	12°♏01'03	3°04'21
minimum elong	14982 Jul 06 14:50	27°♏50'47	3°09'13	minimum elong	14983 Jun 20 23:28	12°♏04'20	3°03'17
min. Earth dist.	14982 Jul 07 03:20	27°♏07'29	0.68655 AU	min. Earth dist.	14983 Jun 20 23:41	12°♏03'36	0.69043 AU
morning rise	14982 Jul 11 20:17	21°♏30'10		morning rise	14983 Jun 26 04:37	5°♏47'01	
direct	14982 Jul 17 03:02	19°♏11'43		direct	14983 Jun 30 22:56	3°♏46'08	
desc. node	14982 Jul 23 06:37	21°♏36'24		desc. node	14983 Jul 10 03:52	9°♏05'08	
morning max el	14982 Jul 27 19:26	25°♏34'11	23°32'20	morning max el	14983 Jul 10 08:20	9°♏16'17	22°04'07
	14982 Jul 31 20:14	0°♎			14983 Jul 26 13:26	0°♎	
	14982 Aug 22 07:37	0°♐		morning set	14983 Aug 12 04:27	25°♎17'40	
morning set	14982 Aug 31 16:22	15°♐08'53			14983 Aug 15 02:10	0°♐	
max. Earth dist.	14982 Sep 04 15:29	21°♐56'08	1.39233 AU	max. Earth dist.	14983 Aug 17 17:09	4°♐19'54	1.41565 AU
	14982 Sep 09 04:14	0°♑					
superior conj	14982 Sep 12 07:36	5°♑46'54	-0°37'12	superior conj	14983 Aug 25 11:51	17°♐40'04	-1°13'12
minimum elong	14982 Sep 12 10:20	5°♑59'37	0°36'44	minimum elong	14983 Aug 25 17:37	18°♐05'30	1°12'40
asc. node	14982 Sep 16 12:24	13°♑44'32			14983 Sep 01 07:53	0°♑	
evening rise	14982 Sep 21 13:06	23°♑29'36		asc. node	14983 Sep 03 08:57	3°♑46'27	
	14982 Sep 24 22:11	0°♒		evening rise	14983 Sep 05 01:02	6°♑52'09	
evening max el	14982 Oct 07 16:30	19°♒46'00	18°45'08		14983 Sep 18 22:11	0°♒	
retrograde	14982 Oct 16 01:15	23°♒59'01		evening max el	14983 Sep 20 23:57	2°♒18'56	18°13'35
evening set	14982 Oct 17 22:57	23°♒46'42		retrograde	14983 Sep 28 06:05	6°♒00'51	
desc. node	14982 Oct 19 02:58	23°♒27'37		evening set	14983 Sep 30 09:18	5°♒42'15	
inferior conj	14982 Oct 26 02:08	19°♒24'09	-2°13'26	desc. node	14983 Oct 06 00:23	2°♒26'01	
minimum elong	14982 Oct 25 20:39	19°♒34'11	2°10'34	inferior conj	14983 Oct 07 18:32	0°♒58'11	-0°33'26
min. Earth dist.	14982 Oct 29 03:53	17°♒09'58	0.56934 AU	minimum elong	14983 Oct 07 17:20	1°♒00'45	0°32'32
morning rise	14982 Nov 02 15:09	14°♒28'50			14983 Oct 08 21:34	30°♒	
direct	14982 Nov 08 13:47	13°♒03'02		min. Earth dist.	14983 Oct 11 01:06	28°♑11'18	0.59034 AU
morning max el	14982 Nov 22 18:45	20°♒25'46	26°31'26	morning rise	14983 Oct 14 21:58	25°♑27'24	
	14982 Dec 01 00:41	0°♓		direct	14983 Oct 21 08:24	23°♑35'07	
asc. node	14982 Dec 13 13:28	20°♓05'56			14983 Nov 03 06:38	0°♒	
	14982 Dec 18 14:57	0°♓		morning max el	14983 Nov 04 15:29	1°♒17'24	27°34'26
morning set	14982 Dec 21 19:34	6°♓42'30			14983 Nov 25 07:11	0°♓	
				asc. node	14983 Nov 30 10:25	9°♓29'52	
superior conj	14982 Dec 28 14:09	21°♓39'57	1°37'45	morning set	14983 Dec 06 02:49	21°♓03'26	
minimum elong	14982 Dec 28 13:51	21°♓38'17	1°38'42		14983 Dec 10 05:37	0°♓	
max. Earth dist.	14982 Dec 29 06:50	23°♓12'59	1.31307 AU	max. Earth dist.	14983 Dec 12 14:57	5°♓19'15	1.31080 AU
	14983 Jan 01 08:25	0°♈					
evening rise	14983 Jan 04 12:28	6°♈49'10		superior conj	14983 Dec 13 01:39	6°♓19'11	1°33'09
desc. node	14983 Jan 15 01:43	27°♈16'03		minimum elong	14983 Dec 13 00:23	6°♓12'03	1°34'04
	14983 Jan 16 15:43	0°♉		evening rise	14983 Dec 19 19:08	21°♓11'33	
evening max el	14983 Feb 04 22:37	25°♉56'31	27°19'28		14983 Dec 24 00:34	0°♈	
	14983 Feb 09 21:30	0°♊		desc. node	14984 Jan 01 22:30	16°♈22'53	
retrograde	14983 Feb 18 22:33	3°♊15'33			14984 Jan 11 05:21	0°♉	
evening set	14983 Feb 25 17:12	1°♊12'03		evening max el	14984 Jan 17 23:01	7°♉30'05	26°28'38
	14983 Feb 27 12:35	30°♉		retrograde	14984 Jan 31 22:19	14°♉37'48	
min. Earth dist.	14983 Mar 01 13:03	28°♉25'14	0.60692 AU	evening set	14984 Feb 07 08:10	12°♉58'01	
inferior conj	14983 Mar 04 17:00	25°♉41'22	-2°10'18	min. Earth dist.	14984 Feb 11 12:32	10°♉20'51	0.58496 AU
minimum elong	14983 Mar 04 21:46	25°♉31'03	2°08'15	inferior conj	14984 Feb 14 15:57	7°♉59'51	-3°37'54
asc. node	14983 Mar 11 10:52	21°♉04'42		minimum elong	14984 Feb 14 23:58	7°♉44'48	3°34'42
morning rise	14983 Mar 12 05:36	20°♉49'15		morning rise	14984 Feb 22 18:57	3°♉29'04	
direct	14983 Mar 14 07:43	20°♉31'22		direct	14984 Feb 24 18:50	3°♉15'20	
morning max el	14983 Mar 21 11:05	24°♉06'10	17°55'56	asc. node	14984 Feb 26 08:19	3°♉24'06	
	14983 Mar 26 05:36	0°♊		morning max el	14984 Mar 03 21:15	7°♉15'20	18°25'23
morning set	14983 Apr 06 01:11	18°♊30'17			14984 Mar 18 09:06	0°♊	
	14983 Apr 12 09:22	0°♋		morning set	14984 Mar 19 16:58	2°♊31'48	
desc. node	14983 Apr 13 03:45	1°♋21'57					
superior conj	14983 Apr 16 13:33	7°♋21'52	-0°27'18	superior conj	14984 Mar 28 22:02	19°♊55'16	0°09'00
minimum elong	14983 Apr 16 11:08	7°♋11'21	0°27'25	minimum elong	14984 Mar 28 22:40	19°♊58'10	0°08'40
max. Earth dist.	14983 Apr 24 00:45	19°♋59'56	1.42771 AU	behind sun begin	14984 Mar 28 16:34	19°♊30'05	
evening rise	14983 Apr 30 00:35	29°♋39'44		behind sun end	14984 Mar 29 04:47	20°♊26'11	
	14983 Apr 30 05:43	0°♌		desc. node	14984 Mar 30 00:18	21°♊55'13	
	14983 May 20 12:12	0°♍			14984 Apr 03 13:04	0°♋	
				max. Earth dist.	14984 Apr 05 10:19	3°♋15'54	1.40678 AU
				evening rise	14984 Apr 09 18:46	10°♋35'25	

	14984 Apr 22 04:10	0°♂			14985 Apr 16 01:09	0°♂	
evening max el	14984 May 14 03:59	28°♂37'05	23°28'21	evening max el	14985 Apr 26 17:27	12°♂30'33	24°48'16
	14984 May 15 14:38	0°♂		retrograde	14985 May 08 12:02	19°♂22'52	
asc. node	14984 May 24 05:13	4°♂51'52		asc. node	14985 May 11 02:26	18°♂53'57	
retrograde	14984 May 24 20:15	4°♂53'36		evening set	14985 May 14 04:23	16°♂59'11	
evening set	14984 May 30 01:06	2°♂41'13		min. Earth dist.	14985 May 18 15:21	11°♂56'35	0.68362 AU
	14984 Jun 01 14:12	30°♂♂		inferior conj	14985 May 19 17:52	10°♂28'38	2°21'30
inferior conj	14984 Jun 04 10:03	26°♂14'51	2°48'09	minimum elong	14985 May 19 15:45	10°♂35'40	2°20'04
minimum elong	14984 Jun 04 08:21	26°♂20'39	2°46'53	morning rise	14985 May 25 03:21	4°♂31'33	
min. Earth dist.	14984 Jun 03 20:21	27°♂01'58	0.68941 AU	direct	14985 May 28 21:23	3°♂10'51	
morning rise	14984 Jun 09 15:35	20°♂08'47		morning max el	14985 Jun 05 03:57	7°♂11'59	19°35'39
direct	14984 Jun 13 21:30	18°♂27'50		desc. node	14985 Jun 12 22:06	16°♂37'27	
morning max el	14984 Jun 22 02:33	23°♂08'40	20°43'34	greatest brilliancy	14985 Jun 17 20:05	23°♂37'45	-0.6m
desc. node	14984 Jun 26 01:01	27°♂30'30			14985 Jun 22 03:07	0°♂	
	14984 Jun 28 01:05	0°♂		morning set	14985 Jun 30 20:52	13°♂17'18	
	14984 Jul 18 20:03	0°♂			14985 Jul 11 15:12	0°♂	
morning set	14984 Jul 21 18:01	4°♂29'35		max. Earth dist.	14985 Jul 12 15:37	1°♂36'09	1.45031 AU
max. Earth dist.	14984 Jul 30 01:30	17°♂37'30	1.43568 AU				
				superior conj	14985 Jul 17 00:38	8°♂33'06	-2°08'11
superior conj	14984 Aug 05 18:01	28°♂36'00	-1°45'47	minimum elong	14985 Jul 17 05:56	8°♂54'19	2°08'47
minimum elong	14984 Aug 06 01:37	29°♂07'45	1°45'37		14985 Jul 30 02:53	0°♂	
	14984 Aug 06 14:05	0°♂		evening rise	14985 Jul 30 23:23	1°♂25'47	
evening rise	14984 Aug 17 22:13	19°♂35'25		asc. node	14985 Aug 07 02:11	13°♂17'13	
asc. node	14984 Aug 20 05:33	23°♂39'02		evening max el	14985 Aug 18 03:36	28°♂51'32	18°09'07
	14984 Aug 23 21:07	0°♂			14985 Aug 19 09:45	0°♂	
evening max el	14984 Sep 03 12:55	15°♂24'05	18°01'59	retrograde	14985 Aug 24 12:18	2°♂12'26	
retrograde	14984 Sep 10 03:21	18°♂48'45		evening set	14985 Aug 27 07:38	1°♂30'44	
evening set	14984 Sep 12 14:12	18°♂20'11			14985 Aug 29 14:20	30°♂♂	
inferior conj	14984 Sep 19 06:38	13°♂16'18	0°48'05	inferior conj	14985 Sep 02 10:26	26°♂09'37	1°48'47
minimum elong	14984 Sep 19 08:02	13°♂12'51	0°47'41	minimum elong	14985 Sep 02 12:47	26°♂03'06	1°47'53
desc. node	14984 Sep 21 21:50	10°♂40'45		min. Earth dist.	14985 Sep 05 00:38	23°♂17'56	0.63535 AU
min. Earth dist.	14984 Sep 22 07:52	10°♂16'56	0.61317 AU	morning rise	14985 Sep 08 15:59	19°♂54'00	
morning rise	14984 Sep 25 23:03	7°♂17'58		desc. node	14985 Sep 08 19:21	19°♂47'37	
direct	14984 Oct 02 14:48	5°♂02'31		direct	14985 Sep 15 07:12	17°♂22'24	
morning max el	14984 Oct 16 19:48	12°♂58'32	27°58'49	morning max el	14985 Sep 29 04:55	25°♂22'52	27°44'54
	14984 Oct 30 10:11	0°♂			14985 Oct 03 10:49	0°♂	
asc. node	14984 Nov 16 07:17	29°♂13'21			14985 Oct 23 22:19	0°♂	
	14984 Nov 16 16:38	0°♂		morning set	14985 Nov 02 23:32	18°♂47'01	
morning set	14984 Nov 19 04:56	5°♂07'07		asc. node	14985 Nov 03 04:03	19°♂09'43	
max. Earth dist.	14984 Nov 24 21:08	17°♂17'00	1.31391 AU	max. Earth dist.	14985 Nov 07 21:21	28°♂56'05	1.32257 AU
					14985 Nov 08 09:21	0°♂	
superior conj	14984 Nov 26 12:02	20°♂52'01	1°22'38				
minimum elong	14984 Nov 26 10:02	20°♂40'53	1°23'22	superior conj	14985 Nov 10 19:17	5°♂12'14	1°06'12
	14984 Nov 30 14:44	0°♂		minimum elong	14985 Nov 10 16:57	4°♂59'37	1°06'42
evening rise	14984 Dec 03 04:54	5°♂40'14		evening rise	14985 Nov 17 15:51	20°♂09'41	
	14984 Dec 15 18:56	0°♂			14985 Nov 22 09:02	0°♂	
desc. node	14984 Dec 18 19:24	4°♂47'08		desc. node	14985 Dec 05 16:25	22°♂12'11	
evening max el	14984 Dec 29 14:47	18°♂11'11	25°06'47	evening max el	14985 Dec 11 00:40	28°♂14'59	23°26'26
retrograde	14985 Jan 12 10:18	25°♂06'48			14985 Dec 12 23:20	0°♂	
evening set	14985 Jan 18 01:48	23°♂55'10		retrograde	14985 Dec 24 09:21	4°♂52'46	
min. Earth dist.	14985 Jan 23 02:54	21°♂12'00	0.56533 AU	evening set	14985 Dec 28 20:24	4°♂09'36	
inferior conj	14985 Jan 25 18:17	19°♂29'02	-4°59'24	min. Earth dist.	14986 Jan 04 11:17	1°♂01'23	0.55093 AU
minimum elong	14985 Jan 26 03:18	19°♂14'22	4°56'32	inferior conj	14986 Jan 06 00:23	0°♂07'19	-5°52'36
morning rise	14985 Feb 03 07:18	15°♂20'04		minimum elong	14986 Jan 06 04:45	0°♂00'56	5°51'19
direct	14985 Feb 05 11:06	15°♂06'46			14986 Jan 06 05:24	30°♂♂	
asc. node	14985 Feb 12 05:43	17°♂27'57		morning rise	14986 Jan 14 14:41	26°♂15'01	
morning max el	14985 Feb 14 21:42	19°♂42'01	19°16'30	direct	14986 Jan 17 08:02	25°♂57'05	
	14985 Feb 22 15:43	0°♂			14986 Jan 26 23:15	0°♂	
morning set	14985 Mar 03 18:01	16°♂56'37		morning max el	14986 Jan 28 08:35	1°♂15'16	20°30'49
	14985 Mar 10 07:40	0°♂		asc. node	14986 Jan 30 03:05	3°♂05'26	
					14986 Feb 15 06:35	0°♂	
superior conj	14985 Mar 11 23:40	3°♂14'51	0°39'48	morning set	14986 Feb 16 01:04	1°♂34'47	
minimum elong	14985 Mar 12 01:54	3°♂25'38	0°39'29				
desc. node	14985 Mar 16 20:51	12°♂28'51		superior conj	14986 Feb 23 14:03	17°♂07'54	1°04'07
max. Earth dist.	14985 Mar 18 16:39	15°♂48'53	1.38404 AU	minimum elong	14986 Feb 23 16:41	17°♂21'14	1°04'03
evening rise	14985 Mar 22 10:04	22°♂25'17		max. Earth dist.	14986 Feb 28 23:58	27°♂49'57	1.36193 AU
	14985 Mar 26 21:18	0°♂			14986 Mar 02 03:15	0°♂	

desc. node	14986 Mar 03 17:24	2°Υ58'53		evening rise	14987 Feb 15 21:16	18°✠15'28	
evening rise	14986 Mar 04 20:05	5°Υ01'52		desc. node	14987 Feb 18 13:58	23°✠21'12	
	14986 Mar 19 18:48	0°♁			14987 Feb 22 06:15	0°Υ	
evening max el	14986 Apr 09 06:59	26°♁22'23	26°00'04		14987 Mar 13 23:33	0°♁	
	14986 Apr 13 10:07	0°♁		evening max el	14987 Mar 22 20:52	10°♁05'04	26°56'10
retrograde	14986 Apr 21 23:14	3°♁38'49		retrograde	14987 Apr 05 04:38	17°♁32'59	
asc. node	14986 Apr 27 23:43	1°♁13'38		evening set	14987 Apr 11 16:55	15°♁01'04	
evening set	14986 Apr 28 02:19	1°♁08'16		asc. node	14987 Apr 14 21:06	12°♁00'20	
	14986 Apr 29 08:15	30°♁♁		min. Earth dist.	14987 Apr 15 16:01	11°♁07'53	0.65878 AU
min. Earth dist.	14986 May 02 06:38	26°♁41'16	0.67328 AU	inferior conj	14987 Apr 17 19:48	8°♁38'02	0°54'27
inferior conj	14986 May 03 21:53	24°♁38'20	1°43'54	minimum elong	14987 Apr 17 18:26	8°♁42'00	0°53'25
minimum elong	14986 May 03 19:49	24°♁44'51	1°42'29	morning rise	14987 Apr 23 21:21	3°♁03'11	
morning rise	14986 May 09 14:02	18°♁51'30		direct	14987 Apr 26 18:30	2°♁17'50	
direct	14986 May 12 21:05	17°♁49'40		morning max el	14987 May 03 02:40	5°♁36'51	18°07'26
morning max el	14986 May 19 12:31	21°♁23'29	18°43'12	desc. node	14987 May 17 15:55	26°♁14'24	
	14986 May 26 12:32	0°♁			14987 May 19 23:54	0°♁	
desc. node	14986 May 30 19:04	6°♁15'01		morning set	14987 May 21 23:30	3°♁12'10	
morning set	14986 Jun 10 09:38	22°♁37'44					
	14986 Jun 15 03:04	0°♁		superior conj	14987 Jun 05 22:47	27°♁02'55	-1°58'24
max. Earth dist.	14986 Jun 25 09:52	16°♁01'53	1.45818 AU	minimum elong	14987 Jun 05 14:43	26°♁31'18	1°58'49
					14987 Jun 07 20:01	0°♁	
superior conj	14986 Jun 26 13:25	17°♁49'30	-2°13'21	max. Earth dist.	14987 Jun 08 06:11	0°♁39'41	1.45866 AU
minimum elong	14986 Jun 26 11:33	17°♁42'11	2°14'17	evening rise	14987 Jun 22 01:28	22°♁05'18	
	14986 Jul 04 07:31	0°♁			14987 Jun 27 04:30	0°♁	
evening rise	14986 Jul 12 00:14	12°♁14'05		greatest brilliancy	14987 Jul 04 02:40	10°♁32'21	-0.7m
greatest brilliancy	14986 Jul 18 08:27	22°♁21'56	-0.9m	asc. node	14987 Jul 11 19:40	21°♁26'23	
	14986 Jul 23 05:34	0°♁		evening max el	14987 Jul 16 02:08	26°♁22'34	19°15'50
asc. node	14986 Jul 24 22:53	2°♁35'38			14987 Jul 21 10:07	0°♁	
evening max el	14986 Aug 01 16:53	12°♁33'34	18°34'03	retrograde	14987 Jul 23 01:48	0°♁14'58	
retrograde	14986 Aug 08 04:53	16°♁03'48			14987 Jul 24 16:30	30°♁♁	
evening set	14986 Aug 11 09:14	15°♁06'31		evening set	14987 Jul 26 15:43	29°♁00'36	
inferior conj	14986 Aug 17 01:59	9°♁30'12	2°30'32	inferior conj	14987 Aug 01 01:50	23°♁10'29	2°56'17
minimum elong	14986 Aug 17 04:12	9°♁23'27	2°29'36	minimum elong	14987 Aug 01 03:20	23°♁05'35	2°55'24
min. Earth dist.	14986 Aug 19 02:34	7°♁02'47	0.65497 AU	min. Earth dist.	14987 Aug 02 12:05	21°♁19'00	0.67082 AU
morning rise	14986 Aug 22 22:00	3°♁06'20		morning rise	14987 Aug 06 14:20	16°♁44'52	
desc. node	14986 Aug 26 16:51	0°♁53'25		direct	14987 Aug 12 15:13	14°♁08'37	
direct	14986 Aug 29 07:53	0°♁27'48		desc. node	14987 Aug 13 14:19	14°♁12'09	
morning max el	14986 Sep 11 16:01	8°♁19'27	26°58'33	morning max el	14987 Aug 25 03:06	21°♁36'14	25°48'20
	14986 Sep 28 14:00	0°♁			14987 Sep 01 10:41	0°♁	
	14986 Oct 16 07:21	0°♁			14987 Sep 21 19:23	0°♁	
morning set	14986 Oct 17 07:49	1°♁56'50		morning set	14987 Sep 30 02:14	14°♁27'53	
asc. node	14986 Oct 21 00:47	9°♁14'23		max. Earth dist.	14987 Oct 03 18:03	21°♁18'14	1.35591 AU
max. Earth dist.	14986 Oct 21 12:32	10°♁13'38	1.33677 AU	asc. node	14987 Oct 07 21:26	29°♁22'53	
					14987 Oct 08 04:53	0°♁	
superior conj	14986 Oct 25 21:11	19°♁14'31	0°43'53				
minimum elong	14986 Oct 25 19:09	19°♁03'49	0°44'11	superior conj	14987 Oct 09 15:02	2°♁51'39	0°15'56
	14986 Oct 30 22:21	0°♁		minimum elong	14987 Oct 09 14:06	2°♁46'56	0°16'12
evening rise	14986 Nov 02 02:09	4°♁35'50		evening rise	14987 Oct 17 09:45	18°♁53'16	
	14986 Nov 15 19:25	0°♁			14987 Oct 22 23:06	0°♁	
evening max el	14986 Nov 22 13:11	8°♁16'31	21°45'21	evening max el	14987 Nov 04 13:03	18°♁50'21	20°18'30
desc. node	14986 Nov 22 13:33	8°♁17'23		desc. node	14987 Nov 09 10:45	22°♁37'44	
retrograde	14986 Dec 04 21:27	14°♁22'58		retrograde	14987 Nov 15 08:37	24°♁13'19	
evening set	14986 Dec 08 00:31	14°♁00'58		evening set	14987 Nov 17 13:15	24°♁01'04	
inferior conj	14986 Dec 16 17:13	10°♁09'15	-5°52'47	inferior conj	14987 Nov 26 10:12	20°♁05'07	-4°53'17
minimum elong	14986 Dec 16 12:27	10°♁15'54	5°51'22	minimum elong	14987 Nov 26 00:13	20°♁19'49	4°49'46
min. Earth dist.	14986 Dec 16 17:05	10°♁09'25	0.54456 AU	min. Earth dist.	14987 Nov 27 23:22	19°♁10'21	0.54751 AU
morning rise	14986 Dec 25 01:06	6°♁21'21		morning rise	14987 Dec 04 10:36	16°♁03'04	
direct	14986 Dec 28 17:09	5°♁51'53		direct	14987 Dec 09 02:53	15°♁15'50	
morning max el	14987 Jan 10 04:44	11°♁53'17	22°06'43	morning max el	14987 Dec 22 15:02	21°♁53'52	23°55'34
asc. node	14987 Jan 17 00:24	19°♁59'17			14987 Dec 29 15:26	0°♁	
	14987 Jan 23 05:34	0°♁		asc. node	14988 Jan 03 21:38	7°♁52'19	
morning set	14987 Jan 31 11:34	16°♁18'58			14988 Jan 15 11:35	0°♁	
	14987 Feb 06 21:40	0°♁		morning set	14988 Jan 15 23:29	1°♁03'37	
superior conj	14987 Feb 07 13:34	1°♁24'07	1°21'44	superior conj	14988 Jan 22 19:18	15°♁55'30	1°32'50
minimum elong	14987 Feb 07 15:47	1°♁35'51	1°22'03	minimum elong	14988 Jan 22 20:41	16°♁02'57	1°33'30
max. Earth dist.	14987 Feb 11 13:13	9°♁40'19	1.34258 AU	max. Earth dist.	14988 Jan 25 10:20	21°♁35'16	1.32730 AU

	14988 Jan 29 11:01	0° H			14988 Dec 22 16:46	0° Z	
evening rise	14988 Jan 30 10:13	1° H 57'22		morning set	14988 Dec 30 10:59	15° Z 42'39	
desc. node	14988 Feb 05 10:34	13° H 31'17			14989 Jan 05 22:39	0° \approx	
	14988 Feb 15 03:53	0° Y					
evening max el	14988 Mar 04 09:54	23° Y 27'24 27°29'11		superior conj	14989 Jan 06 04:50	0° \approx 34'20 1°37'42	
	14988 Mar 13 15:24	0° B		minimum elong	14989 Jan 06 05:10	0° \approx 36'07 1°38'36	
retrograde	14988 Mar 18 03:18	0° B 56'47		max. Earth dist.	14989 Jan 07 13:58	3° \approx 37'36 1.31677 AU	
	14988 Mar 22 08:59	30° K Y		evening rise	14989 Jan 13 07:54	15° \approx 59'15	
evening set	14988 Mar 24 21:59	28° Y 29'54			14989 Jan 20 10:42	0° H	
min. Earth dist.	14988 Mar 28 17:23	25° Y 07'29 0.64065 AU		desc. node	14989 Jan 22 07:12	3° H 22'46	
inferior conj	14988 Mar 31 08:56	22° Y 21'08 -0°07'37			14989 Feb 09 00:54	0° Y	
minimum elong	14988 Mar 31 09:10	22° Y 20'31 0°07'48		evening max el	14989 Feb 14 19:51	6° Y 15'23 27°32'36	
transit middle	14988 Mar 31 09:10	22° Y 20'31 0°07'48		retrograde	14989 Feb 28 18:17	13° Y 39'46	
transit begin	14988 Mar 31 06:27	22° Y 27'40		evening set	14989 Mar 07 14:52	11° Y 25'10	
transit end	14988 Mar 31 11:53	22° Y 13'22		min. Earth dist.	14989 Mar 11 09:06	8° Y 28'02 0.61973 AU	
asc. node	14988 Mar 31 18:29	21° Y 56'06		inferior conj	14989 Mar 14 10:03	5° Y 38'30 -1°22'20	
morning rise	14988 Apr 06 22:34	17° Y 00'46		minimum elong	14989 Mar 14 12:55	5° Y 31'48 1°21'09	
direct	14988 Apr 09 11:01	16° Y 28'48		asc. node	14989 Mar 18 15:56	2° Y 05'09	
morning max el	14988 Apr 15 19:57	19° Y 44'55 17°48'54		morning rise	14989 Mar 21 13:58	0° Y 35'31	
	14988 Apr 23 13:58	0° B		direct	14989 Mar 23 19:13	0° Y 13'33	
morning set	14988 May 02 16:51	15° B 05'51		morning max el	14989 Mar 30 13:19	3° Y 38'09 17°48'04	
desc. node	14988 May 03 12:40	16° B 29'31		morning set	14989 Apr 15 08:47	28° Y 02'28	
	14988 May 11 14:59	0° II			14989 Apr 16 11:17	0° B	
				desc. node	14989 Apr 20 09:19	6° B 54'40	
superior conj	14988 May 15 21:31	6° II 57'13 -1°27'43					
minimum elong	14988 May 15 13:17	6° II 24'00 1°27'38		superior conj	14989 Apr 26 18:51	17° B 54'53 -0°49'39	
max. Earth dist.	14988 May 21 01:58	15° II 13'45 1.45172 AU		minimum elong	14989 Apr 26 14:10	17° B 35'08 0°49'36	
	14988 May 30 13:53	0° E		max. Earth dist.	14989 May 03 18:24	29° B 26'21 1.43803 AU	
evening rise	14988 May 31 13:15	1° E 29'29			14989 May 04 02:45	0° II	
	14988 Jun 19 20:51	0° Ω		evening rise	14989 May 11 03:37	11° II 07'37	
asc. node	14988 Jun 27 16:30	9° Ω 40'12			14989 May 23 16:29	0° E	
evening max el	14988 Jun 28 05:43	10° Ω 13'54 20°12'59		evening max el	14989 Jun 11 03:19	24° E 05'30 21°23'00	
retrograde	14988 Jul 06 00:38	14° Ω 40'13		asc. node	14989 Jun 14 13:26	27° E 04'59	
evening set	14988 Jul 10 00:41	13° Ω 08'19		retrograde	14989 Jun 19 23:25	29° E 14'07	
inferior conj	14988 Jul 15 07:14	7° Ω 05'38 3°08'30		evening set	14989 Jun 24 10:12	27° E 25'18	
minimum elong	14988 Jul 15 07:47	7° Ω 03'46 3°07'37		inferior conj	14989 Jun 29 15:53	21° E 11'37 3°09'00	
min. Earth dist.	14988 Jul 16 03:26	5° Ω 56'46 0.68221 AU		minimum elong	14989 Jun 29 15:27	21° E 13'06 3°08'01	
morning rise	14988 Jul 20 14:33	0° Ω 42'29		min. Earth dist.	14989 Jun 29 22:36	20° E 48'09 0.68878 AU	
	14988 Jul 21 11:11	30° K E		morning rise	14989 Jul 04 20:29	14° E 53'37	
direct	14988 Jul 26 04:11	28° E 16'05		direct	14989 Jul 09 21:51	12° E 42'30	
desc. node	14988 Jul 30 11:44	29° E 27'33		desc. node	14989 Jul 17 09:03	16° E 14'26	
	14988 Jul 31 10:44	0° Ω		morning max el	14989 Jul 20 01:15	18° E 43'15 22°54'19	
morning max el	14988 Aug 06 13:46	5° Ω 05'23 24°23'44			14989 Jul 29 12:35	0° Ω	
	14988 Aug 25 19:23	0° H			14989 Aug 18 22:07	0° H	
morning set	14988 Sep 11 02:37	26° H 10'31		morning set	14989 Aug 23 04:48	6° H 55'48	
	14988 Sep 13 06:57	0° E		max. Earth dist.	14989 Aug 27 16:31	14° H 27'17 1.40242 AU	
max. Earth dist.	14988 Sep 14 17:25	2° E 33'56 1.37858 AU					
				superior conj	14989 Sep 04 12:32	28° H 16'47 -0°52'34	
superior conj	14988 Sep 21 21:28	15° E 55'16 -0°16'50		minimum elong	14989 Sep 04 16:33	28° H 35'08 0°52'02	
minimum elong	14988 Sep 21 22:36	16° E 00'42 0°16'28			14989 Sep 05 11:06	0° E	
asc. node	14988 Sep 23 18:01	19° E 31'21		asc. node	14989 Sep 10 14:35	9° E 36'40	
	14988 Sep 29 01:00	0° M		evening rise	14989 Sep 14 06:35	16° E 35'30	
evening rise	14988 Sep 30 12:13	2° M 55'33			14989 Sep 21 12:33	0° M	
	14988 Oct 16 22:25	0° J		evening max el	14989 Sep 30 05:34	12° M 21'41 18°29'11	
evening max el	14988 Oct 17 03:13	0° J 12'09 19°12'48		retrograde	14989 Oct 08 01:56	16° M 20'14	
retrograde	14988 Oct 26 07:56	4° J 49'16		evening set	14989 Oct 10 01:21	16° M 05'53	
desc. node	14988 Oct 26 08:04	4° J 49'16		desc. node	14989 Oct 13 05:28	14° M 48'39	
evening set	14988 Oct 28 04:54	4° J 38'34		inferior conj	14989 Oct 17 21:00	11° M 34'14 -1°29'15	
inferior conj	14988 Nov 05 17:03	0° J 27'11 -3°15'07		minimum elong	14989 Oct 17 17:29	11° M 41'07 1°27'16	
minimum elong	14988 Nov 05 08:57	0° J 40'46 3°11'21		min. Earth dist.	14989 Oct 21 02:19	9° M 03'39 0.57775 AU	
	14988 Nov 06 09:12	30° K M		morning rise	14989 Oct 25 06:07	6° M 22'47	
min. Earth dist.	14988 Nov 08 09:28	28° M 39'33 0.55926 AU		direct	14989 Oct 31 10:21	4° M 45'37	
morning rise	14988 Nov 13 10:33	25° M 53'19		morning max el	14989 Nov 14 17:14	12° M 18'13 27°02'46	
direct	14988 Nov 18 23:15	24° M 43'06			14989 Nov 28 14:20	0° J	
	14988 Nov 30 23:15	0° J		asc. node	14989 Dec 07 15:48	15° J 38'22	
morning max el	14988 Dec 03 00:56	1° J 51'20 25°40'34		morning set	14989 Dec 14 20:18	0° Z 11'29	
asc. node	14988 Dec 20 18:46	26° J 29'08			14989 Dec 14 18:09	0° Z	

superior conj	14989 Dec 21 16:11	15° ♄ 15'01	1°36'31			14990 Nov 21 19:58	0° ♄	
minimum elong	14989 Dec 21 15:27	15° ♄ 10'56	1°37'29	asc. node		14990 Nov 24 12:43	5° ♄ 10'47	
max. Earth dist.	14989 Dec 21 21:18	15° ♄ 43'38	1.31139 AU	morning set		14990 Nov 29 01:36	14° ♄ 24'57	
evening rise	14989 Dec 28 11:55	0° \approx 15'25		max. Earth dist.		14990 Dec 05 04:48	27° ♄ 45'25	1.31139 AU
	14989 Dec 28 09:01	0° \approx						
desc. node	14990 Jan 09 03:56	22° \approx 48'27		superior conj		14990 Dec 06 03:27	29° ♄ 51'42	1°29'25
	14990 Jan 13 13:26	0° ♄		minimum elong		14990 Dec 06 01:49	29° ♄ 42'38	1°30'16
evening max el	14990 Jan 28 00:18	18° ♄ 17'58	27°01'58			14990 Dec 06 04:56	0° ♄	
retrograde	14990 Feb 11 00:28	25° ♄ 33'12		evening rise		14990 Dec 12 20:07	14° ♄ 40'22	
evening set	14990 Feb 17 16:25	23° ♄ 38'44				14990 Dec 20 09:01	0° \approx	
min. Earth dist.	14990 Feb 21 14:35	20° ♄ 57'42	0.59749 AU	desc. node		14990 Dec 27 00:48	11° \approx 38'22	
inferior conj	14990 Feb 24 19:35	18° ♄ 21'10	-2°47'12	evening max el		14991 Jan 09 21:07	29° \approx 28'36	25°57'12
minimum elong	14990 Feb 25 01:49	18° ♄ 08'28	2°44'33			14991 Jan 10 10:35	0° ♄	
morning rise	14990 Mar 04 14:38	13° ♄ 38'12		retrograde		14991 Jan 23 19:49	6° ♄ 31'45	
asc. node	14990 Mar 05 13:23	13° ♄ 27'05		evening set		14991 Jan 29 22:48	5° ♄ 03'52	
direct	14990 Mar 06 15:07	13° ♄ 22'39		min. Earth dist.		14991 Feb 03 10:15	2° ♄ 26'00	0.57608 AU
morning max el	14990 Mar 14 03:16	17° ♄ 06'49	18°05'56	inferior conj		14991 Feb 06 10:02	0° ♄ 19'32	-4°14'23
	14990 Mar 23 06:12	0° ♄		minimum elong		14991 Feb 06 18:57	0° ♄ 03'46	4°11'05
morning set	14990 Mar 29 17:21	11° ♄ 44'29				14991 Feb 06 21:06	30° ♄	
desc. node	14990 Apr 07 05:53	27° ♄ 25'55		morning rise		14991 Feb 14 18:06	25° \approx 58'00	
				direct		14991 Feb 16 18:29	25° \approx 45'04	
superior conj	14990 Apr 08 15:27	29° ♄ 56'06	-0°11'23	asc. node		14991 Feb 20 10:49	26° \approx 30'44	
minimum elong	14990 Apr 08 14:30	29° ♄ 51'51	0°11'36			14991 Feb 25 10:05	0° ♄	
behind sun begin	14990 Apr 08 09:09	29° ♄ 27'58		morning max el		14991 Feb 25 09:52	29° \approx 59'28	18°44'21
behind sun end	14990 Apr 08 19:52	0° ♄ 15'41		morning set		14991 Mar 13 13:37	25° ♄ 57'31	
	14990 Apr 08 16:20	0° ♄				14991 Mar 15 15:23	0° ♄	
max. Earth dist.	14990 Apr 16 05:54	13° ♄ 03'14	1.41917 AU					
evening rise	14990 Apr 21 09:52	21° ♄ 31'20		superior conj		14991 Mar 22 07:50	12° ♄ 50'49	0°22'49
	14990 Apr 26 18:59	0° ♄		minimum elong		14991 Mar 22 09:19	12° ♄ 57'45	0°22'26
	14990 May 17 21:10	0° ♄		desc. node		14991 Mar 25 02:27	17° ♄ 59'53	
evening max el	14990 May 24 20:09	7° ♄ 57'27	22°41'37	max. Earth dist.		14991 Mar 29 13:31	25° ♄ 59'46	1.39718 AU
asc. node	14990 Jun 01 10:29	13° ♄ 24'47				14991 Mar 31 20:57	0° ♄	
retrograde	14990 Jun 03 20:30	13° ♄ 50'37		evening rise		14991 Apr 02 13:18	2° ♄ 51'29	
evening set	14990 Jun 08 18:34	11° ♄ 46'21				14991 Apr 20 00:22	0° ♄	
inferior conj	14990 Jun 14 01:43	5° ♄ 23'47	2°58'46	evening max el		14991 May 07 10:28	21° ♄ 51'43	24°02'57
minimum elong	14990 Jun 14 00:25	5° ♄ 28'16	2°57'36	retrograde		14991 May 18 14:30	28° ♄ 24'32	
min. Earth dist.	14990 Jun 13 19:27	5° ♄ 45'34	0.69053 AU	asc. node		14991 May 19 07:39	28° ♄ 22'18	
	14990 Jun 18 09:26	30° ♄		evening set		14991 May 24 00:11	26° ♄ 07'12	
morning rise	14990 Jun 19 06:09	29° ♄ 12'46		min. Earth dist.		14991 May 28 15:48	20° ♄ 43'22	0.68753 AU
direct	14990 Jun 23 19:03	27° ♄ 20'15		inferior conj		14991 May 29 10:51	19° ♄ 38'38	2°38'10
	14990 Jun 29 21:42	0° ♄		minimum elong		14991 May 29 08:56	19° ♄ 45'08	2°36'49
morning max el	14990 Jul 02 16:04	2° ♄ 29'13	21°28'30	morning rise		14991 Jun 03 17:44	13° ♄ 35'59	
desc. node	14990 Jul 04 06:16	4° ♄ 09'05		direct		14991 Jun 07 18:33	12° ♄ 03'32	
	14990 Jul 23 10:00	0° ♄		morning max el		14991 Jun 15 13:06	16° ♄ 26'04	20°12'49
morning set	14990 Aug 03 06:36	16° ♄ 38'10		desc. node		14991 Jun 21 03:23	22° ♄ 53'46	
max. Earth dist.	14990 Aug 09 20:17	27° ♄ 12'02	1.42467 AU			14991 Jun 26 09:17	0° ♄	
	14990 Aug 11 13:03	0° ♄		morning set		14991 Jul 13 13:24	25° ♄ 33'26	
						14991 Jul 16 10:20	0° ♄	
superior conj	14990 Aug 17 07:47	9° ♄ 45'59	-1°27'49	max. Earth dist.		14991 Jul 23 07:08	10° ♄ 48'21	1.44273 AU
minimum elong	14990 Aug 17 14:37	10° ♄ 15'28	1°27'23					
asc. node	14990 Aug 28 11:09	29° ♄ 34'43		superior conj		14991 Jul 29 03:52	20° ♄ 16'38	-1°56'58
evening rise	14990 Aug 28 12:50	29° ♄ 42'22		minimum elong		14991 Jul 29 11:09	20° ♄ 46'29	1°57'08
	14990 Aug 28 16:44	0° ♄				14991 Aug 04 00:24	0° ♄	
evening max el	14990 Sep 13 15:54	25° ♄ 09'22	18°06'21	evening rise		14991 Aug 11 02:09	12° ♄ 04'18	
retrograde	14990 Sep 20 14:06	28° ♄ 42'06		asc. node		14991 Aug 15 07:47	19° ♄ 21'36	
evening set	14990 Sep 22 20:22	28° ♄ 19'45				14991 Aug 21 18:56	0° ♄	
inferior conj	14990 Sep 29 22:11	23° ♄ 27'19	0°03'42	evening max el		14991 Aug 28 06:07	8° ♄ 25'17	18°02'49
minimum elong	14990 Sep 29 22:19	23° ♄ 27'01	0°03'56	retrograde		14991 Sep 03 16:44	11° ♄ 46'18	
transit middle	14990 Sep 29 22:19	23° ♄ 27'01	0°03'56	evening set		14991 Sep 06 07:16	11° ♄ 12'20	
transit begin	14990 Sep 29 19:04	23° ♄ 34'24		inferior conj		14991 Sep 12 17:27	6° ♄ 00'54	1°16'17
transit end	14990 Sep 30 01:34	23° ♄ 19'37		minimum elong		14991 Sep 12 19:26	5° ♄ 55'47	1°15'37
desc. node	14990 Sep 30 02:55	23° ♄ 16'32		min. Earth dist.		14991 Sep 15 14:31	3° ♄ 02'37	0.62293 AU
min. Earth dist.	14990 Oct 03 03:38	20° ♄ 32'15	0.60000 AU	desc. node		14991 Sep 17 00:24	1° ♄ 41'55	
morning rise	14990 Oct 06 21:00	17° ♄ 43'36		morning rise		14991 Sep 19 05:12	29° ♄ 54'19	
direct	14990 Oct 13 10:38	15° ♄ 40'21				14991 Sep 19 02:02	30° ♄	
morning max el	14990 Oct 27 17:18	23° ♄ 30'00	27°49'35	direct		14991 Sep 25 21:35	27° ♄ 30'52	
	14990 Nov 02 13:44	0° ♄				14991 Oct 03 07:42	0° ♄	

morning max el	14991 Oct 09 23:46	5° Ω 29'23	27°57'12	morning max el	14992 Sep 21 10:05	18° Υ 08'58	27°28'44
	14991 Oct 28 12:04	0° \mathbb{M}			14992 Oct 01 09:37	0° Ω	
asc. node	14991 Nov 11 09:34	24° \mathbb{M} 59'58			14992 Oct 20 09:57	0° \mathbb{M}	
morning set	14991 Nov 13 00:48	28° \mathbb{M} 18'27		morning set	14992 Oct 26 15:24	11° \mathbb{M} 46'31	
	14991 Nov 13 20:32	0° \mathbb{A}		asc. node	14992 Oct 28 06:21	15° \mathbb{M} 00'32	
max. Earth dist.	14991 Nov 18 08:50	9° \mathbb{A} 35'18	1.31694 AU	max. Earth dist.	14992 Oct 31 05:46	21° \mathbb{M} 06'34	1.32799 AU
superior conj	14991 Nov 20 12:45	14° \mathbb{A} 19'26	1°16'24	superior conj	14992 Nov 03 18:02	28° \mathbb{M} 32'54	0°57'27
minimum elong	14991 Nov 20 10:33	14° \mathbb{A} 07'19	1°17'01	minimum elong	14992 Nov 03 15:45	28° \mathbb{M} 20'37	0°57'51
evening rise	14991 Nov 27 06:37	29° \mathbb{A} 09'40			14992 Nov 04 10:13	0° \mathbb{A}	
	14991 Nov 27 15:58	0° \mathbb{Z}		evening rise	14992 Nov 10 17:34	13° \mathbb{A} 38'46	
desc. node	14991 Dec 13 21:46	29° \mathbb{Z} 39'05			14992 Nov 18 20:49	0° \mathbb{Z}	
	14991 Dec 14 03:38	0° \approx		desc. node	14992 Nov 29 18:50	16° \mathbb{Z} 33'11	
evening max el	14991 Dec 22 09:57	9° \approx 50'57	24°25'26	evening max el	14992 Dec 02 19:40	19° \mathbb{Z} 48'48	22°42'25
retrograde	14992 Jan 05 01:55	16° \approx 39'16		retrograde	14992 Dec 15 19:24	26° \mathbb{Z} 15'06	
evening set	14992 Jan 10 06:23	15° \approx 40'20		evening set	14992 Dec 19 16:53	25° \mathbb{Z} 41'59	
min. Earth dist.	14992 Jan 15 21:40	12° \approx 48'58	0.55835 AU	min. Earth dist.	14992 Dec 27 04:11	22° \mathbb{Z} 17'39	0.54713 AU
inferior conj	14992 Jan 18 03:23	11° \approx 26'13	-5°27'04	inferior conj	14992 Dec 28 02:32	21° \mathbb{Z} 46'01	-6°00'11
minimum elong	14992 Jan 18 11:15	11° \approx 14'04	5°24'50	minimum elong	14992 Dec 28 03:10	21° \mathbb{Z} 45'07	5°59'14
morning rise	14992 Jan 26 18:05	7° \approx 25'02		morning rise	14993 Jan 05 14:46	17° \mathbb{Z} 57'59	
direct	14992 Jan 29 02:32	7° \approx 10'21		direct	14993 Jan 08 17:08	17° \mathbb{Z} 35'59	
asc. node	14992 Feb 07 08:14	11° \approx 15'40		morning max el	14993 Jan 20 09:13	23° \mathbb{Z} 12'18	21°09'22
morning max el	14992 Feb 08 04:48	12° \approx 03'29	19°45'19	asc. node	14993 Jan 24 05:35	27° \mathbb{Z} 27'47	
	14992 Feb 20 09:23	0° \mathbb{H}			14993 Jan 26 03:35	0° \approx	
morning set	14992 Feb 25 17:36	10° \mathbb{H} 29'06		morning set	14993 Feb 09 02:24	25° \approx 10'48	
					14993 Feb 11 09:38	0° \mathbb{H}	
superior conj	14992 Mar 04 15:22	26° \mathbb{H} 25'40	0°50'56	superior conj	14993 Feb 16 10:03	10° \mathbb{H} 29'42	1°12'24
minimum elong	14992 Mar 04 17:54	26° \mathbb{H} 38'07	0°50'42	minimum elong	14993 Feb 16 12:35	10° \mathbb{H} 42'47	1°12'29
	14992 Mar 06 11:06	0° \mathbb{Y}		max. Earth dist.	14993 Feb 21 05:44	20° \mathbb{H} 13'49	1.35325 AU
desc. node	14992 Mar 10 23:00	8° \mathbb{Y} 32'13		evening rise	14993 Feb 25 05:52	27° \mathbb{H} 55'27	
max. Earth dist.	14992 Mar 10 20:07	8° \mathbb{Y} 18'48	1.37443 AU	desc. node	14993 Feb 25 19:35	28° \mathbb{H} 59'23	
evening rise	14992 Mar 14 13:00	15° \mathbb{Y} 02'22			14993 Feb 26 08:40	0° \mathbb{Y}	
	14992 Mar 23 09:29	0° \mathbb{B}			14993 Mar 16 16:44	0° \mathbb{B}	
evening max el	14992 Apr 13 16:46	0° \mathbb{I}		evening max el	14993 Apr 01 13:41	19° \mathbb{B} 34'18	26°26'11
retrograde	14992 Apr 19 00:03	5° \mathbb{I} 45'50	25°20'15	retrograde	14993 Apr 14 13:00	26° \mathbb{B} 56'47	
asc. node	14992 May 01 04:16	12° \mathbb{I} 49'03		evening set	14993 Apr 20 20:26	24° \mathbb{B} 24'40	
evening set	14992 May 05 04:54	11° \mathbb{I} 41'22		asc. node	14993 Apr 22 02:13	23° \mathbb{B} 18'25	
min. Earth dist.	14992 May 07 01:24	10° \mathbb{I} 21'57		min. Earth dist.	14993 Apr 24 22:17	20° \mathbb{B} 12'39	0.66767 AU
inferior conj	14992 May 11 09:26	5° \mathbb{I} 34'43	0.67984 AU	inferior conj	14993 Apr 26 19:01	17° \mathbb{B} 57'00	1°24'25
minimum elong	14992 May 12 17:20	3° \mathbb{I} 51'18	2°06'56	minimum elong	14993 Apr 26 17:09	18° \mathbb{B} 02'41	1°23'08
	14992 May 12 15:09	3° \mathbb{I} 58'21	2°05'30	morning rise	14993 Apr 26 17:09	18° \mathbb{B} 02'41	1°23'08
	14992 May 15 21:50	30° \mathbb{R} \mathbb{B}		direct	14993 May 02 14:51	12° \mathbb{B} 15'17	
morning rise	14992 May 18 05:19	27° \mathbb{B} 58'23		morning max el	14993 May 05 17:36	11° \mathbb{B} 20'49	
direct	14992 May 21 18:40	26° \mathbb{B} 45'45			14993 May 12 04:53	14° \mathbb{B} 46'29	18°25'56
	14992 May 28 03:37	0° \mathbb{I}			14993 May 23 13:42	0° \mathbb{I}	
morning max el	14992 May 28 17:38	0° \mathbb{I} 33'15	19°11'19	desc. node	14993 May 24 21:20	2° \mathbb{I} 02'09	
desc. node	14992 Jun 07 00:25	12° \mathbb{I} 14'42		morning set	14993 Jun 01 16:20	14° \mathbb{I} 17'26	
greatest brilliancy	14992 Jun 10 14:11	17° \mathbb{I} 28'46	-0.7m		14993 Jun 11 16:00	0° \mathbb{E}	
	14992 Jun 18 20:12	0° \mathbb{E}		superior conj	14993 Jun 17 10:45	9° \mathbb{E} 01'44	-2°09'22
morning set	14992 Jun 21 17:59	4° \mathbb{E} 28'20		minimum elong	14993 Jun 17 05:40	8° \mathbb{E} 41'56	2°10'09
max. Earth dist.	14992 Jul 04 23:51	25° \mathbb{E} 02'21	1.45464 AU	max. Earth dist.	14993 Jun 17 19:32	9° \mathbb{E} 36'01	1.45934 AU
superior conj	14992 Jul 08 01:38	29° \mathbb{E} 52'42	-2°12'48		14993 Jun 30 20:44	0° \mathbb{Q}	
minimum elong	14992 Jul 08 04:17	0° \mathbb{Q} 03'12	2°13'39	evening rise	14993 Jul 03 07:34	3° \mathbb{Q} 51'05	
	14992 Jul 08 03:28	0° \mathbb{Q}		greatest brilliancy	14993 Jul 12 10:46	18° \mathbb{Q} 09'19	-0.8m
evening rise	14992 Jul 22 17:18	23° \mathbb{Q} 28'50		asc. node	14993 Jul 19 01:09	27° \mathbb{Q} 59'28	
	14992 Jul 26 16:42	0° \mathbb{P}			14993 Jul 20 12:12	0° \mathbb{P}	
asc. node	14992 Aug 01 04:26	8° \mathbb{P} 52'00		evening max el	14993 Jul 25 08:16	5° \mathbb{P} 44'52	18°49'46
evening max el	14992 Aug 10 20:33	21° \mathbb{P} 59'46	18°17'34	retrograde	14993 Aug 01 00:20	9° \mathbb{P} 23'21	
retrograde	14992 Aug 17 05:28	25° \mathbb{P} 22'55		evening set	14993 Aug 04 08:39	8° \mathbb{P} 18'55	
evening set	14992 Aug 20 04:40	24° \mathbb{P} 34'40		inferior conj	14993 Aug 09 22:10	2° \mathbb{P} 36'17	2°43'16
inferior conj	14992 Aug 26 02:43	19° \mathbb{P} 06'35	2°08'37	minimum elong	14993 Aug 10 00:07	2° \mathbb{P} 30'07	2°42'21
minimum elong	14992 Aug 26 05:06	18° \mathbb{P} 59'39	2°07'42	min. Earth dist.	14993 Aug 11 16:35	0° \mathbb{P} 23'08	0.66220 AU
min. Earth dist.	14992 Aug 28 11:10	16° \mathbb{P} 23'51	0.64413 AU		14993 Aug 12 00:08	30° \mathbb{R} \mathbb{Q}	
morning rise	14992 Sep 01 04:01	12° \mathbb{P} 46'39		morning rise	14993 Aug 15 14:41	26° \mathbb{Q} 10'48	
desc. node	14992 Sep 02 21:53	11° \mathbb{P} 34'12		desc. node	14993 Aug 20 19:22	23° \mathbb{Q} 36'42	
direct	14992 Sep 07 17:26	10° \mathbb{P} 11'18		direct	14993 Aug 21 20:55	23° \mathbb{Q} 32'25	





























































































































	14993 Sep 02 14:32	0°♍		morning rise	14994 Jul 30 10:42	9°♌59'08	
morning max el	14993 Sep 03 21:34	1°♍16'07	26°31'05	direct	14994 Aug 05 06:58	7°♌26'05	
	14993 Sep 25 11:08	0°♌		desc. node	14994 Aug 07 16:47	7°♌48'24	
morning set	14993 Oct 09 18:14	24°♌40'51		morning max el	14994 Aug 17 08:32	14°♌39'53	25°13'29
	14993 Oct 12 12:52	0°♍			14994 Aug 29 21:57	0°♍	
max. Earth dist.	14993 Oct 13 16:55	2°♍17'32	1.34435 AU		14994 Sep 18 07:12	0°♌	
asc. node	14993 Oct 15 03:01	5°♍07'07		morning set	14994 Sep 22 05:33	6°♌53'14	
				max. Earth dist.	14994 Sep 25 18:53	13°♌22'20	1.36523 AU
superior conj	14993 Oct 18 16:49	12°♍24'53	0°32'40	asc. node	14994 Oct 01 23:38	25°♌16'18	
minimum elong	14993 Oct 18 15:08	12°♍16'11	0°32'56				
evening rise	14993 Oct 26 02:58	28°♍01'38		superior conj	14994 Oct 02 06:15	25°♌49'03	0°02'33
	14993 Oct 27 01:38	0°♌		minimum elong	14994 Oct 02 06:04	25°♌48'09	0°02'51
evening max el	14993 Nov 14 11:58	29°♌59'45	21°06'02	behind sun begin	14994 Oct 01 23:44	25°♌16'50	
	14993 Nov 14 12:04	0°♌		behind sun end	14994 Oct 02 12:24	26°♌19'34	
desc. node	14993 Nov 16 15:59	1°♌56'50			14994 Oct 04 08:29	0°♍	
retrograde	14993 Nov 26 05:58	5°♌49'33		evening rise	14994 Oct 10 08:42	12°♍13'28	
evening set	14993 Nov 28 21:32	5°♌33'02			14994 Oct 19 17:11	0°♌	
inferior conj	14993 Dec 07 17:33	1°♌40'49	-5°34'10	evening max el	14994 Oct 27 18:00	10°♌53'38	19°47'50
minimum elong	14993 Dec 07 09:39	1°♌52'00	5°31'52	desc. node	14994 Nov 03 13:13	15°♌24'40	
min. Earth dist.	14993 Dec 08 09:48	1°♌17'47	0.54461 AU	retrograde	14994 Nov 06 20:50	15°♌56'30	
	14993 Dec 10 18:14	30°♌♌		evening set	14994 Nov 08 20:22	15°♌45'47	
morning rise	14993 Dec 15 22:06	27°♌49'19		inferior conj	14994 Nov 17 15:04	11°♌44'41	-4°14'26
direct	14993 Dec 20 00:21	27°♌13'16		minimum elong	14994 Nov 17 05:13	11°♌59'57	4°10'28
	14993 Dec 28 14:18	0°♌		min. Earth dist.	14994 Nov 19 17:41	10°♌26'27	0.55153 AU
morning max el	14994 Jan 02 00:22	3°♌31'22	22°52'21	morning rise	14994 Nov 25 12:31	7°♌30'17	
asc. node	14994 Jan 11 02:52	14°♌48'27		direct	14994 Nov 30 14:06	6°♌33'38	
	14994 Jan 19 18:04	0°♌		morning max el	14994 Dec 14 09:22	13°♌26'08	24°41'48
morning set	14994 Jan 24 13:42	9°♌55'26			14994 Dec 27 04:27	0°♌	
				asc. node	14994 Dec 29 00:03	3°♌01'32	
superior conj	14994 Jan 31 12:31	24°♌53'07	1°27'13	morning set	14995 Jan 09 01:37	24°♌37'50	
minimum elong	14994 Jan 31 14:25	25°♌03'18	1°27'42		14995 Jan 11 12:53	0°♌	
	14994 Feb 02 22:23	0°♌					
max. Earth dist.	14994 Feb 03 22:00	2°♌03'18	1.33546 AU	superior conj	14995 Jan 15 20:07	9°♌28'20	1°35'39
evening rise	14994 Feb 08 12:24	11°♌21'29		minimum elong	14995 Jan 15 21:03	9°♌33'28	1°36'26
desc. node	14994 Feb 12 16:10	19°♌16'52		max. Earth dist.	14995 Jan 17 21:52	13°♌59'58	1.32218 AU
	14994 Feb 18 17:45	0°♌		evening rise	14995 Jan 23 05:23	25°♌12'39	
	14994 Mar 12 01:51	0°♌			14995 Jan 25 14:40	0°♌	
evening max el	14994 Mar 15 03:09	3°♌08'46	27°13'25	desc. node	14995 Jan 30 12:46	9°♌19'39	
retrograde	14994 Mar 28 15:51	10°♌39'15			14995 Feb 12 05:24	0°♌	
evening set	14994 Apr 04 07:18	8°♌08'17		evening max el	14995 Feb 25 15:09	16°♌17'56	27°34'42
min. Earth dist.	14994 Apr 08 04:26	4°♌28'52	0.65142 AU	retrograde	14995 Mar 11 11:36	23°♌46'29	
asc. node	14994 Apr 08 23:35	3°♌36'21		evening set	14995 Mar 18 07:32	21°♌24'02	
inferior conj	14994 Apr 10 13:31	1°♌50'12	0°29'42	min. Earth dist.	14995 Mar 22 02:03	18°♌12'58	0.63191 AU
minimum elong	14994 Apr 10 12:43	1°♌52'27	0°28'57	inferior conj	14995 Mar 24 21:57	15°♌23'23	-0°37'50
	14994 Apr 12 06:05	30°♌♌		minimum elong	14995 Mar 24 23:11	15°♌20'18	0°37'31
morning rise	14994 Apr 16 19:55	26°♌21'27		asc. node	14995 Mar 26 21:01	13°♌29'06	
direct	14994 Apr 19 13:07	25°♌42'21		morning rise	14995 Mar 31 17:26	10°♌09'58	
morning max el	14994 Apr 25 20:46	28°♌58'54	17°57'28	direct	14995 Apr 03 02:29	9°♌42'48	
	14994 Apr 26 20:35	0°♌		morning max el	14995 Apr 09 14:27	13°♌01'34	17°46'19
desc. node	14994 May 11 18:09	22°♌08'55			14995 Apr 21 08:34	0°♌	
morning set	14994 May 13 18:12	25°♌26'32		morning set	14995 Apr 25 21:54	7°♌49'09	
	14994 May 16 12:48	0°♌		desc. node	14995 Apr 28 14:51	12°♌28'45	
superior conj	14994 May 28 00:09	18°♌28'59	-1°46'51	superior conj	14995 May 08 07:54	28°♌48'48	-1°12'00
minimum elong	14994 May 27 15:18	17°♌53'56	1°47'01	minimum elong	14995 May 08 00:58	28°♌20'18	1°11'52
max. Earth dist.	14994 May 31 15:33	24°♌13'04	1.45650 AU		14995 May 09 01:17	0°♌	
	14994 Jun 04 08:28	0°♌		max. Earth dist.	14995 May 14 09:44	8°♌38'14	1.44658 AU
evening rise	14994 Jun 13 01:19	13°♌26'12		evening rise	14995 May 23 12:07	22°♌51'10	
	14994 Jun 23 22:57	0°♌			14995 May 28 04:50	0°♌	
greatest brilliancy	14994 Jun 26 22:17	4°♌23'58	-0.6m		14995 Jun 18 12:31	0°♌	
asc. node	14994 Jul 05 21:56	16°♌36'22		evening max el	14995 Jun 21 16:18	3°♌27'47	20°41'28
evening max el	14994 Jul 08 15:14	19°♌35'42	19°38'22	asc. node	14995 Jun 22 18:49	4°♌31'20	
retrograde	14994 Jul 15 22:26	23°♌41'38		retrograde	14995 Jun 29 21:23	8°♌11'13	
evening set	14994 Jul 19 16:28	22°♌20'01		evening set	14995 Jul 04 01:53	6°♌32'12	
inferior conj	14994 Jul 25 00:43	16°♌24'24	3°03'00	inferior conj	14995 Jul 09 07:47	0°♌24'53	3°10'03
minimum elong	14994 Jul 25 01:50	16°♌20'41	3°02'07	minimum elong	14995 Jul 09 07:54	0°♌24'27	3°09'08
min. Earth dist.	14994 Jul 26 04:59	14°♌50'12	0.67620 AU		14995 Jul 09 14:59	30°♌♌	

min. Earth dist.	14995 Jul 09 22:16	29° \mathfrak{D} 34'53	0.68561 AU	min. Earth dist.	14996 Jun 22 18:20	14° \mathfrak{D} 29'43	0.69019 AU
morning rise	14995 Jul 14 13:37	24° \mathfrak{D} 03'38		morning rise	14996 Jun 27 21:24	8° \mathfrak{D} 18'49	
direct	14995 Jul 19 22:14	21° \mathfrak{D} 42'53		direct	14996 Jul 02 17:33	6° \mathfrak{D} 15'14	
desc. node	14995 Jul 25 14:09	23° \mathfrak{D} 45'50		desc. node	14996 Jul 11 11:28	11° \mathfrak{D} 04'01	
morning max el	14995 Jul 30 19:04	28° \mathfrak{D} 12'22	23°45'41	morning max el	14996 Jul 12 07:32	11° \mathfrak{D} 53'06	22°16'56
	14995 Aug 01 12:04	0° \mathfrak{Q}			14996 Jul 26 17:14	0° \mathfrak{Q}	
	14995 Aug 23 14:16	0° \mathfrak{P}		morning set	14996 Aug 14 12:43	28° \mathfrak{Q} 30'44	
morning set	14995 Sep 03 20:57	18° \mathfrak{P} 12'38			14996 Aug 15 10:46	0° \mathfrak{P}	
max. Earth dist.	14995 Sep 07 16:58	24° \mathfrak{P} 49'45	1.38879 AU	max. Earth dist.	14996 Aug 19 18:06	7° \mathfrak{P} 06'16	1.41232 AU
	14995 Sep 10 14:39	0° \mathfrak{L}					
superior conj	14995 Sep 15 06:42	8° \mathfrak{L} 36'26	-0°31'47	superior conj	14996 Aug 27 13:55	20° \mathfrak{P} 37'12	-1°07'50
minimum elong	14995 Sep 15 08:59	8° \mathfrak{L} 47'10	0°31'19	minimum elong	14996 Aug 27 19:14	21° \mathfrak{P} 00'54	1°07'18
asc. node	14995 Sep 18 20:13	15° \mathfrak{L} 24'08		asc. node	14996 Sep 04 16:47	5° \mathfrak{L} 27'02	
evening rise	14995 Sep 24 08:07	26° \mathfrak{L} 07'17		evening rise	14996 Sep 06 21:53	9° \mathfrak{L} 34'48	
	14995 Sep 26 07:56	0° \mathfrak{M}			14996 Sep 18 16:47	0° \mathfrak{M}	
evening max el	14995 Oct 10 13:54	22° \mathfrak{M} 37'13	18°51'35	evening max el	14996 Sep 22 20:11	5° \mathfrak{M} 04'20	18°16'58
retrograde	14995 Oct 19 03:27	26° \mathfrak{M} 56'01		retrograde	14996 Sep 30 05:40	8° \mathfrak{M} 50'15	
evening set	14995 Oct 21 00:47	26° \mathfrak{M} 44'14		evening set	14996 Oct 02 07:48	8° \mathfrak{M} 32'53	
desc. node	14995 Oct 21 10:31	26° \mathfrak{M} 38'44		desc. node	14996 Oct 07 07:57	5° \mathfrak{M} 51'33	
inferior conj	14995 Oct 29 06:27	22° \mathfrak{M} 24'38	-2°29'31	inferior conj	14996 Oct 09 19:42	3° \mathfrak{M} 51'51	-0°47'34
minimum elong	14995 Oct 29 00:15	22° \mathfrak{M} 35'43	2°26'24	minimum elong	14996 Oct 09 17:57	3° \mathfrak{M} 55'32	0°46'23
min. Earth dist.	14995 Nov 01 06:16	20° \mathfrak{M} 16'57	0.56655 AU	min. Earth dist.	14996 Oct 13 02:15	1° \mathfrak{M} 08'38	0.58697 AU
morning rise	14995 Nov 05 20:42	17° \mathfrak{M} 35'06			14996 Oct 14 14:15	30° \mathfrak{R} \mathfrak{L}	
direct	14995 Nov 11 17:02	16° \mathfrak{M} 13'24		morning rise	14996 Oct 17 00:39	28° \mathfrak{L} 25'50	
morning max el	14995 Nov 25 21:13	23° \mathfrak{M} 32'17	26°19'13	direct	14996 Oct 23 09:37	26° \mathfrak{L} 37'31	
	14995 Dec 01 17:27	0° \mathfrak{J}			14996 Nov 01 14:08	0° \mathfrak{M}	
asc. node	14995 Dec 15 21:09	21° \mathfrak{J} 53'44		morning max el	14996 Nov 06 16:53	4° \mathfrak{M} 17'23	27°27'32
	14995 Dec 20 02:09	0° \mathfrak{Z}			14996 Nov 25 13:55	0° \mathfrak{J}	
morning set	14995 Dec 24 12:25	9° \mathfrak{Z} 13'20		asc. node	14996 Dec 01 18:09	11° \mathfrak{J} 14'11	
				morning set	14996 Dec 07 20:17	23° \mathfrak{J} 36'33	
superior conj	14995 Dec 31 06:41	24° \mathfrak{Z} 09'01	1°37'56		14996 Dec 10 19:08	0° \mathfrak{Z}	
minimum elong	14995 Dec 31 06:33	24° \mathfrak{Z} 08'16	1°38'53	superior conj	14996 Dec 14 18:13	8° \mathfrak{Z} 48'42	1°34'14
max. Earth dist.	14996 Jan 01 03:35	26° \mathfrak{Z} 05'26	1.31386 AU	minimum elong	14996 Dec 14 17:05	8° \mathfrak{Z} 42'20	1°35'10
	14996 Jan 02 21:57	0° \mathfrak{X}		max. Earth dist.	14996 Dec 14 11:42	8° \mathfrak{Z} 12'13	1.31076 AU
evening rise	14996 Jan 07 06:06	9° \mathfrak{X} 22'02		evening rise	14996 Dec 21 12:09	23° \mathfrak{Z} 42'53	
desc. node	14996 Jan 17 09:27	29° \mathfrak{X} 01'37			14996 Dec 24 11:58	0° \mathfrak{X}	
	14996 Jan 17 22:45	0° \mathfrak{H}		desc. node	14997 Jan 03 06:13	18° \mathfrak{X} 13'45	
evening max el	14996 Feb 07 23:24	28° \mathfrak{H} 49'24	27°24'01		14997 Jan 11 00:03	0° \mathfrak{H}	
	14996 Feb 09 06:08	0° \mathfrak{Y}		evening max el	14997 Jan 20 00:53	10° \mathfrak{H} 30'30	26°38'20
retrograde	14996 Feb 21 22:58	6° \mathfrak{Y} 09'36		retrograde	14997 Feb 03 00:22	17° \mathfrak{H} 40'11	
evening set	14996 Feb 28 18:20	4° \mathfrak{Y} 03'04		evening set	14997 Feb 09 12:11	15° \mathfrak{H} 56'20	
min. Earth dist.	14996 Mar 03 13:37	1° \mathfrak{Y} 13'53	0.61029 AU	min. Earth dist.	14997 Feb 13 14:33	13° \mathfrak{H} 18'44	0.58818 AU
	14996 Mar 04 23:40	30° \mathfrak{R} \mathfrak{H}		inferior conj	14997 Feb 16 18:47	10° \mathfrak{H} 53'08	-3°24'38
inferior conj	14996 Mar 06 16:59	28° \mathfrak{H} 28'06	-1°57'22	minimum elong	14997 Feb 17 02:23	10° \mathfrak{H} 38'34	3°21'31
minimum elong	14996 Mar 06 21:13	28° \mathfrak{H} 18'43	1°55'32	morning rise	14997 Feb 24 19:51	6° \mathfrak{H} 19'14	
asc. node	14996 Mar 12 18:27	24° \mathfrak{H} 04'04		direct	14997 Feb 26 19:44	6° \mathfrak{H} 05'09	
morning rise	14996 Mar 14 03:18	23° \mathfrak{H} 32'58		asc. node	14997 Feb 27 15:55	6° \mathfrak{H} 07'44	
direct	14996 Mar 16 06:11	23° \mathfrak{H} 14'06		morning max el	14997 Mar 06 18:06	10° \mathfrak{H} 00'31	18°19'40
morning max el	14996 Mar 23 06:47	26° \mathfrak{H} 45'51	17°53'15		14997 Mar 19 19:06	0° \mathfrak{Y}	
	14996 Mar 26 02:56	0° \mathfrak{Y}		morning set	14997 Mar 22 11:46	5° \mathfrak{Y} 04'52	
morning set	14996 Apr 07 21:41	21° \mathfrak{Y} 07'57					
	14996 Apr 12 19:39	0° \mathfrak{B}		superior conj	14997 Mar 31 21:00	22° \mathfrak{Y} 40'02	0°03'48
desc. node	14996 Apr 14 11:30	2° \mathfrak{B} 57'25		minimum elong	14997 Mar 31 21:16	22° \mathfrak{Y} 41'14	0°03'28
superior conj	14996 Apr 18 15:26	10° \mathfrak{B} 14'26	-0°33'07	behind sun begin	14997 Mar 31 14:04	22° \mathfrak{Y} 08'24	
minimum elong	14996 Apr 18 12:26	10° \mathfrak{B} 01'33	0°33'12	behind sun end	14997 Apr 01 04:28	23° \mathfrak{Y} 13'59	
max. Earth dist.	14996 Apr 26 00:33	22° \mathfrak{B} 38'40	1.43058 AU	desc. node	14997 Apr 01 08:06	23° \mathfrak{Y} 30'25	
	14996 Apr 30 13:59	0° \mathfrak{I}			14997 Apr 04 23:21	0° \mathfrak{B}	
evening rise	14996 May 02 08:13	2° \mathfrak{I} 46'53		max. Earth dist.	14997 Apr 08 10:39	6° \mathfrak{B} 00'29	1.41009 AU
	14996 May 20 14:57	0° \mathfrak{D}		evening rise	14997 Apr 12 23:14	13° \mathfrak{B} 34'07	
evening max el	14996 Jun 03 11:48	17° \mathfrak{D} 20'01	21°55'41		14997 Apr 23 10:21	0° \mathfrak{I}	
asc. node	14996 Jun 08 15:48	21° \mathfrak{D} 30'47			14997 May 15 22:54	0° \mathfrak{D}	
retrograde	14996 Jun 12 19:30	22° \mathfrak{D} 47'01		evening max el	14997 May 17 03:14	1° \mathfrak{D} 12'38	23°16'12
evening set	14996 Jun 17 11:07	20° \mathfrak{D} 51'20		asc. node	14997 May 26 12:54	7° \mathfrak{D} 18'04	
inferior conj	14996 Jun 22 17:10	14° \mathfrak{D} 33'48	3°05'54	retrograde	14997 May 27 15:25	7° \mathfrak{D} 23'27	
minimum elong	14996 Jun 22 16:21	14° \mathfrak{D} 36'38	3°04'51	evening set	14997 Jun 01 18:32	5° \mathfrak{D} 12'59	

	14997 Jun 06 05:53	30° $\mathbb{R}\mathbb{I}$		inferior conj	14998 May 22 11:10	13° $\mathbb{I}\mathbb{I}$ 01'44	2°26'15
min. Earth dist.	14997 Jun 06 15:09	29° $\mathbb{I}\mathbb{I}$ 28'11	0.68985 AU	minimum elong	14998 May 22 09:06	13° $\mathbb{I}\mathbb{I}$ 08'40	2°24'51
inferior conj	14997 Jun 07 02:57	28° $\mathbb{I}\mathbb{I}$ 47'26	2°51'17	morning rise	14998 May 27 19:54	7° $\mathbb{I}\mathbb{I}$ 03'06	
minimum elong	14997 Jun 07 01:21	28° $\mathbb{I}\mathbb{I}$ 52'55	2°50'03	direct	14998 May 31 15:38	5° $\mathbb{I}\mathbb{I}$ 39'25	
morning rise	14997 Jun 12 08:07	22° $\mathbb{I}\mathbb{I}$ 40'05		morning max el	14998 Jun 08 01:08	9° $\mathbb{I}\mathbb{I}$ 45'54	19°44'46
direct	14997 Jun 16 15:47	20° $\mathbb{I}\mathbb{I}$ 56'13		desc. node	14998 Jun 15 05:46	18° $\mathbb{I}\mathbb{I}$ 23'32	
morning max el	14997 Jun 25 00:53	25° $\mathbb{I}\mathbb{I}$ 44'10	20°54'51	greatest brilliancy	14998 Jun 21 01:24	26° $\mathbb{I}\mathbb{I}$ 37'00	-0.6m
desc. node	14997 Jun 28 08:40	29° $\mathbb{I}\mathbb{I}$ 21'59			14998 Jun 23 08:35	0° \mathbb{S}	
	14997 Jun 28 21:28	0° \mathbb{S}		morning set	14998 Jul 04 08:26	16° \mathbb{S} 37'55	
	14997 Jul 20 03:01	0° \mathbb{Q}			14998 Jul 12 23:18	0° \mathbb{Q}	
morning set	14997 Jul 25 05:15	7° \mathbb{Q} 50'14		max. Earth dist.	14998 Jul 15 14:24	4° \mathbb{Q} 08'25	1.44853 AU
max. Earth dist.	14997 Aug 02 01:18	20° \mathbb{Q} 15'57	1.43295 AU				
	14997 Aug 07 23:16	0° \mathbb{P}		superior conj	14998 Jul 20 09:34	11° \mathbb{Q} 47'26	-2°05'46
				minimum elong	14998 Jul 20 15:34	12° \mathbb{Q} 11'37	2°06'15
superior conj	14997 Aug 08 23:35	1° \mathbb{P} 42'05	-1°41'19		14998 Jul 31 11:24	0° \mathbb{P}	
minimum elong	14997 Aug 09 07:06	2° \mathbb{P} 13'44	1°41'05	evening rise	14998 Aug 03 02:06	4° \mathbb{P} 23'47	
evening rise	14997 Aug 20 21:39	22° \mathbb{P} 25'01		asc. node	14998 Aug 09 10:00	15° \mathbb{P} 01'57	
asc. node	14997 Aug 22 13:23	25° \mathbb{P} 21'22			14998 Aug 19 13:29	0° \mathbb{L}	
	14997 Aug 25 04:31	0° \mathbb{L}		evening max el	14998 Aug 20 23:17	1° \mathbb{L} 30'14	18°06'56
evening max el	14997 Sep 06 08:37	18° \mathbb{L} 05'33	18°02'31	retrograde	14998 Aug 27 08:13	4° \mathbb{L} 50'45	
retrograde	14997 Sep 13 00:49	21° \mathbb{L} 32'00		evening set	14998 Aug 30 02:16	4° \mathbb{L} 11'10	
evening set	14997 Sep 15 10:24	21° \mathbb{L} 05'13			14998 Sep 04 05:50	30° $\mathbb{R}\mathbb{P}$	
inferior conj	14997 Sep 22 05:11	16° \mathbb{L} 04'15	0°37'00	inferior conj	14998 Sep 05 06:53	28° \mathbb{P} 52'37	1°40'47
minimum elong	14997 Sep 22 06:18	16° \mathbb{L} 01'32	0°36'45	minimum elong	14998 Sep 05 09:10	28° \mathbb{P} 46'22	1°39'57
desc. node	14997 Sep 24 05:25	14° \mathbb{L} 07'11		min. Earth dist.	14998 Sep 07 23:01	25° \mathbb{P} 58'34	0.63220 AU
min. Earth dist.	14997 Sep 25 07:42	13° \mathbb{L} 05'17	0.60975 AU	desc. node	14998 Sep 11 02:55	23° \mathbb{P} 00'34	
morning rise	14997 Sep 28 23:15	10° \mathbb{L} 09'15		morning rise	14998 Sep 11 14:00	22° \mathbb{P} 39'04	
direct	14997 Oct 05 14:36	7° \mathbb{L} 56'44		direct	14998 Sep 18 05:43	20° \mathbb{P} 09'09	
morning max el	14997 Oct 19 20:17	15° \mathbb{L} 51'37	27°57'39	morning max el	14998 Oct 02 04:46	28° \mathbb{P} 09'40	27°49'07
	14997 Oct 31 10:45	0° \mathbb{M}			14998 Oct 03 23:17	0° \mathbb{L}	
	14997 Nov 18 03:54	0° \mathbb{J}			14998 Oct 25 06:06	0° \mathbb{M}	
asc. node	14997 Nov 18 15:04	0° \mathbb{J} 55'07		asc. node	14998 Nov 05 11:52	20° \mathbb{M} 49'51	
morning set	14997 Nov 21 23:18	7° \mathbb{J} 42'59		morning set	14998 Nov 05 19:11	21° \mathbb{M} 26'40	
max. Earth dist.	14997 Nov 27 18:19	20° \mathbb{J} 11'05	1.31308 AU		14998 Nov 09 22:22	0° \mathbb{J}	
				max. Earth dist.	14998 Nov 10 19:33	1° \mathbb{J} 52'44	1.32093 AU
superior conj	14997 Nov 29 04:54	23° \mathbb{J} 22'40	1°24'38				
minimum elong	14997 Nov 29 02:59	23° \mathbb{J} 12'01	1°25'23	superior conj	14998 Nov 13 12:45	7° \mathbb{J} 45'08	1°09'06
	14997 Dec 02 04:18	0° \mathbb{Z}		minimum elong	14998 Nov 13 10:27	7° \mathbb{J} 32'33	1°09'37
evening rise	14997 Dec 05 21:35	8° \mathbb{Z} 10'35		evening rise	14998 Nov 20 08:28	22° \mathbb{J} 40'09	
	14997 Dec 17 00:03	0° \mathbb{A}			14998 Nov 23 19:54	0° \mathbb{Z}	
desc. node	14997 Dec 21 03:07	6° \mathbb{A} 44'57		desc. node	14998 Dec 08 00:06	24° \mathbb{Z} 20'02	
evening max el	14998 Jan 01 17:49	21° \mathbb{A} 18'17	25°20'33		14998 Dec 12 18:00	0° \mathbb{A}	
retrograde	14998 Jan 15 14:26	28° \mathbb{A} 16'17		evening max el	14998 Dec 14 04:18	1° \mathbb{A} 26'15	23°41'54
evening set	14998 Jan 21 09:13	27° \mathbb{A} 00'21		retrograde	14998 Dec 27 15:23	8° \mathbb{A} 07'04	
min. Earth dist.	14998 Jan 26 06:12	24° \mathbb{A} 19'06	0.56795 AU	evening set	14999 Jan 01 07:03	7° \mathbb{A} 20'05	
inferior conj	14998 Jan 29 00:14	22° \mathbb{A} 29'34	-4°48'19	min. Earth dist.	14999 Jan 07 15:23	4° \mathbb{A} 16'46	0.55259 AU
minimum elong	14998 Jan 29 09:24	22° \mathbb{A} 14'21	4°45'17	inferior conj	14999 Jan 09 09:07	3° \mathbb{A} 15'10	-5°47'29
morning rise	14998 Feb 06 12:15	18° \mathbb{A} 17'34		minimum elong	14999 Jan 09 14:36	3° \mathbb{A} 07'03	5°46'00
direct	14998 Feb 08 14:50	18° \mathbb{A} 04'32			14999 Jan 15 17:59	30° $\mathbb{R}\mathbb{Z}$	
asc. node	14998 Feb 14 13:21	19° \mathbb{A} 55'36		morning rise	14999 Jan 17 23:48	29° \mathbb{Z} 20'45	
morning max el	14998 Feb 17 20:17	22° \mathbb{A} 34'10	19°07'28	direct	14999 Jan 20 14:27	29° \mathbb{Z} 03'53	
	14998 Feb 23 18:10	0° \mathbb{X}			14999 Jan 25 04:59	0° \mathbb{A}	
morning set	14998 Mar 06 11:40	19° \mathbb{X} 26'41		morning max el	14999 Jan 31 09:20	4° \mathbb{A} 15'47	20°18'19
	14998 Mar 11 19:37	0° \mathbb{Y}		asc. node	14999 Feb 01 10:44	5° \mathbb{A} 19'56	
					14999 Feb 16 18:03	0° \mathbb{X}	
superior conj	14998 Mar 14 20:22	5° \mathbb{Y} 53'29	0°35'32	morning set	14999 Feb 18 18:00	4° \mathbb{X} 03'39	
minimum elong	14998 Mar 14 22:26	6° \mathbb{Y} 03'25	0°35'11				
desc. node	14998 Mar 19 04:39	14° \mathbb{Y} 04'09		superior conj	14999 Feb 26 09:06	19° \mathbb{X} 42'26	1°00'51
max. Earth dist.	14998 Mar 21 17:00	18° \mathbb{Y} 38'30	1.38742 AU	minimum elong	14999 Feb 26 11:44	19° \mathbb{X} 55'41	1°00'44
evening rise	14998 Mar 25 11:30	25° \mathbb{Y} 16'21			14999 Mar 03 14:46	0° \mathbb{Y}	
	14998 Mar 28 06:17	0° \mathbb{B}		max. Earth dist.	14999 Mar 03 23:58	0° \mathbb{Y} 43'54	1.36507 AU
	14998 Apr 17 02:04	0° \mathbb{I}		desc. node	14999 Mar 06 01:11	4° \mathbb{Y} 35'12	
evening max el	14998 Apr 29 16:49	15° \mathbb{I} 06'16	24°36'45	evening rise	14999 Mar 07 18:59	7° \mathbb{Y} 47'08	
retrograde	14998 May 11 07:53	21° \mathbb{I} 54'10			14999 Mar 21 00:46	0° \mathbb{B}	
asc. node	14998 May 13 10:06	21° \mathbb{I} 35'19		evening max el	14999 Apr 12 06:25	28° \mathbb{B} 59'30	25°50'11
evening set	14998 May 16 22:30	19° \mathbb{I} 31'59			14999 Apr 13 07:43	0° \mathbb{I}	
min. Earth dist.	14998 May 21 10:36	14° \mathbb{I} 23'52	0.68476 AU	retrograde	14999 Apr 24 19:47	6° \mathbb{I} 12'51	

asc. node	14999 Apr 30 07:21	4° Π 10'59		evening set	15000 Apr 14 13:05	17° \mathcal{B} 38'46	
evening set	14999 Apr 30 21:19	3° Π 43'09		asc. node	15000 Apr 17 04:42	15° \mathcal{B} 09'52	
	14999 May 04 10:37	30° \mathcal{R} 8		min. Earth dist.	15000 Apr 18 12:53	13° \mathcal{B} 40'47	0.66123 AU
min. Earth dist.	14999 May 05 02:35	29° \mathcal{B} 10'51	0.67513 AU	inferior conj	15000 Apr 20 14:50	11° \mathcal{B} 14'24	1°02'48
inferior conj	14999 May 06 15:54	27° \mathcal{B} 12'49	1°50'23	minimum elong	15000 Apr 20 13:19	11° \mathcal{B} 18'53	1°01'40
minimum elong	14999 May 06 13:47	27° \mathcal{B} 19'33	1°48'58	morning rise	15000 Apr 26 14:48	5° \mathcal{B} 37'39	
morning rise	14999 May 12 06:52	21° \mathcal{B} 24'14		direct	15000 Apr 29 13:25	4° \mathcal{B} 49'58	
direct	14999 May 15 15:32	20° \mathcal{B} 19'38		morning max el	15000 May 05 22:05	8° \mathcal{B} 10'12	18°11'42
morning max el	14999 May 22 08:40	23° \mathcal{B} 56'38	18°49'56	desc. node	15000 May 19 23:37	27° \mathcal{B} 53'55	
	14999 May 27 12:25	0° Π			15000 May 21 07:11	0° Π	
desc. node	14999 Jun 02 02:45	7° Π 57'18		morning set	15000 May 25 04:12	6° Π 12'59	
greatest brilliancy	14999 Jun 05 02:09	12° Π 26'17	-0.8m				
morning set	14999 Jun 13 18:30	25° Π 50'19		superior conj	15000 Jun 09 09:00	0° \mathcal{B} 18'59	-2°01'50
	14999 Jun 16 10:45	0° \mathcal{B}		minimum elong	15000 Jun 09 01:31	29° Π 49'43	2°02'23
max. Earth dist.	14999 Jun 28 08:17	18° \mathcal{B} 31'40	1.45755 AU		15000 Jun 09 04:08	0° \mathcal{B}	
				max. Earth dist.	15000 Jun 11 04:41	3° \mathcal{B} 09'40	1.45913 AU
superior conj	14999 Jun 30 00:17	21° \mathcal{B} 08'03	-2°13'52	evening rise	15000 Jun 25 11:03	25° \mathcal{B} 20'14	
minimum elong	14999 Jun 29 23:38	21° \mathcal{B} 05'31	2°14'49		15000 Jun 28 11:12	0° \mathcal{B}	
	14999 Jul 05 15:36	0° \mathcal{B}		greatest brilliancy	15000 Jul 06 18:48	12° \mathcal{B} 46'06	-0.7m
evening rise	14999 Jul 15 06:41	15° \mathcal{B} 21'23		asc. node	15000 Jul 14 03:23	23° \mathcal{B} 19'12	
	14999 Jul 24 10:16	0° \mathcal{B}		evening max el	15000 Jul 18 22:53	28° \mathcal{B} 58'50	19°08'32
asc. node	14999 Jul 27 06:40	4° \mathcal{B} 23'37			15000 Jul 20 00:58	0° \mathcal{B}	
evening max el	14999 Aug 04 12:57	15° \mathcal{B} 10'28	18°29'13	retrograde	15000 Jul 25 20:16	2° \mathcal{B} 47'10	
retrograde	14999 Aug 10 23:49	18° \mathcal{B} 38'17		evening set	15000 Jul 29 08:45	1° \mathcal{B} 35'19	
evening set	14999 Aug 14 02:50	17° \mathcal{B} 43'22			15000 Jul 31 06:03	30° \mathcal{R} 8	
inferior conj	14999 Aug 19 20:52	12° \mathcal{B} 09'10	2°25'17	inferior conj	15000 Aug 03 19:39	25° \mathcal{B} 47'01	2°53'18
minimum elong	14999 Aug 19 23:09	12° \mathcal{B} 02'18	2°24'20	minimum elong	15000 Aug 03 21:16	25° \mathcal{B} 41'45	2°52'24
min. Earth dist.	14999 Aug 21 23:31	9° \mathcal{B} 37'25	0.65232 AU	min. Earth dist.	15000 Aug 05 07:58	23° \mathcal{B} 49'48	0.66875 AU
morning rise	14999 Aug 25 18:12	5° \mathcal{B} 46'11		morning rise	15000 Aug 09 09:08	19° \mathcal{B} 21'22	
desc. node	14999 Aug 29 00:25	3° \mathcal{B} 45'52		direct	15000 Aug 15 11:28	16° \mathcal{B} 44'25	
direct	14999 Sep 01 05:11	3° \mathcal{B} 08'11		desc. node	15000 Aug 15 21:52	16° \mathcal{B} 45'08	
morning max el	14999 Sep 14 15:36	11° \mathcal{B} 01'38	27°07'09	morning max el	15000 Aug 28 02:49	24° \mathcal{B} 16'26	25°59'57
	14999 Sep 29 17:22	0° \mathcal{B}			15000 Sep 02 06:26	0° \mathcal{B}	
	14999 Oct 17 18:09	0° \mathcal{B}			15000 Sep 23 03:12	0° \mathcal{B}	
morning set	14999 Oct 20 05:09	4° \mathcal{B} 41'07		morning set	15000 Oct 03 01:52	17° \mathcal{B} 18'40	
asc. node	14999 Oct 23 08:35	10° \mathcal{B} 53'29		max. Earth dist.	15000 Oct 06 19:14	24° \mathcal{B} 19'43	1.35278 AU
max. Earth dist.	14999 Oct 24 12:11	13° \mathcal{B} 13'13	1.33433 AU		15000 Oct 09 16:49	0° \mathcal{B}	
				asc. node	15000 Oct 10 05:14	1° \mathcal{B} 01'47	
superior conj	14999 Oct 28 15:35	21° \mathcal{B} 50'25	0°47'38				
minimum elong	14999 Oct 28 13:28	21° \mathcal{B} 39'10	0°47'58	superior conj	15000 Oct 12 10:48	5° \mathcal{B} 31'51	0°20'30
	14999 Nov 01 11:10	0° \mathcal{B}		minimum elong	15000 Oct 12 09:38	5° \mathcal{B} 25'57	0°20'47
evening rise	14999 Nov 04 18:58	7° \mathcal{B} 07'07		evening rise	15000 Oct 20 03:06	21° \mathcal{B} 26'28	
	14999 Nov 16 19:22	0° \mathcal{B}			15000 Oct 24 08:21	0° \mathcal{B}	
desc. node	14999 Nov 24 21:11	10° \mathcal{B} 38'56		evening max el	15000 Nov 07 13:30	21° \mathcal{B} 53'04	20°30'11
evening max el	14999 Nov 25 15:47	11° \mathcal{B} 25'48	21°59'48	desc. node	15000 Nov 11 18:22	25° \mathcal{B} 17'01	
retrograde	14999 Dec 08 04:23	17° \mathcal{B} 37'38		retrograde	15000 Nov 18 15:01	27° \mathcal{B} 23'20	
evening set	14999 Dec 11 12:07	17° \mathcal{B} 13'06		evening set	15000 Nov 20 22:03	27° \mathcal{B} 10'13	
inferior conj	14999 Dec 20 03:09	13° \mathcal{B} 20'54	-5°56'48	inferior conj	15000 Nov 29 19:10	23° \mathcal{B} 15'33	-5°05'31
minimum elong	14999 Dec 19 23:45	13° \mathcal{B} 25'40	5°55'36	minimum elong	15000 Nov 29 09:28	23° \mathcal{B} 29'40	5°02'17
min. Earth dist.	14999 Dec 19 21:13	13° \mathcal{B} 29'13	0.54492 AU	min. Earth dist.	15000 Dec 01 03:06	22° \mathcal{B} 29'06	0.54645 AU
morning rise	14999 Dec 28 12:15	9° \mathcal{B} 33'34		morning rise	15000 Dec 07 20:36	19° \mathcal{B} 16'59	
direct	15000 Jan 01 00:42	9° \mathcal{B} 06'12		direct	15000 Dec 12 09:20	18° \mathcal{B} 32'55	
morning max el	15000 Jan 13 07:26	15° \mathcal{B} 01'13	21°51'20	morning max el	15000 Dec 25 18:43	25° \mathcal{B} 05'49	23°39'09
asc. node	15000 Jan 19 08:04	22° \mathcal{B} 03'32			15000 Dec 30 07:08	0° \mathcal{B}	
	15000 Jan 24 11:29	0° \mathcal{B}		asc. node	15001 Jan 06 05:19	9° \mathcal{B} 48'46	
morning set	15000 Feb 03 04:07	18° \mathcal{B} 47'28			15001 Jan 16 23:48	0° \mathcal{B}	
	15000 Feb 08 10:46	0° \mathcal{B}		morning set	15001 Jan 18 15:56	3° \mathcal{B} 32'31	
superior conj	15000 Feb 10 07:25	3° \mathcal{B} 55'41	1°19'28	superior conj	15001 Jan 25 12:22	18° \mathcal{B} 25'19	1°31'33
minimum elong	15000 Feb 10 09:44	4° \mathcal{B} 07'52	1°19'44	minimum elong	15001 Jan 25 13:53	18° \mathcal{B} 33'32	1°32'11
max. Earth dist.	15000 Feb 14 12:15	12° \mathcal{B} 35'19	1.34522 AU	max. Earth dist.	15001 Jan 28 08:11	24° \mathcal{B} 29'04	1.32927 AU
evening rise	15000 Feb 18 18:05	20° \mathcal{B} 55'42			15001 Jan 30 23:30	0° \mathcal{B}	
desc. node	15000 Feb 20 21:43	24° \mathcal{B} 58'56		evening rise	15001 Feb 02 05:27	4° \mathcal{B} 33'43	
	15000 Feb 23 15:50	0° \mathcal{B}		desc. node	15001 Feb 07 18:19	15° \mathcal{B} 11'11	
	15000 Mar 14 22:08	0° \mathcal{B}			15001 Feb 16 09:19	0° \mathcal{B}	
evening max el	15000 Mar 25 20:17	12° \mathcal{B} 44'16	26°49'05	evening max el	15001 Mar 08 09:27	26° \mathcal{B} 09'50	27°25'56
retrograde	15000 Apr 08 01:58	20° \mathcal{B} 10'51			15001 Mar 12 21:30	0° \mathcal{B}	

retrograde	15001 Mar 22 01:40	3°♄39'39		minimum elong	15002 Jan 09 21:58	3°♄06'12	1°38'14
evening set	15001 Mar 28 19:42	1°♄11'23		max. Earth dist.	15002 Jan 11 10:53	6°♄29'46	1.31799 AU
	15001 Mar 30 07:09	30°♄♂		evening rise	15002 Jan 17 02:01	18°♄33'00	
min. Earth dist.	15001 Apr 01 15:28	27°♄44'49	0.64357 AU		15002 Jan 22 20:39	0°♄	
inferior conj	15001 Apr 04 05:26	25°♄00'02	0°02'39	desc. node	15002 Jan 25 14:57	5°♄05'54	
minimum elong	15001 Apr 04 05:21	25°♄00'13	0°02'17		15002 Feb 10 18:33	0°♄	
transit middle	15001 Apr 04 05:21	25°♄00'13	0°02'17	evening max el	15002 Feb 18 19:56	9°♄03'39	27°34'12
transit begin	15001 Apr 04 02:18	25°♄08'24		retrograde	15002 Mar 04 18:02	16°♄29'37	
transit end	15001 Apr 04 08:25	24°♄52'03		evening set	15002 Mar 11 14:38	14°♄12'37	
asc. node	15001 Apr 04 02:06	25°♄08'57		min. Earth dist.	15002 Mar 15 08:46	11°♄12'12	0.62292 AU
morning rise	15001 Apr 10 17:07	19°♄37'30		inferior conj	15002 Mar 18 08:35	8°♄22'01	-1°10'16
direct	15001 Apr 13 06:47	19°♄03'46		minimum elong	15002 Mar 18 10:59	8°♄16'18	1°09'19
morning max el	15001 Apr 19 15:05	22°♄19'30	17°50'34	asc. node	15002 Mar 21 23:33	5°♄11'49	
	15001 Apr 25 17:04	0°♄		morning rise	15002 Mar 25 10:17	3°♄16'22	
morning set	15001 May 06 17:36	17°♄55'13		direct	15002 Mar 27 16:24	2°♄53'13	
desc. node	15001 May 06 20:22	18°♄06'53		morning max el	15002 Apr 03 08:41	6°♄15'58	17°47'02
	15001 May 13 23:49	0°♄			15002 Apr 18 20:37	0°♄	
				morning set	15002 Apr 19 06:35	0°♄43'53	
superior conj	15001 May 20 04:52	10°♄05'07	-1°33'03	desc. node	15002 Apr 23 17:04	8°♄31'06	
minimum elong	15001 May 19 20:19	9°♄30'50	1°33'00				
max. Earth dist.	15001 May 25 00:41	17°♄45'21	1.45317 AU	superior conj	15002 Apr 30 22:41	20°♄53'24	-0°55'34
	15001 Jun 01 21:21	0°♄		minimum elong	15002 Apr 30 17:23	20°♄31'13	0°55'30
evening rise	15001 Jun 04 23:48	4°♄45'47			15002 May 06 11:25	0°♄	
greatest brilliancy	15001 Jun 19 20:21	27°♄00'39	-0.6m	max. Earth dist.	15002 May 07 17:29	2°♄01'22	1.44039 AU
	15001 Jun 21 22:29	0°♄		evening rise	15002 May 15 12:47	14°♄19'35	
asc. node	15001 Jul 01 00:12	11°♄39'37			15002 May 25 21:45	0°♄	
evening max el	15001 Jul 02 03:20	12°♄50'12	20°03'34	evening max el	15002 Jun 15 01:48	26°♄42'13	21°11'55
retrograde	15001 Jul 09 19:01	17°♄11'02		asc. node	15002 Jun 17 21:08	29°♄13'11	
evening set	15001 Jul 13 17:30	15°♄41'46			15002 Jun 18 22:53	0°♄	
inferior conj	15001 Jul 19 00:23	9°♄40'47	3°07'26	retrograde	15002 Jun 23 17:59	1°♄44'24	
minimum elong	15001 Jul 19 01:05	9°♄38'24	3°06'33	evening set	15002 Jun 28 03:05	29°♄58'07	
min. Earth dist.	15001 Jul 19 22:38	8°♄25'17	0.68079 AU		15002 Jun 28 02:09	30°♄♂	
morning rise	15001 Jul 24 08:19	3°♄16'55		inferior conj	15002 Jul 03 08:43	23°♄46'00	3°09'36
direct	15001 Jul 29 23:39	0°♄48'44		minimum elong	15002 Jul 03 08:26	23°♄46'59	3°08'39
desc. node	15001 Aug 02 19:18	1°♄44'45		min. Earth dist.	15002 Jul 03 17:28	23°♄15'34	0.68809 AU
morning max el	15001 Aug 10 13:37	7°♄44'54	24°36'51	morning rise	15002 Jul 08 13:33	17°♄27'00	
	15001 Aug 27 23:52	0°♄♂		direct	15002 Jul 13 16:47	15°♄13'14	
morning set	15001 Sep 15 05:13	29°♄09'30		desc. node	15002 Jul 20 16:38	18°♄19'45	
	15001 Sep 15 16:45	0°♄		morning max el	15002 Jul 24 00:49	21°♄21'51	23°07'34
max. Earth dist.	15001 Sep 18 19:09	5°♄32'09	1.37507 AU		15002 Jul 31 11:36	0°♄	
					15002 Aug 21 05:36	0°♄♂	
superior conj	15001 Sep 25 19:09	18°♄41'04	-0°11'38	morning set	15002 Aug 27 10:59	10°♄04'22	
minimum elong	15001 Sep 25 19:54	18°♄44'45	0°11'16	max. Earth dist.	15002 Aug 31 17:40	17°♄17'54	1.39894 AU
behind sun begin	15001 Sep 25 15:04	18°♄21'15			15002 Sep 07 21:33	0°♄	
behind sun end	15001 Sep 26 00:45	19°♄08'16					
asc. node	15001 Sep 27 01:49	21°♄10'35		superior conj	15002 Sep 08 12:49	1°♄09'56	-0°47'04
	15001 Oct 01 12:24	0°♄♂		minimum elong	15002 Sep 08 16:23	1°♄26'17	0°46'33
evening rise	15001 Oct 04 06:31	5°♄31'35		asc. node	15002 Sep 13 22:24	11°♄16'55	
	15001 Oct 18 07:43	0°♄♂		evening rise	15002 Sep 18 02:20	19°♄15'42	
evening max el	15001 Oct 21 01:34	3°♄07'25	19°21'09		15002 Sep 23 19:19	0°♄♂	
desc. node	15001 Oct 29 15:40	7°♄48'59		evening max el	15002 Oct 04 02:25	15°♄10'44	18°34'17
retrograde	15001 Oct 30 11:58	7°♄51'11		retrograde	15002 Oct 12 02:55	19°♄14'02	
evening set	15001 Nov 01 09:08	7°♄40'41		evening set	15002 Oct 14 01:36	19°♄00'30	
inferior conj	15001 Nov 09 23:18	3°♄32'10	-3°31'04	desc. node	15002 Oct 16 13:02	18°♄07'16	
minimum elong	15001 Nov 09 14:37	3°♄46'25	3°27'12	inferior conj	15002 Oct 21 23:57	14°♄32'07	-1°44'45
min. Earth dist.	15001 Nov 12 12:33	1°♄51'53	0.55701 AU	minimum elong	15002 Oct 21 19:45	14°♄40'09	1°42'26
	15001 Nov 15 16:49	30°♄♂		min. Earth dist.	15002 Oct 25 04:20	12°♄06'48	0.57475 AU
morning rise	15001 Nov 17 17:49	29°♄03'32		morning rise	15002 Oct 29 10:27	9°♄26'11	
direct	15001 Nov 23 03:44	27°♄57'00		direct	15002 Nov 04 12:53	7°♄52'52	
	15001 Nov 30 12:26	0°♄♂		morning max el	15002 Nov 18 19:13	15°♄22'18	26°52'32
morning max el	15001 Dec 07 04:12	5°♄01'36	25°25'58		15002 Nov 30 15:24	0°♄♂	
asc. node	15001 Dec 24 02:29	28°♄19'40		asc. node	15002 Dec 10 23:33	17°♄24'38	
	15001 Dec 25 00:51	0°♄♂			15002 Dec 17 06:40	0°♄♂	
morning set	15002 Jan 03 03:36	18°♄12'38		morning set	15002 Dec 18 13:22	2°♄43'09	
	15002 Jan 08 12:22	0°♄♂					
				superior conj	15002 Dec 25 08:43	17°♄44'19	1°37'06
superior conj	15002 Jan 09 21:29	3°♄03'31	1°37'21	minimum elong	15002 Dec 25 08:08	17°♄41'06	1°38'03

max. Earth dist.	15002 Dec 25 17:48	18°  35'07	1.31184 AU	morning set	15003 Dec 02 19:25	16°  59'45	
	15002 Dec 30 21:58	0° 			15003 Dec 08 18:37	0° 	
evening rise	15003 Jan 01 05:15	2°  47'29		max. Earth dist.	15003 Dec 09 01:39	0°  39'13	1.31105 AU
desc. node	15003 Jan 12 11:41	24°  35'59					
	15003 Jan 15 17:08	0° 		superior conj	15003 Dec 09 20:08	2°  22'29	1°30'54
evening max el	15003 Feb 01 01:28	21°  14'05	27°08'52	minimum elong	15003 Dec 09 18:38	2°  14'05	1°31'45
retrograde	15003 Feb 15 01:45	28°  30'55		evening rise	15003 Dec 16 13:00	17°  12'09	
evening set	15003 Feb 21 18:43	26°  33'14			15003 Dec 22 18:27	0° 	
min. Earth dist.	15003 Feb 25 15:54	23°  50'24	0.60073 AU	desc. node	15003 Dec 30 08:30	13°  32'19	
inferior conj	15003 Feb 28 20:43	21°  10'53	-2°33'58		15004 Jan 11 11:10	0° 	
minimum elong	15003 Mar 01 02:25	20°  58'59	2°31'30	evening max el	15004 Jan 13 23:40	2°  33'23	26°08'52
morning rise	15003 Mar 08 13:32	16°  24'42		retrograde	15004 Jan 27 22:40	9°  38'01	
asc. node	15003 Mar 08 21:02	16°  20'09		evening set	15004 Feb 03 04:12	8°  06'00	
direct	15003 Mar 10 14:28	16°  08'26		min. Earth dist.	15004 Feb 07 12:58	5°  28'40	0.57911 AU
morning max el	15003 Mar 17 23:25	19°  49'14	18°02'02	inferior conj	15004 Feb 10 14:14	3°  16'53	-4°01'35
	15003 Mar 25 11:55	0° 		minimum elong	15004 Feb 10 22:54	3°  01'16	3°58'17
morning set	15003 Apr 02 13:06	14°  20'43			15004 Feb 15 17:39	30° 	
desc. node	15003 Apr 10 13:41	29°  01'58		morning rise	15004 Feb 18 20:38	28°  52'02	
	15003 Apr 11 02:40	0° 		direct	15004 Feb 20 20:41	28°  38'54	
				asc. node	15004 Feb 23 18:29	29°  08'06	
superior conj	15003 Apr 12 16:03	2°  45'56	-0°16'59		15004 Feb 25 16:30	0° 	
minimum elong	15003 Apr 12 14:36	2°  39'31	0°17'12	morning max el	15004 Feb 29 07:21	2°  48'08	18°37'15
max. Earth dist.	15003 Apr 20 05:46	15°  44'32	1.42223 AU	morning set	15004 Mar 16 07:55	28°  30'17	
evening rise	15003 Apr 25 16:14	24°  36'00			15004 Mar 17 02:28	0° 	
	15003 Apr 29 02:21	0° 					
	15003 May 19 19:48	0° 		superior conj	15004 Mar 25 05:46	15°  33'39	0°17'59
evening max el	15003 May 28 19:19	10°  34'35	22°29'35	minimum elong	15004 Mar 25 06:59	15°  39'16	0°17'36
asc. node	15003 Jun 04 18:11	15°  44'14		desc. node	15004 Mar 27 10:16	19°  35'55	
retrograde	15003 Jun 07 15:22	16°  20'59		max. Earth dist.	15004 Apr 01 14:08	28°  48'26	1.40059 AU
evening set	15003 Jun 12 11:44	14°  18'58			15004 Apr 02 06:38	0° 	
inferior conj	15003 Jun 17 18:32	7°  57'41	3°00'57	evening rise	15004 Apr 05 16:29	5°  48'00	
minimum elong	15003 Jun 17 17:22	8°  01'45	2°59'51		15004 Apr 21 04:43	0° 	
min. Earth dist.	15003 Jun 17 14:13	8°  12'42	0.69060 AU	evening max el	15004 May 10 09:55	24°  12'40	23°50'52
morning rise	15003 Jun 22 22:50	1°  45'32			15004 May 17 15:29	0° 	
	15003 Jun 26 04:20	30°  R  II		retrograde	15004 May 21 09:49	0°  55'45	
direct	15003 Jun 27 13:39	29°  II50'00		asc. node	15004 May 21 15:18	0°  55'31	
	15003 Jun 29 00:05	0° 			15004 May 24 20:47	30°  R  II	
morning max el	15003 Jul 06 14:54	5°  50'6'20	21°40'44	evening set	15004 May 26 17:51	28°  II40'05	
desc. node	15003 Jul 07 13:55	6°  50'53'1		min. Earth dist.	15004 May 31 10:43	23°  II10'53	0.68834 AU
	15003 Jul 25 15:18	0° 		inferior conj	15004 Jun 01 03:53	22°  II12'17	2°41'58
morning set	15003 Aug 07 16:19	19°  55'51		minimum elong	15004 Jun 01 02:03	22°  II18'34	2°40'39
	15003 Aug 13 21:47	0° 		morning rise	15004 Jun 06 10:15	16°  II08'26	
max. Earth dist.	15003 Aug 13 20:36	29°  55'09	1.42161 AU	direct	15004 Jun 10 12:52	14°  II32'57	
				morning max el	15004 Jun 18 10:54	19°  II01'32	20°23'14
superior conj	15003 Aug 21 11:19	12°  57'55	-1°22'42	desc. node	15004 Jun 23 11:06	24°  II43'37	
minimum elong	15003 Aug 21 17:49	13°  57'16'08	1°22'14		15004 Jun 27 11:05	0° 	
	15003 Aug 31 02:13	0° 		morning set	15004 Jul 17 01:08	28°  55'50	
asc. node	15003 Aug 31 18:58	1°  51'6'32			15004 Jul 17 17:45	0° 	
evening rise	15003 Sep 01 10:41	2°  52'8'24		max. Earth dist.	15004 Jul 26 06:39	13°  52'25'19	1.44041 AU
evening max el	15003 Sep 17 11:53	27°  53'55	18°08'29				
	15003 Sep 20 00:38	0° 		superior conj	15004 Aug 01 10:54	23°  52'27'11	-1°53'15
retrograde	15003 Sep 24 12:35	1°  52'29'29		minimum elong	15004 Aug 01 18:24	23°  52'58'07	1°53'17
evening set	15003 Sep 26 17:47	1°  52'08'30			15004 Aug 05 09:16	0° 	
	15003 Sep 29 05:01	30°  R  5		evening rise	15004 Aug 14 02:49	14°  52'57'52	
desc. node	15003 Oct 03 10:28	26°  52'44'54		asc. node	15004 Aug 17 15:32	21°  52'05'22	
inferior conj	15003 Oct 03 22:10	26°  52'18'59	-0°09'12		15004 Aug 22 22:21	0° 	
minimum elong	15003 Oct 03 21:52	26°  52'19'40	0°08'43	evening max el	15004 Aug 31 01:43	11°  52'06'11	18°02'10
transit middle	15003 Oct 03 21:52	26°  52'19'40	0°08'43	retrograde	15004 Sep 06 13:27	14°  52'28'11	
transit begin	15003 Oct 03 19:01	26°  52'26'00		evening set	15004 Sep 09 02:42	13°  52'56'09	
transit end	15003 Oct 04 00:42	26°  52'13'19		inferior conj	15004 Sep 15 15:00	8°  52'47'14	1°06'37
min. Earth dist.	15003 Oct 07 04:13	23°  52'26'21	0.59661 AU	minimum elong	15004 Sep 15 16:48	8°  52'42'38	1°06'02
morning rise	15003 Oct 10 22:37	20°  52'39'41		min. Earth dist.	15004 Sep 18 13:35	5°  52'48'17	0.61953 AU
direct	15003 Oct 17 11:20	18°  52'40'06		desc. node	15004 Sep 19 07:58	5°  52'04'24	
morning max el	15003 Oct 31 18:08	26° 52'27'13	27°45'07	morning rise	15004 Sep 22 04:22	2° 52'43'23	
	15003 Nov 04 02:38	0°		direct	15004 Sep 28 20:39	0°	
	15003 Nov 24 04:59	0°		morning max el	15004 Oct 12 23:52	8° 52'20'16	27°58'34
asc. node	15003 Nov 27 20:32	6° 52'54'37			15004 Oct 29 16:17	0°	

asc. node	15004 Nov 13 17:22	26° \mathbb{M} 41'55			15005 Oct 22 18:59	0° \mathbb{M}		
	15004 Nov 15 08:35	0° \mathbb{Z}		morning set	15005 Oct 30 11:41	14° \mathbb{M} 29'03		
morning set	15004 Nov 15 19:39	0° \mathbb{Z} 56'46		asc. node	15005 Oct 31 14:06	16° \mathbb{M} 41'04		
max. Earth dist.	15004 Nov 21 06:31	12° \mathbb{Z} 32'08	1.31577 AU	max. Earth dist.	15005 Nov 04 04:42	24° \mathbb{M} 06'24	1.32599 AU	
					15005 Nov 06 23:13	0° \mathbb{Z}		
superior conj	15004 Nov 23 05:49	16° \mathbb{Z} 51'58	1°18'46					
minimum elong	15004 Nov 23 03:41	16° \mathbb{Z} 40'09	1°19'26	superior conj	15005 Nov 07 11:48	1° \mathbb{Z} 07'45	1°00'42	
	15004 Nov 29 04:35	0° \mathbb{Z}		minimum elong	15005 Nov 07 09:29	0° \mathbb{Z} 55'16	1°01'09	
evening rise	15004 Nov 29 23:15	1° \mathbb{Z} 41'15		evening rise	15005 Nov 14 10:12	16° \mathbb{Z} 10'28		
	15004 Dec 15 02:08	0° \approx			15005 Nov 21 04:40	0° \mathbb{Z}		
desc. node	15004 Dec 16 05:25	1° \approx 41'38		desc. node	15005 Dec 03 02:25	18° \mathbb{Z} 47'04		
evening max el	15004 Dec 25 13:26	13° \approx 01'41	24°40'13	evening max el	15005 Dec 06 22:53	23° \mathbb{Z} 00'22	22°57'42	
retrograde	15005 Jan 08 06:40	19° \approx 52'34		retrograde	15005 Dec 20 02:03	29° \mathbb{Z} 31'06		
evening set	15005 Jan 13 15:18	18° \approx 49'10		evening set	15005 Dec 24 04:20	28° \mathbb{Z} 54'36		
min. Earth dist.	15005 Jan 19 01:16	16° \approx 01'08	0.56067 AU	min. Earth dist.	15005 Dec 31 08:14	25° \mathbb{Z} 36'14	0.54829 AU	
inferior conj	15005 Jan 21 10:40	14° \approx 31'10	-5°17'57	inferior conj	15006 Jan 01 11:58	24° \mathbb{Z} 56'38	-5°58'46	
minimum elong	15005 Jan 21 19:05	14° \approx 17'57	5°15'29	minimum elong	15006 Jan 01 14:01	24° \mathbb{Z} 53'44	5°57'45	
morning rise	15005 Jan 30 00:59	10° \approx 27'24		morning rise	15006 Jan 10 01:06	21° \mathbb{Z} 07'28		
direct	15005 Feb 01 07:38	10° \approx 13'19		direct	15006 Jan 13 00:07	20° \mathbb{Z} 47'04		
asc. node	15005 Feb 09 15:55	13° \approx 38'23		morning max el	15006 Jan 24 10:54	26° \mathbb{Z} 17'02	20°55'30	
morning max el	15005 Feb 11 04:15	14° \approx 59'58	19°34'45	asc. node	15006 Jan 27 13:16	29° \mathbb{Z} 38'19		
	15005 Feb 21 17:17	0° \mathbb{X}			15006 Jan 27 20:25	0° \approx		
morning set	15005 Feb 28 10:54	12° \mathbb{X} 59'31		morning set	15006 Feb 12 19:04	27° \approx 39'46		
					15006 Feb 13 22:02	0° \mathbb{X}		
superior conj	15005 Mar 08 11:17	29° \mathbb{X} 03'11	0°47'05					
minimum elong	15005 Mar 08 13:44	29° \mathbb{X} 15'08	0°46'48	superior conj	15006 Feb 20 04:29	13° \mathbb{X} 03'19	1°09'33	
	15005 Mar 08 22:54	0° \mathbb{Y}		minimum elong	15006 Feb 20 07:04	13° \mathbb{X} 16'33	1°09'36	
desc. node	15005 Mar 14 06:48	10° \mathbb{Y} 08'36		max. Earth dist.	15006 Feb 25 05:12	23° \mathbb{X} 08'19	1.35620 AU	
max. Earth dist.	15005 Mar 14 20:34	11° \mathbb{Y} 12'06	1.37777 AU		15006 Feb 28 19:28	0° \mathbb{Y}		
evening rise	15005 Mar 18 13:15	17° \mathbb{Y} 51'26		evening rise	15006 Mar 01 03:45	0° \mathbb{Y} 38'33		
	15005 Mar 25 17:17	0° \mathbb{B}		desc. node	15006 Mar 01 03:19	0° \mathbb{Y} 36'32		
	15005 Apr 15 12:23	0° \mathbb{I}			15006 Mar 18 20:20	0° \mathbb{B}		
evening max el	15005 Apr 22 23:24	8° \mathbb{I} 22'37	25°09'14	evening max el	15006 Apr 05 12:55	22° \mathbb{B} 12'03	26°17'25	
retrograde	15005 May 05 00:18	15° \mathbb{I} 22'12		retrograde	15006 Apr 18 09:55	29° \mathbb{B} 32'52		
asc. node	15005 May 08 12:32	14° \mathbb{I} 30'18		evening set	15006 Apr 24 15:52	27° \mathbb{B} 01'06		
evening set	15005 May 10 19:49	12° \mathbb{I} 56'09		asc. node	15006 Apr 25 09:51	26° \mathbb{B} 22'02		
min. Earth dist.	15005 May 15 04:50	8° \mathbb{I} 03'38	0.68128 AU	min. Earth dist.	15006 Apr 28 18:31	22° \mathbb{B} 43'57	0.66969 AU	
inferior conj	15005 May 16 10:51	6° \mathbb{I} 25'28	2°12'26	inferior conj	15006 Apr 30 13:22	20° \mathbb{B} 32'29	1°31'41	
minimum elong	15005 May 16 08:42	6° \mathbb{I} 32'32	2°10'59	minimum elong	15006 Apr 30 11:25	20° \mathbb{B} 38'30	1°30'20	
morning rise	15005 May 21 21:55	0° \mathbb{I} 31'09		morning rise	15006 May 06 07:51	14° \mathbb{B} 48'59		
	15005 May 22 18:12	30° \mathbb{R} \mathbb{B}		direct	15006 May 09 12:04	13° \mathbb{B} 52'02		
direct	15005 May 25 12:55	29° \mathbb{B} 15'44		morning max el	15006 May 16 00:41	17° \mathbb{B} 20'22	18°31'39	
	15005 May 28 10:46	0° \mathbb{I}			15006 May 25 18:04	0° \mathbb{I}		
morning max el	15005 Jun 01 14:21	3° \mathbb{I} 07'38	19°19'30	desc. node	15006 May 28 05:04	3° \mathbb{I} 43'57		
desc. node	15005 Jun 10 08:08	13° \mathbb{I} 59'56		morning set	15006 Jun 05 23:27	17° \mathbb{I} 25'51		
greatest brilliancy	15005 Jun 14 07:03	19° \mathbb{I} 44'00	-0.7m		15006 Jun 13 23:45	0° \mathbb{B}		
	15005 Jun 21 02:39	0° \mathbb{B}						
morning set	15005 Jun 26 04:44	7° \mathbb{B} 47'31		superior conj	15006 Jun 21 21:41	12° \mathbb{B} 21'13	-2°11'11	
max. Earth dist.	15005 Jul 08 22:38	27° \mathbb{B} 35'04	1.45328 AU	minimum elong	15006 Jun 21 17:41	12° \mathbb{B} 05'35	2°12'04	
	15005 Jul 10 11:28	0° \mathbb{Q}		max. Earth dist.	15006 Jun 21 17:50	12° \mathbb{B} 06'11	1.45908 AU	
					15006 Jul 03 04:13	0° \mathbb{Q}		
superior conj	15005 Jul 12 11:38	3° \mathbb{Q} 10'27	-2°11'33	evening rise	15006 Jul 07 15:31	7° \mathbb{Q} 03'18		
minimum elong	15005 Jul 12 15:20	3° \mathbb{Q} 25'08	2°12'20	greatest brilliancy	15006 Jul 15 22:38	20° \mathbb{Q} 08'05	-0.8m	
evening rise	15005 Jul 26 21:36	26° \mathbb{Q} 32'04		asc. node	15006 Jul 22 08:51	29° \mathbb{Q} 50'25		
	15005 Jul 28 23:56	0° \mathbb{P}			15006 Jul 22 11:31	0° \mathbb{P}		
asc. node	15005 Aug 04 12:10	10° \mathbb{P} 38'50		evening max el	15006 Jul 29 04:34	8° \mathbb{P} 22'31	18°43'52	
evening max el	15005 Aug 14 16:17	24° \mathbb{P} 38'26	18°14'13	retrograde	15006 Aug 04 19:05	11° \mathbb{P} 57'54		
retrograde	15005 Aug 21 00:58	28° \mathbb{P} 00'38		evening set	15006 Aug 08 01:58	10° \mathbb{P} 56'03		
evening set	15005 Aug 23 22:47	27° \mathbb{P} 14'43		inferior conj	15006 Aug 13 16:33	5° \mathbb{P} 15'37	2°39'01	
inferior conj	15005 Aug 29 22:25	21° \mathbb{P} 48'57	2°01'53	minimum elong	15006 Aug 13 18:36	5° \mathbb{P} 09'12	2°38'05	
minimum elong	15005 Aug 30 00:48	21° \mathbb{P} 42'07	2°00'57	min. Earth dist.	15006 Aug 15 13:08	2° \mathbb{P} 57'12	0.65976 AU	
min. Earth dist.	15005 Sep 01 08:54	19° \mathbb{P} 02'48	0.64112 AU		15006 Aug 18 04:14	30° \mathbb{R} \mathbb{Q}		
morning rise	15005 Sep 05 01:10	15° \mathbb{P} 30'18		morning rise	15006 Aug 19 10:15	28° \mathbb{Q} 50'29		
desc. node	15005 Sep 06 05:28	14° \mathbb{P} 39'33		desc. node	15006 Aug 24 02:58	26° \mathbb{Q} 21'42		
direct	15005 Sep 11 15:15	12° \mathbb{P} 56'08		direct	15006 Aug 25 17:48	26° \mathbb{Q} 11'51		
morning max el	15005 Sep 25 09:52	20° \mathbb{P} 55'05	27°35'01		15006 Sep 03 11:24	0° \mathbb{P}		
	15005 Oct 03 06:53	0° \mathbb{Q}		morning max el	15006 Sep 07 21:17	3° \mathbb{P} 58'52	26°41'06	

	15006 Sep 27 16:36	0°♄			15007 Aug 31 22:29	0°♄		
morning set	15006 Oct 13 16:29	27°♄28'55			15007 Sep 20 15:54	0°♄		
	15006 Oct 15 00:04	0°♄		morning set	15007 Sep 26 06:22	9°♄47'56		
max. Earth dist.	15006 Oct 17 17:09	5°♄18'54	1.34160 AU	max. Earth dist.	15007 Sep 29 20:10	16°♄22'30	1.36193 AU	
asc. node	15006 Oct 18 10:46	6°♄46'55		asc. node	15007 Oct 05 07:23	26°♄55'48		
superior conj	15006 Oct 22 11:42	15°♄03'21	0°36'47	superior conj	15007 Oct 06 02:46	28°♄32'12	0°07'26	
minimum elong	15006 Oct 22 09:53	14°♄53'51	0°37'05	minimum elong	15007 Oct 06 02:18	28°♄29'51	0°07'43	
evening rise	15006 Oct 29 19:56	0°♄34'22		behind sun begin	15007 Oct 05 20:43	28°♄01'59		
	15006 Oct 29 13:24	0°♄		behind sun end	15007 Oct 06 07:53	28°♄57'47		
	15006 Nov 15 17:24	0°♄			15007 Oct 06 20:19	0°♄		
evening max el	15006 Nov 18 13:41	3°♄07'17	21°19'26	evening rise	15007 Oct 14 02:23	14°♄48'09		
desc. node	15006 Nov 19 23:33	4°♄26'03			15007 Oct 21 22:06	0°♄		
retrograde	15006 Nov 30 13:00	9°♄03'11		evening max el	15007 Oct 31 17:33	13°♄53'55	19°58'05	
evening set	15006 Dec 03 08:15	8°♄45'02		desc. node	15007 Nov 06 20:48	18°♄13'03		
inferior conj	15006 Dec 12 03:18	4°♄53'17	-5°42'02	retrograde	15007 Nov 11 02:11	19°♄03'39		
minimum elong	15006 Dec 11 20:23	5°♄03'02	5°40'04	evening set	15007 Nov 13 03:13	18°♄52'33		
min. Earth dist.	15006 Dec 12 13:55	4°♄38'20	0.54437 AU	inferior conj	15007 Nov 21 22:59	14°♄53'34	-4°28'49	
morning rise	15006 Dec 20 09:00	1°♄03'24		minimum elong	15007 Nov 21 12:56	15°♄08'49	4°24'58	
direct	15006 Dec 24 07:38	0°♄29'46		min. Earth dist.	15007 Nov 23 21:14	13°♄43'23	0.54994 AU	
morning max el	15007 Jan 06 03:40	6°♄42'24	22°36'13	morning rise	15007 Nov 29 21:25	10°♄43'49		
asc. node	15007 Jan 14 10:33	16°♄49'53		direct	15007 Dec 04 19:55	9°♄50'31		
	15007 Jan 22 03:34	0°♄		morning max el	15007 Dec 18 12:52	16°♄38'09	24°25'50	
morning set	15007 Jan 28 06:08	12°♄24'30			15007 Dec 29 06:08	0°♄		
				asc. node	15008 Jan 01 07:46	4°♄56'04		
superior conj	15007 Feb 04 05:58	27°♄24'34	1°25'23	morning set	15008 Jan 12 18:05	27°♄07'38		
minimum elong	15007 Feb 04 08:00	27°♄35'21	1°25'48		15008 Jan 14 01:59	0°♄		
	15007 Feb 05 11:17	0°♄						
max. Earth dist.	15007 Feb 07 20:19	4°♄57'46	1.33783 AU	superior conj	15008 Jan 19 12:58	11°♄58'25	1°34'46	
evening rise	15007 Feb 12 08:28	14°♄00'40		minimum elong	15008 Jan 19 14:04	12°♄04'25	1°35'31	
desc. node	15007 Feb 15 23:51	20°♄55'53		max. Earth dist.	15008 Jan 21 19:16	16°♄53'40	1.32385 AU	
	15007 Feb 21 01:51	0°♄		evening rise	15008 Jan 27 00:06	27°♄48'39		
	15007 Mar 13 16:24	0°♄			15008 Jan 28 02:10	0°♄		
evening max el	15007 Mar 19 02:33	5°♄49'47	27°07'56	desc. node	15008 Feb 02 20:27	11°♄01'17		
retrograde	15007 Apr 01 13:44	13°♄19'48			15008 Feb 14 07:27	0°♄		
evening set	15007 Apr 08 04:06	10°♄48'23		evening max el	15008 Feb 29 15:01	19°♄03'54	27°33'28	
min. Earth dist.	15007 Apr 12 01:53	7°♄04'10	0.65403 AU	retrograde	15008 Mar 14 10:32	26°♄32'46		
asc. node	15007 Apr 12 07:14	6°♄49'22		evening set	15008 Mar 21 06:05	24°♄08'43		
inferior conj	15007 Apr 14 09:08	4°♄28'18	0°38'51	min. Earth dist.	15008 Mar 25 00:53	20°♄53'45	0.63501 AU	
minimum elong	15007 Apr 14 08:06	4°♄31'13	0°37'59	inferior conj	15008 Mar 27 19:18	18°♄05'02	-0°26'47	
	15007 Apr 18 21:37	30°♄		minimum elong	15008 Mar 27 20:09	18°♄02'52	0°26'38	
morning rise	15007 Apr 20 13:46	28°♄57'21		asc. node	15008 Mar 29 04:41	16°♄41'28		
direct	15007 Apr 23 08:18	28°♄16'09		morning rise	15008 Apr 03 12:40	12°♄49'03		
	15007 Apr 27 20:27	0°♄		direct	15008 Apr 05 22:53	12°♄20'15		
morning max el	15007 Apr 29 16:01	1°♄33'25	18°00'37	morning max el	15008 Apr 12 09:37	15°♄37'53	17°46'50	
desc. node	15007 May 15 01:53	23°♄48'14			15008 Apr 22 15:28	0°♄		
morning set	15007 May 17 21:08	28°♄23'00		morning set	15008 Apr 28 21:20	10°♄35'36		
	15007 May 18 20:54	0°♄		desc. node	15008 Apr 30 22:35	14°♄06'13		
					15008 May 10 10:08	0°♄		
superior conj	15007 Jun 01 09:23	21°♄43'01	-1°51'16					
minimum elong	15007 Jun 01 00:41	21°♄08'41	1°51'30	superior conj	15008 May 11 13:47	1°♄53'08	-1°17'43	
max. Earth dist.	15007 Jun 04 13:51	26°♄43'16	1.45741 AU	minimum elong	15008 May 11 06:20	1°♄22'43	1°17'35	
	15007 Jun 06 16:14	0°♄		max. Earth dist.	15008 May 17 08:40	11°♄11'48	1.44852 AU	
evening rise	15007 Jun 17 11:38	16°♄43'21		evening rise	15008 May 26 22:23	26°♄06'49		
	15007 Jun 26 04:06	0°♄			15008 May 29 11:30	0°♄		
greatest brilliancy	15007 Jun 30 18:26	6°♄52'44	-0.7m		15008 Jun 19 07:40	0°♄		
asc. node	15007 Jul 09 05:38	18°♄32'38		evening max el	15008 Jun 24 14:23	6°♄04'55	20°31'17	
evening max el	15007 Jul 12 12:23	22°♄12'56	19°30'08	asc. node	15008 Jun 25 02:32	6°♄34'42		
retrograde	15007 Jul 19 16:48	26°♄13'50		retrograde	15008 Jul 02 15:45	10°♄42'04		
evening set	15007 Jul 23 09:22	24°♄54'49		evening set	15008 Jul 06 18:43	9°♄05'29		
inferior conj	15007 Jul 28 18:14	19°♄01'09	3°00'49	inferior conj	15008 Jul 12 00:47	2°♄59'51	3°09'41	
minimum elong	15007 Jul 28 19:29	18°♄57'00	2°59'57	minimum elong	15008 Jul 12 01:03	2°♄58'52	3°08'48	
min. Earth dist.	15007 Jul 30 00:36	17°♄20'43	0.67445 AU	min. Earth dist.	15008 Jul 12 17:16	2°♄03'11	0.68452 AU	
morning rise	15007 Aug 03 05:03	12°♄35'40			15008 Jul 14 06:08	30°♄		
direct	15007 Aug 09 03:00	10°♄01'17		morning rise	15008 Jul 17 07:06	26°♄37'55		
desc. node	15007 Aug 11 00:25	10°♄15'02		direct	15008 Jul 22 17:30	24°♄15'06		
morning max el	15007 Aug 21 08:15	17°♄20'11	25°25'51	desc. node	15008 Jul 27 21:49	25°♄58'02		

	15008 Aug 01 21:57	0°♎		morning max el	15009 Jul 16 06:53	14°♊31'09	22°29'56
morning max el	15008 Aug 02 18:48	0°♎51'32	23°59'04		15009 Jul 28 19:54	0°♎	
	15008 Aug 24 20:12	0°♐			15009 Aug 17 18:54	0°♐	
morning set	15008 Sep 07 01:03	21°♐16'03		morning set	15009 Aug 18 20:31	1°♐43'38	
max. Earth dist.	15008 Sep 10 18:45	27°♐46'17	1.38522 AU	max. Earth dist.	15009 Aug 23 19:12	9°♐54'50	1.40889 AU
	15008 Sep 12 00:46	0°♑					
superior conj	15008 Sep 18 05:29	11°♑26'02	-0°26'22	superior conj	15009 Aug 31 15:33	23°♐34'10	-1°02'24
minimum elong	15008 Sep 18 07:20	11°♑34'50	0°25'57	minimum elong	15009 Aug 31 20:25	23°♐56'02	1°01'52
asc. node	15008 Sep 21 03:59	17°♑04'12		asc. node	15009 Sep 04 04:28	0°♑	
evening rise	15008 Sep 27 03:00	28°♑45'38		evening rise	15009 Sep 08 00:34	7°♑08'02	
	15008 Sep 27 18:08	0°♒			15009 Sep 10 18:29	12°♑17'49	
evening max el	15008 Oct 13 11:36	25°♒30'31	18°58'32	evening max el	15009 Sep 20 16:41	0°♒	
retrograde	15008 Oct 22 06:13	29°♒55'29		retrograde	15009 Sep 26 16:36	7°♒51'37	18°20'48
desc. node	15008 Oct 23 18:09	29°♒48'15		evening set	15009 Oct 04 05:43	11°♒41'47	
evening set	15008 Oct 24 03:19	29°♒44'09		desc. node	15009 Oct 06 06:48	11°♒25'34	
inferior conj	15008 Nov 01 11:22	25°♒27'27	-2°45'45	inferior conj	15009 Oct 10 15:35	9°♒16'51	
minimum elong	15008 Nov 01 04:28	25°♒39'30	2°42'22	minimum elong	15009 Oct 13 21:24	6°♒47'43	-1°02'08
min. Earth dist.	15008 Nov 04 08:51	23°♒26'35	0.56390 AU	min. Earth dist.	15009 Oct 13 19:03	6°♒52'32	1°00'40
morning rise	15008 Nov 09 02:47	20°♒43'31		morning rise	15009 Oct 17 03:42	4°♒08'35	0.58370 AU
direct	15008 Nov 14 20:36	19°♒25'55		direct	15009 Oct 21 03:50	1°♒26'38	
morning max el	15008 Nov 28 23:59	26°♒40'58	26°06'15		15009 Oct 24 20:54	30°♒♑	
	15008 Dec 02 04:29	0°♓			15009 Oct 27 11:14	29°♑42'12	
asc. node	15008 Dec 18 04:53	23°♓43'05		morning max el	15009 Oct 30 02:35	0°♒	
	15008 Dec 21 12:32	0°♓			15009 Nov 10 18:31	7°♒19'37	27°19'39
morning set	15008 Dec 27 05:13	11°♓44'40		asc. node	15009 Nov 27 19:18	0°♓	
				morning set	15009 Dec 05 01:53	12°♓59'35	
superior conj	15009 Jan 02 23:15	26°♓38'40	1°37'59		15009 Dec 11 13:40	26°♓09'57	
minimum elong	15009 Jan 02 23:17	26°♓38'50	1°38'54		15009 Dec 13 08:21	0°♓	
max. Earth dist.	15009 Jan 04 00:26	28°♓58'39	1.31479 AU	superior conj	15009 Dec 18 10:47	11°♓18'46	1°35'12
	15009 Jan 04 11:31	0°♈		minimum elong	15009 Dec 18 09:48	11°♓13'12	1°36'07
evening rise	15009 Jan 09 23:52	11°♈55'43		max. Earth dist.	15009 Dec 18 08:23	11°♓05'17	1.31089 AU
	15009 Jan 19 06:38	0°♉		evening rise	15009 Dec 25 05:17	26°♓14'56	
desc. node	15009 Jan 19 17:09	0°♉46'51			15009 Dec 26 23:51	0°♈	
	15009 Feb 09 07:06	0°♊		desc. node	15010 Jan 06 13:55	20°♈03'53	
evening max el	15009 Feb 10 23:58	1°♊41'23	27°27'43		15010 Jan 12 21:59	0°♉	
retrograde	15009 Feb 24 23:05	9°♊02'54		evening max el	15010 Jan 24 02:29	13°♉29'48	26°47'15
evening set	15009 Mar 03 19:04	6°♊53'25		retrograde	15010 Jan 24 02:29	13°♉29'48	26°47'15
min. Earth dist.	15009 Mar 07 13:55	4°♊01'39	0.61363 AU	evening set	15010 Feb 07 02:14	20°♉41'34	
inferior conj	15009 Mar 10 16:32	1°♊14'16	-1°44'41	min. Earth dist.	15010 Feb 13 15:42	18°♉53'50	
minimum elong	15009 Mar 10 20:17	1°♊05'51	1°43'04	inferior conj	15010 Feb 17 16:22	16°♉15'23	0.59139 AU
	15009 Mar 12 02:06	30°♊♈		minimum elong	15010 Feb 20 21:07	13°♉45'34	-3°11'16
asc. node	15009 Mar 16 02:09	27°♉05'52		morning rise	15010 Feb 21 04:15	13°♉31'36	3°08'19
morning rise	15009 Mar 18 00:37	26°♉16'18		direct	15010 Feb 28 20:09	9°♉08'35	
direct	15009 Mar 20 04:19	25°♉56'24		asc. node	15010 Mar 02 20:08	8°♉54'03	
morning max el	15009 Mar 27 02:23	29°♉25'17	17°51'02	morning max el	15010 Mar 02 23:35	8°♉54'08	
	15009 Mar 27 16:06	0°♊			15010 Mar 10 14:44	12°♉45'13	18°14'28
morning set	15009 Apr 11 18:29	23°♊46'48		morning set	15010 Mar 22 04:15	0°♊	
	15009 Apr 15 05:40	0°♋			15010 Mar 26 06:46	7°♊38'57	
desc. node	15009 Apr 17 19:15	4°♋33'32		superior conj	15010 Apr 04 20:21	25°♊26'27	-0°01'33
				minimum elong	15010 Apr 04 20:12	25°♊25'49	0°01'52
superior conj	15009 Apr 22 17:46	13°♋08'48	-0°38'59	behind sun begin	15010 Apr 04 12:46	24°♊52'10	
minimum elong	15009 Apr 22 14:11	12°♋53'29	0°39'01	behind sun end	15010 Apr 05 03:39	25°♊59'23	
max. Earth dist.	15009 Apr 30 00:12	25°♋16'59	1.43329 AU	desc. node	15010 Apr 04 15:50	25°♊06'04	
	15009 May 02 22:19	0°♌			15010 Apr 07 09:34	0°♋	
evening rise	15009 May 06 16:13	5°♌55'33		max. Earth dist.	15010 Apr 12 10:47	8°♋44'20	1.41329 AU
	15009 May 22 18:25	0°♍		evening rise	15010 Apr 17 04:09	16°♋34'40	
evening max el	15009 Jun 07 10:36	19°♍56'41	21°44'09		15010 Apr 25 16:50	0°♌	
asc. node	15009 Jun 11 23:32	23°♍43'27			15010 May 17 13:26	0°♍	
retrograde	15009 Jun 16 14:09	25°♍17'12		evening max el	15010 May 21 02:26	3°♍49'00	23°04'04
evening set	15009 Jun 21 04:07	23°♍23'48		asc. node	15010 May 29 20:36	9°♍42'53	
inferior conj	15009 Jun 26 09:58	17°♍07'33	3°07'12	retrograde	15010 May 31 10:31	9°♍53'55	
minimum elong	15009 Jun 26 09:17	17°♍09'54	3°06'11	evening set	15010 Jun 05 11:53	7°♍45'30	
min. Earth dist.	15009 Jun 26 13:03	16°♍56'47	0.68977 AU	inferior conj	15010 Jun 10 19:48	1°♍20'52	2°54'11
morning rise	15009 Jul 01 14:17	10°♍51'33		minimum elong	15010 Jun 10 18:19	1°♍26'01	2°52'59
direct	15009 Jul 06 12:15	8°♍45'19		min. Earth dist.	15010 Jun 10 09:55	1°♍55'05	0.69017 AU
desc. node	15009 Jul 14 19:08	13°♍05'20			15010 Jun 11 19:17	30°♒♌	

morning rise	15010 Jun 16 00:39	25° Π 12'11		morning rise	15011 May 31 12:23	9° Π 35'14	
direct	15010 Jun 20 10:07	23° Π 25'20		direct	15011 Jun 04 09:52	8° Π 08'28	
morning max el	15010 Jun 28 23:21	28° Π 20'34	21°06'24	morning max el	15011 Jun 11 22:25	12° Π 20'27	19°54'15
	15010 Jun 30 13:26	0° \mathfrak{C}		desc. node	15011 Jun 18 13:27	20° Π 10'58	
desc. node	15010 Jul 01 16:21	1° \mathfrak{C} 15'21			15011 Jun 25 13:10	0° \mathfrak{C}	
	15010 Jul 22 09:31	0° Ω		morning set	15011 Jul 08 20:07	19° \mathfrak{C} 59'30	
morning set	15010 Jul 29 16:08	11° Ω 10'40			15011 Jul 15 07:10	0° Ω	
max. Earth dist.	15010 Aug 06 01:06	22° Ω 55'31	1.43014 AU	max. Earth dist.	15011 Jul 19 13:16	6° Ω 41'49	1.44664 AU
	15010 Aug 10 08:16	0° \mathfrak{M}					
superior conj	15010 Aug 13 04:36	4° \mathfrak{M} 47'24	-1°36'41	superior conj	15011 Jul 24 18:00	15° Ω 01'05	-2°02'58
minimum elong	15010 Aug 13 11:56	5° \mathfrak{M} 18'33	1°36'20	minimum elong	15011 Jul 25 00:36	15° Ω 27'45	2°03'19
evening rise	15010 Aug 24 20:37	25° \mathfrak{M} 13'56		evening rise	15011 Aug 02 20:00	0° \mathfrak{M}	
asc. node	15010 Aug 25 21:09	27° \mathfrak{M} 03'42		asc. node	15011 Aug 07 04:12	7° \mathfrak{M} 20'34	
	15010 Aug 27 12:39	0° \mathfrak{L}			15011 Aug 12 17:44	16° \mathfrak{M} 46'22	
evening max el	15010 Sep 10 04:21	20° \mathfrak{L} 48'02	18°03'28	evening max el	15011 Aug 21 06:00	0° \mathfrak{L}	
retrograde	15010 Sep 16 22:29	24° \mathfrak{L} 16'29		retrograde	15011 Aug 24 18:54	4° \mathfrak{L} 09'34	18°05'10
evening set	15010 Sep 19 06:51	23° \mathfrak{L} 51'21		evening set	15011 Aug 31 04:14	7° \mathfrak{L} 29'55	
inferior conj	15010 Sep 26 04:03	18° \mathfrak{L} 53'22	0°25'29	inferior conj	15011 Sep 02 21:02	6° \mathfrak{L} 52'22	
minimum elong	15010 Sep 26 04:51	18° \mathfrak{L} 51'28	0°25'24	minimum elong	15011 Sep 09 03:33	1° \mathfrak{L} 36'20	1°32'25
desc. node	15010 Sep 27 13:02	17° \mathfrak{L} 34'47			15011 Sep 09 05:45	1° \mathfrak{L} 30'26	1°31'37
min. Earth dist.	15010 Sep 29 07:46	15° \mathfrak{L} 55'16	0.60633 AU	min. Earth dist.	15011 Sep 10 15:18	30° \mathfrak{R} \mathfrak{M}	
morning rise	15010 Oct 02 23:46	13° \mathfrak{L} 02'02		desc. node	15011 Sep 11 21:30	28° \mathfrak{M} 40'23	0.62898 AU
direct	15010 Oct 09 14:37	10° \mathfrak{L} 52'34		morning rise	15011 Sep 14 10:31	26° \mathfrak{M} 16'05	
morning max el	15010 Oct 23 20:49	18° \mathfrak{L} 45'59	27°55'37	direct	15011 Sep 15 12:15	25° \mathfrak{M} 25'04	
	15010 Nov 02 09:00	0° \mathfrak{M}			15011 Sep 22 04:23	22° \mathfrak{M} 57'09	
	15010 Nov 20 14:34	0° \mathfrak{J}		morning max el	15011 Oct 05 05:06	0° \mathfrak{L}	
asc. node	15010 Nov 21 22:48	2° \mathfrak{J} 37'31			15011 Oct 06 04:35	0° \mathfrak{L} 57'17	27°52'43
morning set	15010 Nov 25 17:31	10° \mathfrak{J} 18'52		asc. node	15011 Oct 27 13:01	0° \mathfrak{M}	
max. Earth dist.	15010 Dec 01 15:21	23° \mathfrak{J} 05'07	1.31237 AU	morning set	15011 Nov 08 19:36	22° \mathfrak{M} 30'26	
					15011 Nov 09 14:36	24° \mathfrak{M} 06'12	
superior conj	15010 Dec 02 21:42	25° \mathfrak{J} 53'41	1°26'28	max. Earth dist.	15011 Nov 12 11:06	0° \mathfrak{J}	
minimum elong	15010 Dec 02 19:53	25° \mathfrak{J} 43'34	1°27'16		15011 Nov 14 17:34	4° \mathfrak{J} 49'40	1.31937 AU
	15010 Dec 04 17:53	0° \mathfrak{Z}		superior conj	15011 Nov 17 06:06	10° \mathfrak{J} 18'19	1°11'50
evening rise	15010 Dec 09 14:17	10° \mathfrak{Z} 41'33		minimum elong	15011 Nov 17 03:49	10° \mathfrak{J} 05'50	1°12'25
	15010 Dec 19 06:37	0° \approx		evening rise	15011 Nov 24 01:03	25° \mathfrak{J} 11'16	
desc. node	15010 Dec 24 10:46	8° \approx 41'53			15011 Nov 26 07:18	0° \mathfrak{Z}	
evening max el	15011 Jan 05 20:44	24° \approx 25'13	25°33'50	desc. node	15011 Dec 11 07:44	26° \mathfrak{Z} 26'48	
	15011 Jan 13 16:21	0° \mathfrak{X}			15011 Dec 14 01:41	0° \approx	
retrograde	15011 Jan 19 18:17	1° \mathfrak{X} 25'14		evening max el	15011 Dec 18 08:00	4° \approx 38'23	23°57'23
evening set	15011 Jan 25 16:04	0° \mathfrak{X} 05'07		retrograde	15011 Dec 31 21:04	11° \approx 21'55	
	15011 Jan 25 20:40	30° \mathfrak{R} \approx		evening set	15012 Jan 05 17:21	10° \approx 30'53	
min. Earth dist.	15011 Jan 30 09:23	27° \approx 25'22	0.57068 AU	min. Earth dist.	15012 Jan 11 19:25	7° \approx 32'08	0.55446 AU
inferior conj	15011 Feb 02 05:43	25° \approx 29'37	-4°36'39	inferior conj	15012 Jan 13 17:34	6° \approx 23'03	-5°41'13
minimum elong	15011 Feb 02 14:54	25° \approx 14'03	4°33'30	minimum elong	15012 Jan 14 00:03	6° \approx 13'20	5°39'28
morning rise	15011 Feb 10 16:32	21° \approx 14'22		morning rise	15012 Jan 22 08:28	2° \approx 26'20	
direct	15011 Feb 12 18:05	21° \approx 01'30		direct	15012 Jan 24 20:41	2° \approx 10'22	
asc. node	15011 Feb 17 21:02	22° \approx 26'07		morning max el	15012 Feb 04 09:44	7° \approx 15'43	20°06'12
morning max el	15011 Feb 21 18:33	25° \approx 25'45	18°58'55	asc. node	15012 Feb 04 18:25	7° \approx 37'01	
	15011 Feb 25 16:17	0° \mathfrak{X}			15012 Feb 19 04:44	0° \mathfrak{X}	
morning set	15011 Mar 10 05:27	21° \mathfrak{X} 57'44		morning set	15012 Feb 22 11:00	6° \mathfrak{X} 33'06	
	15011 Mar 14 07:20	0° \mathfrak{Y}					
superior conj	15011 Mar 18 17:20	8° \mathfrak{Y} 33'30	0°31'06	superior conj	15012 Mar 01 04:19	22° \mathfrak{X} 17'47	0°57'25
minimum elong	15011 Mar 18 19:13	8° \mathfrak{Y} 42'28	0°30'44	minimum elong	15012 Mar 01 06:56	22° \mathfrak{X} 30'50	0°57'15
desc. node	15011 Mar 22 12:22	15° \mathfrak{Y} 39'48			15012 Mar 05 02:22	0° \mathfrak{Y}	
max. Earth dist.	15011 Mar 25 17:23	21° \mathfrak{Y} 28'11	1.39081 AU	max. Earth dist.	15012 Mar 07 00:07	3° \mathfrak{Y} 38'00	1.36835 AU
evening rise	15011 Mar 29 13:21	28° \mathfrak{Y} 09'15		desc. node	15012 Mar 08 08:53	6° \mathfrak{Y} 11'19	
	15011 Mar 30 15:24	0° \mathfrak{Z}		evening rise	15012 Mar 10 18:12	10° \mathfrak{Y} 33'29	
	15011 Apr 19 04:03	0° Π			15012 Mar 22 07:18	0° \mathfrak{Z}	
evening max el	15011 May 03 16:12	17° Π 42'44	24°25'02	evening max el	15012 Apr 13 15:48	0° Π	
retrograde	15011 May 15 03:34	24° Π 25'41		retrograde	15012 Apr 15 05:48	1° Π 36'26	25°39'56
asc. node	15011 May 16 17:46	24° Π 14'44		asc. node	15012 Apr 27 16:05	8° Π 46'21	
evening set	15011 May 20 16:25	22° Π 05'09		evening set	15012 May 02 15:01	7° Π 05'42	
min. Earth dist.	15011 May 25 05:43	16° Π 51'29	0.68583 AU	min. Earth dist.	15012 May 03 16:05	6° Π 17'32	
inferior conj	15011 May 26 04:21	15° Π 35'20	2°30'47	inferior conj	15012 May 07 22:20	1° Π 39'59	0.67691 AU
minimum elong	15011 May 26 02:20	15° Π 42'10	2°29'23	minimum elong	15012 May 09 09:43	29° \mathfrak{Z} 47'00	1°56'36
					15012 May 09 07:34	29° \mathfrak{Z} 53'53	1°55'09

	15012 May 09 05:40	30°R♂		morning rise	15013 Apr 29 08:08	8°♂11'29	
morning rise	15012 May 14 23:35	23°♂56'48		direct	15013 May 02 08:13	7°♂21'26	
direct	15012 May 18 09:54	22°♂49'23		morning max el	15013 May 08 17:35	10°♂43'13	18°16'19
morning max el	15012 May 25 04:52	26°♂29'43	18°57'01	desc. node	15013 May 22 07:19	29°♂33'33	
	15012 May 28 08:53	0°♂			15013 May 22 14:00	0°♂	
desc. node	15012 Jun 04 10:26	9°♂40'13		morning set	15013 May 28 09:29	9°♂15'17	
greatest brilliancy	15012 Jun 07 12:50	14°♂17'39	-0.7m		15013 Jun 10 12:17	0°♂	
morning set	15012 Jun 17 03:49	29°♂04'26					
	15012 Jun 17 18:10	0°♂		superior conj	15013 Jun 12 19:27	3°♂35'41	-2°04'54
max. Earth dist.	15012 Jul 01 06:46	21°♂01'54	1.45673 AU	minimum elong	15013 Jun 12 12:42	3°♂09'19	2°05'32
				max. Earth dist.	15013 Jun 14 03:12	5°♂39'39	1.45937 AU
superior conj	15012 Jul 03 10:55	24°♂26'11	-2°13'54	evening rise	15013 Jun 28 20:15	28°♂34'23	
minimum elong	15012 Jul 03 11:28	24°♂28'24	2°14'51		15013 Jun 29 18:14	0°♂	
	15012 Jul 06 23:42	0°♂		greatest brilliancy	15013 Jul 09 10:09	14°♂15'7'03	-0.8m
evening rise	15012 Jul 18 12:29	18°♂12'27'18		asc. node	15013 Jul 16 11:07	25°♂11'1'15	
	15012 Jul 25 15:59	0°♂			15013 Jul 20 07:34	0°♂	
asc. node	15012 Jul 29 14:22	6°♂11'1'00		evening max el	15013 Jul 21 19:31	1°♂35'15	19°01'35
evening max el	15012 Aug 07 08:52	17°♂47'36	18°24'48	retrograde	15013 Jul 28 14:50	5°♂19'50	
retrograde	15012 Aug 13 18:49	21°♂13'26		evening set	15013 Aug 01 01:51	4°♂10'35	
evening set	15012 Aug 16 20:32	20°♂20'49			15013 Aug 05 07:12	30°R♂	
inferior conj	15012 Aug 22 15:53	14°♂48'43	2°19'39	inferior conj	15013 Aug 06 13:35	28°♂12'24'10	2°49'57
minimum elong	15012 Aug 22 18:13	14°♂41'47	2°18'42	minimum elong	15013 Aug 06 15:21	28°♂18'32	2°49'04
min. Earth dist.	15012 Aug 24 20:36	12°♂12'55	0.64954 AU	min. Earth dist.	15013 Aug 08 04:01	26°♂12'21'16	0.66656 AU
morning rise	15012 Aug 28 14:35	8°♂26'44		morning rise	15013 Aug 12 04:07	21°♂15'8'26	
desc. node	15012 Aug 31 08:02	6°♂41'22		direct	15013 Aug 18 07:50	19°♂12'20'56	
direct	15012 Sep 04 02:31	5°♂49'29		desc. node	15013 Aug 18 05:30	19°♂12'20'58	
morning max el	15012 Sep 17 15:10	13°♂44'28	27°15'16	morning max el	15013 Aug 31 02:35	26°♂15'7'14	26°11'12
	15012 Sep 30 19:27	0°♂			15013 Sep 02 22:57	0°♂	
	15012 Oct 19 04:31	0°♂			15013 Sep 24 10:31	0°♂	
morning set	15012 Oct 23 02:12	7°♂12'24'54		morning set	15013 Oct 06 01:08	20°♂12'08'23	
asc. node	15012 Oct 25 16:19	12°♂13'32'36		max. Earth dist.	15013 Oct 09 20:15	27°♂12'21'16	1.34977 AU
max. Earth dist.	15012 Oct 27 11:42	16°♂13'1'16	1.33196 AU		15013 Oct 11 04:42	0°♂	
				asc. node	15013 Oct 12 12:58	2°♂12'40'13	
superior conj	15012 Oct 31 09:47	24°♂12'26'04	0°51'16				
minimum elong	15012 Oct 31 07:35	24°♂14'12'22	0°51'38	superior conj	15013 Oct 15 06:20	8°♂12'11'10	0°24'58
	15012 Nov 03 00:05	0°♂		minimum elong	15013 Oct 15 04:58	8°♂12'04'10	0°25'14
evening rise	15012 Nov 07 11:42	9°♂13'38'36		evening rise	15013 Oct 22 20:21	23°♂12'59'12	
	15012 Nov 17 22:21	0°♂			15013 Oct 25 18:38	0°♂	
desc. node	15012 Nov 27 04:49	12°♂12'35'8'30		evening max el	15013 Nov 10 14:16	24°♂12'56'28	20°42'17
evening max el	15012 Nov 28 18:38	14°♂13'36'08	22°14'36	desc. node	15013 Nov 14 02:01	27°♂12'52'58	
retrograde	15012 Dec 11 11:20	20°♂13'53'16			15013 Nov 18 06:58	0°♂	
evening set	15012 Dec 14 23:53	20°♂13'25'55		retrograde	15013 Nov 21 21:40	0°♂13'33'49	
min. Earth dist.	15012 Dec 23 01:18	16°♂13'49'20	0.54550 AU	evening set	15013 Nov 24 07:24	0°♂13'19'42	
inferior conj	15012 Dec 23 13:07	16°♂13'32'47	-5°59'21		15013 Nov 25 15:59	30°R♂	
minimum elong	15012 Dec 23 11:07	16°♂13'35'35	5°58'18	inferior conj	15013 Dec 03 04:22	26°♂12'26'04	-5°16'43
morning rise	15012 Dec 31 23:23	12°♂13'45'37		minimum elong	15013 Dec 02 19:08	26°♂12'39'21	5°13'48
direct	15013 Jan 04 08:16	12°♂13'20'16		min. Earth dist.	15013 Dec 04 06:56	25°♂12'47'50	0.54559 AU
morning max el	15013 Jan 16 09:57	18°♂13'08'44	21°36'14	morning rise	15013 Dec 11 06:52	22°♂12'30'27	
asc. node	15013 Jan 21 15:45	24°♂13'09'28		direct	15013 Dec 15 15:58	21°♂12'49'20	
	15013 Jan 25 15:08	0°♂		morning max el	15013 Dec 28 22:23	28°♂12'17'11	23°22'48
morning set	15013 Feb 05 20:42	21°♂13'16'13			15013 Dec 30 15:27	0°♂	
	15013 Feb 09 23:46	0°♂		asc. node	15014 Jan 08 13:01	11°♂12'34'58	
					15014 Jan 18 11:35	0°♂	
superior conj	15013 Feb 13 01:25	6°♂13'27'47	1°17'04	morning set	15014 Jan 21 08:24	6°♂12'00'1'02	
minimum elong	15013 Feb 13 03:50	6°♂13'40'22	1°17'15				
max. Earth dist.	15013 Feb 17 11:30	15°♂13'30'39	1.34800 AU	superior conj	15014 Jan 28 05:34	20°♂12'55'10	1°30'08
evening rise	15013 Feb 21 15:12	23°♂13'36'39		minimum elong	15014 Jan 28 07:14	21°♂12'00'4'08	1°30'42
desc. node	15013 Feb 23 05:26	26°♂13'36'07		max. Earth dist.	15014 Jan 31 06:11	27°♂12'22'34	1.33132 AU
	15013 Feb 25 01:52	0°♂			15014 Feb 01 12:17	0°♂	
	15013 Mar 15 22:35	0°♂		evening rise	15014 Feb 05 00:56	7°♂12'10'18	
evening max el	15013 Mar 28 19:40	15°♂12'22'40	26°41'26	desc. node	15014 Feb 10 02:01	16°♂12'50'04	
retrograde	15013 Apr 10 23:09	22°♂12'47'48			15014 Feb 17 15:47	0°♂	
evening set	15013 Apr 17 09:03	20°♂12'15'35		evening max el	15014 Mar 11 08:55	28°♂12'51'22	27°22'06
asc. node	15013 Apr 19 12:22	18°♂12'17'21			15014 Mar 12 14:15	0°♂	
min. Earth dist.	15013 Apr 21 09:33	16°♂12'12'46	0.66360 AU	retrograde	15014 Mar 24 23:57	6°♂12'21'39	
inferior conj	15013 Apr 23 09:41	13°♂12'49'59	1°10'49	evening set	15014 Mar 31 17:14	3°♂12'52'13	
minimum elong	15013 Apr 23 08:01	13°♂12'54'57	1°09'37	min. Earth dist.	15014 Apr 04 13:24	0°♂12'21'20	0.64639 AU

	15014 Apr 04 21:29	30° Υ			15015 Feb 11 15:26	0° Υ	
asc. node	15014 Apr 06 09:48	28° Υ 21'44		evening max el	15015 Feb 21 19:59	11° Υ 51'01	27°35'09
inferior conj	15014 Apr 07 01:44	27° Υ 38'21	0°12'35	retrograde	15015 Mar 07 17:43	19° Υ 18'19	
minimum elong	15014 Apr 07 01:22	27° Υ 39'18	0°12'06	evening set	15015 Mar 14 14:09	16° Υ 59'14	
transit middle	15014 Apr 07 01:22	27° Υ 39'18	0°12'06	min. Earth dist.	15015 Mar 18 08:17	13° Υ 55'17	0.62607 AU
transit begin	15014 Apr 06 23:22	27° Υ 44'45		inferior conj	15015 Mar 21 06:52	11° Υ 04'51	-0°58'24
transit end	15014 Apr 07 03:23	27° Υ 33'52		minimum elong	15015 Mar 21 08:50	11° Υ 00'05	0°57'41
morning rise	15014 Apr 13 11:31	22° Υ 13'40		asc. node	15015 Mar 24 07:15	8° Υ 20'01	
direct	15014 Apr 16 02:23	21° Υ 38'09		morning rise	15015 Mar 28 06:21	5° Υ 56'29	
morning max el	15014 Apr 22 10:18	24° Υ 53'50	17°52'37	direct	15015 Mar 30 13:26	5° Υ 32'01	
	15014 Apr 26 17:22	0° ♄		morning max el	15015 Apr 06 04:04	8° Υ 53'13	17°46'24
desc. node	15014 May 09 04:05	19° ♄ 44'09			15015 Apr 20 05:37	0° ♄	
morning set	15014 May 09 18:55	20° ♄ 45'58		morning set	15015 Apr 22 04:51	3° ♄ 26'19	
	15014 May 15 08:39	0° ♂		desc. node	15015 Apr 26 00:47	10° ♄ 07'00	
superior conj	15014 May 23 12:48	13° ♂ 14'24	-1°38'10	superior conj	15015 May 04 03:07	23° ♄ 53'08	-1°01'29
minimum elong	15014 May 23 04:02	12° ♂ 39'27	1°38'11	minimum elong	15015 May 03 21:13	23° ♄ 28'36	1°01'23
max. Earth dist.	15014 May 27 23:16	20° ♂ 15'57	1.45448 AU		15015 May 07 20:19	0° ♂	
	15014 Jun 03 05:06	0° ♄		max. Earth dist.	15015 May 10 16:30	4° ♂ 35'19	1.44270 AU
evening rise	15014 Jun 08 10:25	8° ♄ 02'07		evening rise	15015 May 18 22:21	17° ♂ 32'19	
greatest brilliancy	15014 Jun 23 03:42	0° Ω 07'48	-0.6m		15015 May 27 03:42	0° ♄	
	15014 Jun 23 01:33	0° Ω		evening max el	15015 Jun 18 00:14	29° ♄ 18'24	21°01'02
asc. node	15014 Jul 03 07:58	13° Ω 37'47			15015 Jun 18 17:17	0° Ω	
evening max el	15014 Jul 05 00:51	15° Ω 26'18	19°54'26	asc. node	15015 Jun 20 04:54	1° Ω 19'24	
retrograde	15014 Jul 12 13:28	19° Ω 41'50		retrograde	15015 Jun 26 12:29	4° Ω 13'57	
evening set	15014 Jul 16 10:21	18° Ω 15'16		evening set	15015 Jun 30 19:57	2° Ω 30'15	
inferior conj	15014 Jul 21 17:40	12° Ω 16'04	3°06'03		15015 Jul 03 07:02	30° ♄	
minimum elong	15014 Jul 21 18:31	12° Ω 13'12	3°05'11	inferior conj	15015 Jul 06 01:37	26° ♄ 19'48	3°09'57
min. Earth dist.	15014 Jul 22 18:00	10° Ω 53'58	0.67927 AU	minimum elong	15015 Jul 06 01:29	26° ♄ 20'15	3°09'02
morning rise	15014 Jul 27 02:16	5° Ω 51'35		min. Earth dist.	15015 Jul 06 12:24	25° ♄ 42'23	0.68735 AU
direct	15014 Aug 01 19:18	3° Ω 21'37		morning rise	15015 Jul 11 06:46	19° ♄ 59'52	
desc. node	15014 Aug 05 02:57	4° Ω 03'59		direct	15015 Jul 16 11:53	17° ♄ 43'33	
morning max el	15014 Aug 13 13:31	10° Ω 24'23	24°49'48	desc. node	15015 Jul 23 00:18	20° ♄ 25'58	
	15014 Aug 29 03:38	0° ♄		morning max el	15015 Jul 27 00:26	23° ♄ 59'41	23°20'47
	15014 Sep 17 02:23	0° ♂			15015 Aug 01 08:45	0° Ω	
morning set	15014 Sep 18 07:23	2° ♄ 07'00		morning set	15015 Aug 22 12:57	0° ♄	
max. Earth dist.	15014 Sep 21 20:46	8° ♄ 30'18	1.37161 AU	max. Earth dist.	15015 Aug 30 16:34	13° ♄ 10'30	
					15015 Sep 03 18:52	20° ♄ 08'37	1.39543 AU
superior conj	15014 Sep 28 16:33	21° ♄ 25'42	-0°06'30		15015 Sep 09 08:08	0° ♄	
minimum elong	15014 Sep 28 16:57	21° ♄ 27'40	0°06'10	superior conj	15015 Sep 11 12:40	4° ♄ 01'09	-0°41'36
behind sun begin	15014 Sep 28 10:49	20° ♄ 57'40		minimum elong	15015 Sep 11 15:46	4° ♄ 15'29	0°41'06
behind sun end	15014 Sep 28 23:06	21° ♄ 57'43		asc. node	15015 Sep 16 06:10	12° ♄ 56'03	
asc. node	15014 Sep 29 09:35	22° ♄ 49'10		evening rise	15015 Sep 20 21:49	21° ♄ 54'19	
	15014 Oct 03 00:09	0° ♄			15015 Sep 25 03:37	0° ♄	
evening rise	15014 Oct 07 00:40	8° ♄ 06'45		evening max el	15015 Oct 06 23:28	18° ♄ 00'05	18°39'53
	15014 Oct 19 02:31	0° ♄		retrograde	15015 Oct 15 04:17	22° ♄ 08'27	
evening max el	15014 Oct 24 00:14	6° ♄ 03'22	19°29'58	evening set	15015 Oct 17 02:24	21° ♄ 55'37	
desc. node	15014 Oct 31 23:19	10° ♄ 44'56		desc. node	15015 Oct 18 20:41	21° ♄ 22'43	
retrograde	15014 Nov 02 16:22	10° ♄ 53'44		inferior conj	15015 Oct 25 03:22	17° ♄ 30'24	-2°00'29
evening set	15014 Nov 04 14:02	10° ♄ 43'19		minimum elong	15015 Oct 24 22:28	17° ♄ 39'33	1°57'52
inferior conj	15014 Nov 13 05:59	6° ♄ 37'32	-3°46'50	min. Earth dist.	15015 Oct 28 06:31	15° ♄ 10'51	0.57181 AU
minimum elong	15014 Nov 12 20:47	6° ♄ 52'18	3°42'51	morning rise	15015 Nov 01 15:12	12° ♄ 30'10	
min. Earth dist.	15014 Nov 15 15:52	5° ♄ 04'42	0.55493 AU	direct	15015 Nov 07 15:42	11° ♄ 00'48	
morning rise	15014 Nov 21 01:30	2° ♄ 14'00		morning max el	15015 Nov 21 21:21	18° ♄ 26'45	26°41'35
direct	15014 Nov 26 08:36	1° ♄ 10'57			15015 Dec 01 14:05	0° ♄	
morning max el	15014 Dec 10 07:32	8° ♄ 11'41	25°10'59	asc. node	15015 Dec 13 07:14	19° ♄ 10'44	
asc. node	15014 Dec 26 10:11	0° ♄ 10'17			15015 Dec 18 18:50	0° ♄	
	15014 Dec 26 07:50	0° ♄		morning set	15015 Dec 21 06:21	5° ♄ 14'04	
morning set	15015 Jan 05 20:13	20° ♄ 41'59					
	15015 Jan 10 02:08	0° ♄		superior conj	15015 Dec 28 01:14	20° ♄ 13'08	1°37'31
superior conj	15015 Jan 12 14:14	5° ♄ 32'28	1°36'53	minimum elong	15015 Dec 28 00:49	20° ♄ 10'47	1°38'28
minimum elong	15015 Jan 12 14:53	5° ♄ 36'03	1°37'43	max. Earth dist.	15015 Dec 28 14:23	21° ♄ 26'34	1.31240 AU
max. Earth dist.	15015 Jan 14 07:53	9° ♄ 21'24	1.31927 AU		15016 Jan 01 11:15	0° ♄	
evening rise	15015 Jan 19 20:18	21° ♄ 06'48		evening rise	15016 Jan 03 22:41	5° ♄ 19'28	
	15015 Jan 24 07:16	0° ♄		desc. node	15016 Jan 14 19:24	26° ♄ 22'13	
desc. node	15015 Jan 27 22:40	6° ♄ 47'51			15016 Jan 16 22:25	0° ♄	

evening max el	15016 Feb 04 02:33	24° Υ 08'54	27°15'00	desc. node	15016 Dec 31 16:12	15° \approx 24'30	
	15016 Feb 12 04:18	0° Υ			15017 Jan 10 21:27	0° Υ	
retrograde	15016 Feb 18 02:45	1° Υ 27'02		evening max el	15017 Jan 16 01:55	5° Υ 35'41	26°19'48
	15016 Feb 23 19:52	30° Υ		retrograde	15017 Jan 30 01:05	12° Υ 41'54	
evening set	15016 Feb 24 20:38	29° Υ 26'12		evening set	15017 Feb 05 09:01	11° Υ 05'44	
min. Earth dist.	15016 Feb 28 17:01	26° Υ 41'20	0.60402 AU	min. Earth dist.	15017 Feb 09 15:22	8° Υ 28'34	0.58222 AU
inferior conj	15016 Mar 02 21:28	23° Υ 59'17	-2°20'45	inferior conj	15017 Feb 12 17:51	6° Υ 11'46	-3°48'34
minimum elong	15016 Mar 03 02:39	23° Υ 48'14	2°18'31	minimum elong	15017 Feb 13 02:12	5° Υ 56'24	3°45'19
asc. node	15016 Mar 10 04:43	19° Υ 15'09		morning rise	15017 Feb 20 22:30	1° Υ 43'40	
morning rise	15016 Mar 10 12:00	19° Υ 09'51		direct	15017 Feb 22 22:24	1° Υ 30'15	
direct	15016 Mar 12 13:31	18° Υ 52'46		asc. node	15017 Feb 25 02:07	1° Υ 46'38	
morning max el	15016 Mar 19 19:24	22° Υ 30'18	17°58'34	morning max el	15017 Mar 03 04:31	5° Υ 34'25	18°30'41
	15016 Mar 25 15:29	0° Υ			15017 Mar 18 13:21	0° Υ	
morning set	15016 Apr 04 09:08	16° Υ 57'06		morning set	15017 Mar 19 02:19	1° Υ 02'11	
desc. node	15016 Apr 11 21:23	0° Υ 37'00					
	15016 Apr 11 13:07	0° Υ		superior conj	15017 Mar 28 04:00	18° Υ 16'10	0°13'01
superior conj	15016 Apr 14 17:05	5° Υ 36'19	-0°22'42	minimum elong	15017 Mar 28 04:53	18° Υ 20'18	0°12'39
minimum elong	15016 Apr 14 15:06	5° Υ 27'40	0°22'52	behind sun begin	15017 Mar 28 00:32	18° Υ 00'09	
max. Earth dist.	15016 Apr 22 05:41	18° Υ 24'47	1.42524 AU	behind sun end	15017 Mar 28 09:15	18° Υ 40'25	
evening rise	15016 Apr 27 23:05	27° Υ 41'15		desc. node	15017 Mar 29 17:58	21° Υ 10'30	
	15016 Apr 29 10:12	0° Υ			15017 Apr 03 16:45	0° Υ	
	15016 May 19 20:27	0° Υ		max. Earth dist.	15017 Apr 04 14:37	1° Υ 34'51	1.40394 AU
evening max el	15016 May 30 18:26	13° Υ 10'54	22°17'36	evening rise	15017 Apr 08 20:02	8° Υ 44'17	
asc. node	15016 Jun 06 01:56	18° Υ 01'04			15017 Apr 22 10:00	0° Υ	
retrograde	15016 Jun 09 10:07	18° Υ 50'23		evening max el	15017 May 13 09:16	27° Υ 04'26	23°38'46
evening set	15016 Jun 14 04:49	16° Υ 50'35			15017 May 16 14:52	0° Υ	
inferior conj	15016 Jun 19 11:19	10° Υ 30'38	3°02'57	asc. node	15017 May 23 23:02	3° Υ 25'34	
minimum elong	15016 Jun 19 10:17	10° Υ 34'16	3°01'51	retrograde	15017 May 24 05:03	3° Υ 25'51	
min. Earth dist.	15016 Jun 19 08:57	10° Υ 38'55	0.69061 AU	evening set	15017 May 29 11:24	1° Υ 11'53	
morning rise	15016 Jun 24 15:33	4° Υ 17'26			15017 May 30 17:17	30° Υ	
direct	15016 Jun 29 08:15	2° Υ 18'59		min. Earth dist.	15017 Jun 03 05:32	25° Υ 37'18	0.68898 AU
morning max el	15016 Jul 08 13:50	7° Υ 42'41	21°53'09	inferior conj	15017 Jun 03 20:49	24° Υ 44'52	2°45'32
desc. node	15016 Jul 08 21:33	8° Υ 02'11		minimum elong	15017 Jun 03 19:04	24° Υ 50'53	2°44'14
	15016 Jul 25 20:14	0° Υ		morning rise	15017 Jun 09 02:43	18° Υ 39'49	
morning set	15016 Aug 10 01:31	23° Υ 11'15		direct	15017 Jun 13 07:07	17° Υ 01'23	
	15016 Aug 14 06:37	0° Υ		morning max el	15017 Jun 21 08:50	21° Υ 36'23	20°34'01
max. Earth dist.	15016 Aug 15 21:07	2° Υ 38'45	1.41845 AU	desc. node	15017 Jun 25 18:43	26° Υ 33'19	
superior conj	15016 Aug 23 14:19	15° Υ 47'33	-1°17'30		15017 Jun 28 11:29	0° Υ	
minimum elong	15016 Aug 23 20:26	16° Υ 14'18	1°16'58	morning set	15017 Jul 19 01:07	0° Υ	
	15016 Aug 31 12:10	0° Υ			15017 Jul 20 12:46	2° Υ 17'25	
asc. node	15016 Sep 02 02:45	2° Υ 57'13		max. Earth dist.	15017 Jul 29 06:19	16° Υ 02'34	1.43794 AU
evening rise	15016 Sep 03 08:09	5° Υ 12'36		superior conj	15017 Aug 04 17:26	26° Υ 35'45	-1°49'14
	15016 Sep 18 17:07	0° Υ		minimum elong	15017 Aug 05 01:02	27° Υ 07'20	1°49'09
evening max el	15016 Sep 19 07:56	0° Υ 38'16	18°11'03		15017 Aug 06 18:22	0° Υ	
retrograde	15016 Sep 26 11:26	4° Υ 17'06		evening rise	15017 Aug 17 03:02	17° Υ 49'36	
evening set	15016 Sep 28 15:34	3° Υ 57'26		asc. node	15017 Aug 19 23:19	22° Υ 48'11	
desc. node	15016 Oct 04 18:06	0° Υ 11'51			15017 Aug 24 03:47	0° Υ	
	15016 Oct 04 23:43	30° Υ		evening max el	15017 Sep 02 21:19	13° Υ 46'36	18°01'53
inferior conj	15016 Oct 05 22:32	29° Υ 10'49	-0°22'28	retrograde	15017 Sep 09 10:25	17° Υ 09'57	
minimum elong	15016 Oct 05 21:45	29° Υ 12'32	0°21'47	evening set	15017 Sep 11 22:21	16° Υ 39'49	
min. Earth dist.	15016 Oct 09 04:56	26° Υ 21'08	0.59322 AU	inferior conj	15017 Sep 18 12:50	11° Υ 33'32	0°56'28
morning rise	15016 Oct 13 00:35	23° Υ 36'05		minimum elong	15017 Sep 18 14:26	11° Υ 29'32	0°55'59
direct	15016 Oct 19 12:11	21° Υ 40'23		min. Earth dist.	15017 Sep 21 12:52	8° Υ 34'15	0.61613 AU
morning max el	15016 Nov 02 19:07	29° Υ 24'51	27°39'46	desc. node	15017 Sep 21 15:35	8° Υ 27'47	
	15016 Nov 03 09:17	0° Υ		morning rise	15017 Sep 25 03:50	5° Υ 32'35	
	15016 Nov 24 13:18	0° Υ		direct	15017 Oct 01 19:53	3° Υ 14'38	
asc. node	15016 Nov 29 04:11	8° Υ 37'39		morning max el	15017 Oct 16 00:05	11° Υ 11'22	27°59'04
morning set	15016 Dec 04 13:03	19° Υ 33'10			15017 Oct 30 19:26	0° Υ	
	15016 Dec 09 08:20	0° Υ		asc. node	15017 Nov 16 01:02	28° Υ 22'50	
max. Earth dist.	15016 Dec 10 22:25	3° Υ 32'06	1.31086 AU		15017 Nov 16 20:26	0° Υ	
superior conj	15016 Dec 11 12:43	4° Υ 52'05	1°32'13	morning set	15017 Nov 18 14:17	3° Υ 33'34	
minimum elong	15016 Dec 11 11:21	4° Υ 44'22	1°33'06	max. Earth dist.	15017 Nov 24 04:01	15° Υ 27'30	1.31473 AU
evening rise	15016 Dec 18 05:53	19° Υ 43'06		superior conj	15017 Nov 25 22:46	19° Υ 23'05	1°20'59
	15016 Dec 23 04:50	0° Υ		minimum elong	15017 Nov 25 20:42	19° Υ 11'38	1°21'41
					15017 Nov 30 17:43	0° Υ	

evening rise	15017 Dec 02 15:51	4° ♁ 11'43		evening rise	15018 Nov 17 02:48	18° ♁ 41'02	
	15017 Dec 16 03:47	0° ♁			15018 Nov 22 13:58	0° ♁	
desc. node	15017 Dec 18 13:06	3° ♁ 41'59		desc. node	15018 Dec 05 10:07	20° ♁ 58'29	
evening max el	15017 Dec 28 16:41	16° ♁ 10'17	24°54'38	evening max el	15018 Dec 10 02:17	26° ♁ 11'25	23°13'08
retrograde	15018 Jan 11 11:10	23° ♁ 03'44			15018 Dec 14 19:39	0° ♁	
evening set	15018 Jan 16 23:36	21° ♁ 55'54		retrograde	15018 Dec 23 08:34	2° ♁ 46'07	
min. Earth dist.	15018 Jan 22 04:38	19° ♁ 10'39	0.56310 AU	evening set	15018 Dec 27 15:35	2° ♁ 06'07	
inferior conj	15018 Jan 24 17:23	17° ♁ 33'38	-5°08'06		15019 Jan 01 12:28	30° ♁	
minimum elong	15018 Jan 25 02:12	17° ♁ 19'32	5°05'23	min. Earth dist.	15019 Jan 03 12:21	28° ♁ 53'22	0.54960 AU
morning rise	15018 Feb 02 07:07	13° ♁ 27'10		inferior conj	15019 Jan 04 21:13	28° ♁ 05'57	-5°55'58
direct	15018 Feb 04 12:09	13° ♁ 13'32		minimum elong	15019 Jan 05 00:34	28° ♁ 01'06	5°54'49
asc. node	15018 Feb 11 23:31	16° ♁ 01'55		morning rise	15019 Jan 13 11:04	24° ♁ 15'14	
morning max el	15018 Feb 14 03:19	17° ♁ 54'01	19°24'47	direct	15019 Jan 16 06:53	23° ♁ 56'16	
	15018 Feb 22 23:45	0° ♁		morning max el	15019 Jan 27 12:16	29° ♁ 19'59	20°42'03
morning set	15018 Mar 03 04:16	15° ♁ 29'00			15019 Jan 28 04:28	0° ♁	
	15018 Mar 10 10:53	0° ♁		asc. node	15019 Jan 29 20:53	1° ♁ 49'41	
				morning set	15019 Feb 15 11:49	0° ♁ 08'14	
superior conj	15018 Mar 11 07:25	1° ♁ 40'20	0°43'05		15019 Feb 15 10:14	0° ♁	
minimum elong	15018 Mar 11 09:45	1° ♁ 51'40	0°42'46	superior conj	15019 Feb 22 23:07	15° ♁ 36'51	1°06'35
desc. node	15018 Mar 16 14:30	11° ♁ 43'45		minimum elong	15019 Feb 23 01:43	15° ♁ 50'09	1°06'33
max. Earth dist.	15018 Mar 17 20:57	14° ♁ 03'27	1.38108 AU	max. Earth dist.	15019 Feb 28 04:49	26° ♁ 02'09	1.35921 AU
evening rise	15018 Mar 21 13:51	20° ♁ 40'24			15019 Mar 02 06:38	0° ♁	
	15018 Mar 27 01:42	0° ♁		desc. node	15019 Mar 03 11:02	2° ♁ 12'56	
	15018 Apr 16 10:33	0° ♁		evening rise	15019 Mar 04 01:57	3° ♁ 22'00	
evening max el	15018 Apr 25 22:43	10° ♁ 58'29	24°58'04		15019 Mar 20 01:03	0° ♁	
retrograde	15018 May 07 20:16	17° ♁ 54'19		evening max el	15019 Apr 08 12:12	24° ♁ 49'11	26°08'17
asc. node	15018 May 10 20:14	17° ♁ 16'06			15019 Apr 14 21:12	0° ♁	
evening set	15018 May 13 14:06	15° ♁ 29'26		retrograde	15019 Apr 21 06:44	2° ♁ 07'57	
min. Earth dist.	15018 May 18 00:07	10° ♁ 31'34	0.68257 AU		15019 Apr 26 23:29	30° ♁	
inferior conj	15018 May 19 04:16	8° ♁ 58'47	2°17'39	evening set	15019 Apr 27 11:10	29° ♁ 36'44	
minimum elong	15018 May 19 02:08	9° ♁ 05'51	2°16'12	asc. node	15019 Apr 27 17:32	29° ♁ 23'17	
morning rise	15018 May 24 14:27	3° ♁ 03'01		min. Earth dist.	15019 May 01 14:41	25° ♁ 14'19	0.67164 AU
direct	15018 May 28 07:05	1° ♁ 44'46		inferior conj	15019 May 03 07:37	23° ♁ 07'20	1°38'38
morning max el	15018 Jun 04 11:13	5° ♁ 41'31	19°28'05	minimum elong	15019 May 03 05:35	23° ♁ 13'39	1°37'16
desc. node	15018 Jun 12 15:46	15° ♁ 44'50		morning rise	15019 May 09 00:48	17° ♁ 22'01	
greatest brilliancy	15018 Jun 17 02:14	22° ♁ 06'58	-0.7m	direct	15019 May 12 06:31	16° ♁ 22'29	
	15018 Jun 22 08:54	0° ♁		morning max el	15019 May 18 20:37	19° ♁ 53'42	18°37'44
morning set	15018 Jun 29 15:52	11° ♁ 07'11			15019 May 26 21:14	0° ♁	
	15018 Jul 11 19:35	0° ♁		desc. node	15019 May 30 12:42	5° ♁ 25'18	
max. Earth dist.	15018 Jul 11 21:28	0° ♁ 07'22	1.45177 AU	morning set	15019 Jun 09 07:14	20° ♁ 35'32	
					15019 Jun 15 07:35	0° ♁	
superior conj	15018 Jul 15 21:19	6° ♁ 26'50	-2°09'52	max. Earth dist.	15019 Jun 24 16:05	14° ♁ 35'31	1.45869 AU
minimum elong	15018 Jul 16 01:57	6° ♁ 45'18	2°10'33				
evening rise	15018 Jul 30 01:21	29° ♁ 33'09		superior conj	15019 Jun 25 08:42	15° ♁ 40'21	-2°12'35
	15018 Jul 30 07:49	0° ♁		minimum elong	15019 Jun 25 05:51	15° ♁ 29'15	2°13'30
asc. node	15018 Aug 06 19:58	12° ♁ 24'44			15019 Jul 04 12:02	0° ♁	
evening max el	15018 Aug 17 11:59	27° ♁ 16'35	18°11'15	evening rise	15019 Jul 10 23:00	10° ♁ 13'37	
	15018 Aug 21 04:19	0° ♁		greatest brilliancy	15019 Jul 18 07:31	21° ♁ 54'11	-0.9m
retrograde	15018 Aug 23 20:35	0° ♁ 37'58			15019 Jul 23 13:31	0° ♁	
evening set	15018 Aug 26 17:03	29° ♁ 54'22		asc. node	15019 Jul 24 16:40	1° ♁ 40'21	
	15018 Aug 26 12:25	30° ♁		evening max el	15019 Aug 01 00:49	10° ♁ 59'42	18°38'23
inferior conj	15018 Sep 01 18:22	24° ♁ 31'04	1°54'40	retrograde	15019 Aug 07 13:55	14° ♁ 32'12	
minimum elong	15018 Sep 01 20:44	24° ♁ 24'23	1°53'46	evening set	15019 Aug 10 19:25	13° ♁ 32'51	
min. Earth dist.	15018 Sep 04 06:52	21° ♁ 41'47	0.63807 AU	inferior conj	15019 Aug 16 11:08	7° ♁ 54'37	2°34'20
morning rise	15018 Sep 07 22:37	18° ♁ 13'54		minimum elong	15019 Aug 16 13:17	7° ♁ 48'00	2°33'25
desc. node	15018 Sep 08 13:04	17° ♁ 47'07		min. Earth dist.	15019 Aug 18 09:53	5° ♁ 31'14	0.65726 AU
direct	15018 Sep 14 13:20	15° ♁ 41'04		morning rise	15019 Aug 22 06:05	1° ♁ 30'04	
morning max el	15018 Sep 28 09:42	23° ♁ 40'59	27°40'34		15019 Aug 24 09:34	30° ♁	
	15018 Oct 04 01:45	0° ♁		desc. node	15019 Aug 26 10:34	29° ♁ 09'11	
	15018 Oct 24 03:42	0° ♁		direct	15019 Aug 28 14:55	28° ♁ 51'22	
morning set	15018 Nov 02 07:43	17° ♁ 09'58			15019 Sep 02 05:03	0° ♁	
asc. node	15018 Nov 02 21:50	18° ♁ 20'38		morning max el	15019 Sep 10 20:58	6° ♁ 41'05	26°50'38
max. Earth dist.	15018 Nov 07 03:18	27° ♁ 04'20	1.32411 AU		15019 Sep 28 21:27	0° ♁	
	15018 Nov 08 12:21	0° ♁			15019 Oct 16 11:12	0° ♁	
superior conj	15018 Nov 10 05:26	3° ♁ 41'17	1°03'50	morning set	15019 Oct 16 14:27	0° ♁ 15'31	
minimum elong	15018 Nov 10 03:06	3° ♁ 28'41	1°04'18	max. Earth dist.	15019 Oct 20 17:11	8° ♁ 19'17	1.33893 AU

asc. node	15019 Oct 20 18:33	8°♍26'10		superior conj	15020 Oct 07 23:06	1°♍14'29	0°12'13
				minimum elong	15020 Oct 07 22:21	1°♍10'47	0°12'29
superior conj	15019 Oct 25 06:28	17°♍40'49	0°40'48	behind sun begin	15020 Oct 07 18:23	0°♍50'50	
minimum elong	15019 Oct 25 04:31	17°♍30'36	0°41'06	behind sun end	15020 Oct 08 02:20	1°♍30'45	
	15019 Oct 31 01:43	0°♌		evening rise	15020 Oct 15 20:00	17°♍22'29	
evening rise	15019 Nov 01 12:53	3°♌06'27			15020 Oct 22 05:07	0°♌	
	15019 Nov 16 08:45	0°♌		evening max el	15020 Nov 02 17:31	16°♌55'18	20°08'51
evening max el	15019 Nov 21 15:49	6°♌15'41	21°33'18	desc. node	15020 Nov 08 04:29	20°♌58'26	
desc. node	15019 Nov 22 07:15	6°♌52'41		retrograde	15020 Nov 13 07:59	22°♌12'06	
retrograde	15019 Dec 03 20:06	12°♌17'26		evening set	15020 Nov 15 10:51	22°♌00'26	
evening set	15019 Dec 06 19:27	11°♌57'19		inferior conj	15020 Nov 24 07:22	18°♌03'15	-4°42'39
inferior conj	15019 Dec 15 13:18	8°♌05'49	-5°48'35	minimum elong	15020 Nov 23 21:16	18°♌18'18	4°38'57
minimum elong	15019 Dec 15 07:31	8°♌13'55	5°46'56	min. Earth dist.	15020 Nov 26 00:52	17°♌01'18	0.54855 AU
min. Earth dist.	15019 Dec 15 18:12	7°♌58'56	0.54435 AU	morning rise	15020 Dec 02 06:50	13°♌57'51	
morning rise	15019 Dec 23 20:10	4°♌17'10		direct	15020 Dec 07 02:05	13°♌07'49	
direct	15019 Dec 27 15:12	3°♌45'51		morning max el	15020 Dec 20 16:32	19°♌50'25	24°09'38
morning max el	15020 Jan 09 06:52	9°♌52'39	22°20'13		15020 Dec 29 04:57	0°♌	
asc. node	15020 Jan 16 18:12	18°♌52'06		asc. node	15021 Jan 02 15:26	6°♌51'01	
	15020 Jan 23 11:59	0°♍		morning set	15021 Jan 14 10:37	29°♌37'14	
morning set	15020 Jan 30 22:39	14°♍53'18			15021 Jan 14 14:52	0°♍	
superior conj	15020 Feb 06 23:36	29°♍55'59	1°23'23	superior conj	15021 Jan 21 05:57	14°♍28'30	1°33'44
minimum elong	15020 Feb 07 01:45	0°♋07'20	1°23'45	minimum elong	15021 Jan 21 07:12	14°♍35'19	1°34'26
	15020 Feb 07 00:22	0°♋		max. Earth dist.	15021 Jan 23 16:56	19°♍47'47	1.32566 AU
max. Earth dist.	15020 Feb 10 18:56	7°♋52'22	1.34035 AU	evening rise	15021 Jan 28 19:05	0°♋24'56	
evening rise	15020 Feb 15 04:52	16°♋40'13			15021 Jan 28 14:10	0°♋	
desc. node	15020 Feb 18 07:36	22°♋34'21		desc. node	15021 Feb 04 04:13	12°♋42'23	
	15020 Feb 22 10:39	0°♎			15021 Feb 14 11:02	0°♎	
	15020 Mar 13 10:52	0°♏		evening max el	15021 Mar 03 14:50	21°♎48'35	27°31'26
evening max el	15020 Mar 21 02:00	8°♏29'55	27°01'49	retrograde	15021 Mar 17 09:14	29°♎17'41	
retrograde	15020 Apr 03 11:27	15°♏58'56		evening set	15021 Mar 24 04:21	26°♎52'04	
evening set	15020 Apr 10 00:42	13°♏27'14		min. Earth dist.	15021 Mar 27 23:28	23°♎33'08	0.63809 AU
asc. node	15020 Apr 13 14:54	10°♏01'04		inferior conj	15021 Mar 30 16:21	20°♎45'35	-0°15'57
min. Earth dist.	15020 Apr 13 23:10	9°♏38'11	0.65664 AU	minimum elong	15021 Mar 30 16:51	20°♎44'17	0°16'00
inferior conj	15020 Apr 16 04:34	7°♏05'25	0°47'42	asc. node	15021 Mar 31 12:19	19°♎54'17	
minimum elong	15020 Apr 16 03:20	7°♏08'57	0°46'45	morning rise	15021 Apr 06 07:41	15°♎27'10	
morning rise	15020 Apr 22 07:30	1°♏32'20		direct	15021 Apr 08 19:06	14°♎56'41	
direct	15020 Apr 25 03:27	0°♏48'55		morning max el	15021 Apr 15 04:46	18°♎13'22	17°47'45
morning max el	15020 May 01 11:19	4°♏07'00	18°04'06		15021 Apr 23 21:19	0°♏	
desc. node	15020 May 16 09:33	25°♏26'58		morning set	15021 May 01 21:12	13°♏22'50	
	15020 May 19 04:52	0°♐		desc. node	15021 May 03 06:18	15°♏43'21	
morning set	15020 May 20 00:40	1°♐20'22			15021 May 11 19:03	0°♐	
superior conj	15020 Jun 03 18:58	24°♐57'12	-1°55'20	superior conj	15021 May 14 20:12	4°♐58'28	-1°23'18
minimum elong	15020 Jun 03 10:33	24°♐24'09	1°55'41	minimum elong	15021 May 14 12:17	4°♐26'24	1°23'12
max. Earth dist.	15020 Jun 06 12:11	29°♐12'47	1.45817 AU	max. Earth dist.	15021 May 20 07:35	13°♐44'39	1.45028 AU
	15020 Jun 07 00:16	0°♑		evening rise	15021 May 30 08:48	29°♐22'39	
evening rise	15020 Jun 19 21:43	19°♑59'16			15021 May 30 18:34	0°♑	
	15020 Jun 26 10:04	0°♒			15021 Jun 20 06:06	0°♒	
greatest brilliancy	15020 Jul 02 13:06	9°♒15'34	-0.7m	asc. node	15021 Jun 27 10:18	8°♒36'36	
asc. node	15020 Jul 10 13:27	20°♒27'32		evening max el	15021 Jun 27 12:20	8°♒41'41	20°21'21
evening max el	15020 Jul 14 09:27	24°♒49'38	19°22'17	retrograde	15021 Jul 05 10:08	13°♒12'53	
retrograde	15020 Jul 21 11:13	28°♒45'47		evening set	15021 Jul 09 11:33	11°♒38'47	
evening set	15020 Jul 25 02:22	27°♒29'16		inferior conj	15021 Jul 14 17:50	5°♒34'44	3°09'07
inferior conj	15020 Jul 30 11:52	21°♒37'33	2°58'21	minimum elong	15021 Jul 14 18:16	5°♒33'15	3°08'13
minimum elong	15020 Jul 30 13:16	21°♒32'58	2°57'28	min. Earth dist.	15021 Jul 15 12:18	4°♒31'30	0.68330 AU
min. Earth dist.	15020 Jul 31 20:21	19°♒51'03	0.67256 AU		15021 Jul 19 04:41	30°♒☾	
morning rise	15020 Aug 04 23:35	15°♒11'56		morning rise	15021 Jul 20 00:41	29°♑12'10	
direct	15020 Aug 10 23:08	12°♒36'29		direct	15021 Jul 25 12:50	26°♑47'24	
desc. node	15020 Aug 12 08:02	12°♒43'41		desc. node	15021 Jul 30 05:25	28°♑11'57	
morning max el	15020 Aug 23 07:58	20°♒00'09	25°38'02		15021 Aug 01 21:19	0°♒	
	15020 Aug 31 21:37	0°♓		morning max el	15021 Aug 05 18:36	3°♒30'51	24°12'25
	15020 Sep 21 00:21	0°♑			15021 Aug 26 01:38	0°♓	
morning set	15020 Sep 28 06:50	12°♑41'19		morning set	15021 Sep 10 04:40	24°♓17'57	
max. Earth dist.	15020 Oct 01 21:33	19°♑23'35	1.35867 AU		15021 Sep 13 10:49	0°♑	
asc. node	15020 Oct 06 15:12	28°♑35'07		max. Earth dist.	15021 Sep 13 20:38	0°♑43'46	1.38166 AU
	15020 Oct 07 08:14	0°♒					

superior conj	15021 Sep 21 03:53	14° Ω 14'18	-0°21'02	superior conj	15022 Sep 03 16:37	26° Π 29'28	-0°56'57
minimum elong	15021 Sep 21 05:20	14° Ω 21'13	0°20'37	minimum elong	15022 Sep 03 21:01	26° Π 49'24	0°56'24
asc. node	15021 Sep 23 11:48	18° Ω 44'05		asc. node	15022 Sep 05 14:49	0° Ω	
	15021 Sep 29 04:53	0° Π		evening rise	15022 Sep 10 08:21	8° Ω 48'47	
evening rise	15021 Sep 29 21:42	1° Π 23'14		evening rise	15022 Sep 13 14:43	14° Ω 59'33	
evening max el	15021 Oct 16 09:31	28° Π 24'22	19°05'56		15022 Sep 21 20:01	0° Π	
	15021 Oct 18 03:38	0° Σ		evening max el	15022 Sep 29 13:05	10° Π 39'14	18°25'06
retrograde	15021 Oct 25 09:27	2° Σ 55'44		retrograde	15022 Oct 07 06:03	14° Π 33'52	
desc. node	15021 Oct 26 01:48	2° Σ 54'16		evening set	15022 Oct 09 06:10	14° Π 18'42	
evening set	15021 Oct 27 06:25	2° Σ 44'47		desc. node	15022 Oct 12 23:12	12° Π 39'44	
	15021 Nov 02 11:04	30° κ Π		inferior conj	15022 Oct 16 23:30	9° Π 44'08	-1°17'00
inferior conj	15021 Nov 04 16:44	28° Π 30'55	-3°01'58	minimum elong	15022 Oct 16 20:31	9° Π 50'05	1°15'16
minimum elong	15021 Nov 04 09:09	28° Π 43'51	2°58'22	min. Earth dist.	15022 Oct 20 05:21	7° Π 09'25	0.58049 AU
min. Earth dist.	15021 Nov 07 11:36	26° Π 37'06	0.56139 AU	morning rise	15022 Oct 24 07:22	4° Π 28'09	
morning rise	15021 Nov 12 09:16	23° Π 52'28		direct	15022 Oct 30 13:07	2° Π 47'34	
direct	15021 Nov 18 00:27	22° Π 38'50		morning max el	15022 Nov 13 20:16	10° Π 22'26	27°10'55
morning max el	15021 Dec 02 02:56	29° Π 50'08	25°52'41		15022 Nov 28 23:17	0° Σ	
	15021 Dec 02 07:02	0° Σ		asc. node	15022 Dec 07 09:35	14° Σ 45'12	
asc. node	15021 Dec 20 12:35	25° Σ 32'33		morning set	15022 Dec 14 06:53	28° Σ 42'44	
	15021 Dec 22 22:10	0° Ξ			15022 Dec 14 21:18	0° Ξ	
morning set	15021 Dec 29 21:58	14° Ξ 15'22		superior conj	15022 Dec 21 03:18	13° Ξ 48'33	1°35'59
superior conj	15022 Jan 05 15:51	29° Ξ 07'57	1°37'52	minimum elong	15022 Dec 21 02:27	13° Ξ 43'48	1°36'56
minimum elong	15022 Jan 05 16:03	29° Ξ 09'01	1°38'47	max. Earth dist.	15022 Dec 21 04:56	13° Ξ 57'42	1.31109 AU
	15022 Jan 06 01:14	0° \approx		evening rise	15022 Dec 27 22:25	28° Ξ 46'53	
max. Earth dist.	15022 Jan 06 21:18	1° \approx 51'13	1.31581 AU		15022 Dec 28 12:10	0° \approx	
evening rise	15022 Jan 12 17:45	14° \approx 29'11		desc. node	15023 Jan 08 21:39	21° \approx 53'24	
	15022 Jan 20 15:26	0° H			15023 Jan 13 22:26	0° H	
desc. node	15022 Jan 22 00:53	2° H 31'15		evening max el	15023 Jan 27 03:54	16° H 28'11	26°55'33
	15022 Feb 09 16:48	0° Υ		retrograde	15023 Feb 10 03:58	23° H 42'00	
evening max el	15022 Feb 14 00:19	4° Υ 31'47	27°30'41	evening set	15023 Feb 16 18:47	21° H 50'36	
retrograde	15022 Feb 27 23:04	11° Υ 54'54		min. Earth dist.	15023 Feb 20 17:59	19° H 10'56	0.59461 AU
evening set	15022 Mar 06 19:27	9° Υ 42'38		inferior conj	15023 Feb 23 23:01	16° H 37'18	-2°57'57
min. Earth dist.	15022 Mar 10 13:55	6° Υ 48'07	0.61690 AU	minimum elong	15023 Feb 24 05:39	16° H 24'00	2°55'09
inferior conj	15022 Mar 13 15:43	3° Υ 59'23	-1°32'09	morning rise	15023 Mar 03 19:56	11° H 57'09	
minimum elong	15022 Mar 13 18:58	3° Υ 51'55	1°30'48	asc. node	15023 Mar 05 07:12	11° H 43'13	
asc. node	15022 Mar 18 09:46	0° Υ 09'34		direct	15023 Mar 05 20:07	11° H 42'07	
	15022 Mar 18 16:05	30° R H		morning max el	15023 Mar 13 11:11	15° H 29'28	18°09'43
morning rise	15022 Mar 20 21:33	28° H 58'46			15023 Mar 23 12:17	0° Υ	
direct	15022 Mar 23 02:05	28° H 37'46		morning set	15023 Mar 29 01:59	10° Υ 13'58	
	15022 Mar 27 08:37	0° Υ		desc. node	15023 Apr 06 23:33	26° Υ 41'59	
morning max el	15022 Mar 29 21:53	2° Υ 04'10	17°49'15	superior conj	15023 Apr 07 20:06	28° Υ 14'20	-0°07'00
morning set	15022 Apr 14 15:37	26° Υ 26'32		minimum elong	15023 Apr 07 19:31	28° Υ 11'44	0°07'16
	15022 Apr 16 15:28	0° B		behind sun begin	15023 Apr 07 12:40	27° Υ 41'04	
desc. node	15022 Apr 20 02:57	6° B 09'41		behind sun end	15023 Apr 08 02:21	28° Υ 42'20	
					15023 Apr 08 19:46	0° B	
superior conj	15022 Apr 25 20:36	16° B 04'40	-0°44'53	max. Earth dist.	15023 Apr 15 10:48	11° B 27'31	1.41648 AU
minimum elong	15022 Apr 25 16:25	15° B 46'54	0°44'52	evening rise	15023 Apr 20 09:34	19° B 36'56	
max. Earth dist.	15022 May 02 23:39	27° B 54'12	1.43587 AU		15023 Apr 26 23:38	0° II	
	15022 May 04 06:48	0° II			15023 May 18 07:57	0° E	
evening rise	15022 May 10 00:38	9° II 05'26		evening max el	15023 May 24 01:34	6° E 25'37	22°51'53
	15022 May 23 22:38	0° E		asc. node	15023 Jun 01 04:18	12° E 05'40	
evening max el	15022 Jun 10 09:13	22° E 33'11	21°32'42	retrograde	15023 Jun 03 05:31	12° E 24'15	
asc. node	15022 Jun 14 07:15	25° E 54'26		evening set	15023 Jun 08 05:06	10° E 18'02	
retrograde	15022 Jun 19 08:45	27° E 47'20		min. Earth dist.	15023 Jun 13 04:38	4° E 22'01	0.69046 AU
evening set	15022 Jun 23 21:00	25° E 56'20		inferior conj	15023 Jun 13 12:34	3° E 54'27	2°56'50
inferior conj	15022 Jun 29 02:44	19° E 41'26	3°08'18	minimum elong	15023 Jun 13 11:12	3° E 59'14	2°55'39
minimum elong	15022 Jun 29 02:11	19° E 43'19	3°07'18		15023 Jun 16 11:45	30° R II	
min. Earth dist.	15022 Jun 29 07:46	19° E 23'51	0.68928 AU	morning rise	15023 Jun 18 17:11	27° II 44'27	
morning rise	15022 Jul 04 07:11	13° E 24'21		direct	15023 Jun 23 04:30	25° II 54'34	
direct	15022 Jul 09 06:57	11° E 15'31			15023 Jun 30 22:08	0° E	
desc. node	15022 Jul 17 02:44	15° E 07'56		morning max el	15023 Jul 01 21:52	0° E 57'09	21°18'06
morning max el	15022 Jul 19 06:19	17° E 09'24	22°43'01	desc. node	15023 Jul 03 23:56	3° E 09'39	
	15022 Jul 29 21:27	0° O			15023 Jul 23 15:35	0° O	
	15022 Aug 19 02:47	0° Π		morning set	15023 Aug 02 02:30	14° O 29'44	
morning set	15022 Aug 22 03:41	4° Π 54'50		max. Earth dist.	15023 Aug 09 00:53	25° O 35'32	1.42726 AU
max. Earth dist.	15022 Aug 26 20:15	12° Π 43'49	1.40544 AU				

	15023 Aug 11 17:08	0°♎		morning set	15024 Jul 11 07:51	23°♊21'43	
					15024 Jul 15 14:49	0°♏	
superior conj	15023 Aug 16 08:58	7°♎51'03 -1°31'51		max. Earth dist.	15024 Jul 21 12:17	9°♏16'25	1.44462 AU
minimum elong	15023 Aug 16 16:04	8°♎21'25 1°31'27					
evening rise	15023 Aug 27 19:03	28°♎01'19		superior conj	15024 Jul 27 01:58	18°♏13'58 -1°59'48	
asc. node	15023 Aug 28 04:55	28°♎45'47		minimum elong	15024 Jul 27 09:00	18°♏42'36 2°00'03	
	15023 Aug 28 21:23	0°♎			15024 Aug 03 04:40	0°♎	
evening max el	15023 Sep 13 00:05	23°♎30'57 18°04'53		evening rise	15024 Aug 09 05:46	10°♎16'24	
retrograde	15023 Sep 19 20:20	27°♎01'37		asc. node	15024 Aug 14 01:32	18°♎30'59	
evening set	15023 Sep 22 03:33	26°♎38'02			15024 Aug 21 04:23	0°♎	
inferior conj	15023 Sep 29 03:13	21°♎43'04 0°13'33		evening max el	15024 Aug 26 14:29	6°♎49'40 18°03'45	
minimum elong	15023 Sep 29 03:40	21°♎42'02 0°13'38		retrograde	15024 Sep 02 00:26	10°♎10'13	
transit middle	15023 Sep 29 03:40	21°♎42'02 0°13'38		evening set	15024 Sep 04 15:59	9°♎34'39	
transit begin	15023 Sep 29 01:52	21°♎46'10		inferior conj	15024 Sep 11 00:27	4°♎21'06 1°23'34	
transit end	15023 Sep 29 05:27	21°♎37'52		minimum elong	15024 Sep 11 02:32	4°♎15'35 1°22'51	
desc. node	15023 Sep 29 20:38	21°♎02'29		min. Earth dist.	15024 Sep 13 20:07	1°♎23'44 0.62571 AU	
min. Earth dist.	15023 Oct 02 07:56	18°♎46'22 0.60290 AU			15024 Sep 15 06:44	30°♎	
morning rise	15023 Oct 06 00:34	15°♎55'43		desc. node	15024 Sep 15 18:05	29°♎34'24	
direct	15023 Oct 12 14:51	13°♎49'29		morning rise	15024 Sep 17 10:47	28°♎12'19	
morning max el	15023 Oct 26 21:22	21°♎41'06 27°52'48		direct	15024 Sep 24 03:08	25°♎46'42	
	15023 Nov 03 04:27	0°♎			15024 Oct 03 23:15	0°♎	
	15023 Nov 22 00:36	0°♎		morning max el	15024 Oct 08 04:24	3°♎46'03 27°55'32	
asc. node	15023 Nov 24 06:30	4°♎20'27			15024 Oct 27 18:56	0°♎	
morning set	15023 Nov 28 11:31	12°♎54'27		asc. node	15024 Nov 10 03:20	24°♎11'36	
max. Earth dist.	15023 Dec 04 12:13	25°♎59'03 1.31176 AU		morning set	15024 Nov 11 09:46	26°♎45'22	
					15024 Nov 12 23:33	0°♎	
superior conj	15023 Dec 05 14:24	28°♎24'47 1°28'12		max. Earth dist.	15024 Nov 16 15:26	7°♎46'41 1.31797 AU	
minimum elong	15023 Dec 05 12:41	28°♎15'15 1°29'01					
	15023 Dec 06 07:28	0°♎		superior conj	15024 Nov 18 23:18	12°♎51'25 1°14'28	
evening rise	15023 Dec 12 07:00	13°♎12'58		minimum elong	15024 Nov 18 21:04	12°♎39'06 1°15'03	
	15023 Dec 20 14:22	0°♎		evening rise	15024 Nov 25 17:38	27°♎42'45	
desc. node	15023 Dec 26 18:30	10°♎38'20			15024 Nov 26 19:12	0°♎	
evening max el	15024 Jan 08 23:32	27°♎31'57 25°46'41		desc. node	15024 Dec 12 15:27	28°♎32'25	
	15024 Jan 11 19:46	0°♎			15024 Dec 13 16:54	0°♎	
retrograde	15024 Jan 22 21:47	4°♎33'44		evening max el	15024 Dec 20 11:37	7°♎50'11 24°12'38	
evening set	15024 Jan 28 22:25	3°♎09'26		retrograde	15025 Jan 03 02:18	14°♎36'17	
min. Earth dist.	15024 Feb 02 12:28	0°♎30'49 0.57353 AU		evening set	15025 Jan 08 03:07	13°♎41'02	
	15024 Feb 03 06:36	30°♎		min. Earth dist.	15025 Jan 13 23:15	10°♎46'26 0.55651 AU	
inferior conj	15024 Feb 05 10:46	28°♎29'11 -4°24'34		inferior conj	15025 Jan 16 01:34	9°♎29'57 -5°33'49	
minimum elong	15024 Feb 05 19:51	28°♎13'26 4°21'18		minimum elong	15025 Jan 16 08:53	9°♎18'50 5°31'49	
morning rise	15024 Feb 13 20:11	24°♎10'33		morning rise	15025 Jan 24 16:28	5°♎30'51	
direct	15024 Feb 15 20:58	23°♎57'43		direct	15025 Jan 27 02:35	5°♎15'37	
asc. node	15024 Feb 20 04:38	24°♎59'20		asc. node	15025 Feb 06 02:02	9°♎55'58	
morning max el	15024 Feb 24 16:31	28°♎16'38 18°50'52		morning max el	15025 Feb 06 09:46	10°♎14'23 19°54'41	
	15024 Feb 26 07:28	0°♎			15025 Feb 19 14:30	0°♎	
morning set	15024 Mar 11 23:22	24°♎29'38		morning set	15025 Feb 24 04:06	9°♎03'02	
	15024 Mar 14 18:48	0°♎					
superior conj	15024 Mar 20 14:37	11°♎14'45 0°26'31		superior conj	15025 Mar 03 23:46	24°♎53'56 0°53'51	
minimum elong	15024 Mar 20 16:17	11°♎22'38 0°26'09		minimum elong	15025 Mar 04 02:20	25°♎06'41 0°53'38	
desc. node	15024 Mar 23 20:06	17°♎15'50			15025 Mar 06 14:04	0°♎	
max. Earth dist.	15024 Mar 27 17:49	24°♎17'42 1.39426 AU		max. Earth dist.	15025 Mar 10 00:23	6°♎32'02 1.37164 AU	
	15024 Mar 31 00:41	0°♎		desc. node	15025 Mar 10 16:40	7°♎47'50	
evening rise	15024 Mar 31 15:40	1°♎03'47		evening rise	15025 Mar 13 17:46	13°♎20'49	
	15024 Apr 19 07:01	0°♎			15025 Mar 23 14:20	0°♎	
evening max el	15024 May 05 15:36	20°♎19'38 24°13'09		evening max el	15025 Apr 14 05:43	0°♎	
retrograde	15024 May 16 23:04	26°♎57'15			15025 Apr 18 05:13	4°♎13'36 25°29'27	
asc. node	15024 May 18 01:27	26°♎52'00		retrograde	15025 Apr 30 12:16	11°♎19'55	
evening set	15024 May 22 10:13	24°♎38'25		asc. node	15025 May 04 22:42	9°♎58'32	
min. Earth dist.	15024 May 27 00:46	19°♎19'14 0.68683 AU		evening set	15025 May 06 10:45	8°♎52'01	
inferior conj	15024 May 27 21:28	18°♎09'14 2°35'00		min. Earth dist.	15025 May 10 17:57	4°♎09'16 0.67854 AU	
minimum elong	15024 May 27 19:30	18°♎15'53 2°33'39		inferior conj	15025 May 12 03:27	2°♎21'24 2°02'29	
morning rise	15024 Jun 02 04:50	12°♎07'42		minimum elong	15025 May 12 01:17	2°♎28'23 2°01'03	
direct	15024 Jun 06 04:07	10°♎37'52			15025 May 14 00:35	30°♎	
morning max el	15024 Jun 13 19:50	14°♎55'25 20°04'03		morning rise	15025 May 17 16:16	26°♎29'43	
	15024 Jun 19 21:03	21°♎59'18		direct	15025 May 21 04:14	25°♎19'29	
desc. node	15024 Jun 25 16:47	0°♎		morning max el	15025 May 28 01:15	29°♎03'30 19°04'33	
					15025 May 28 23:28	0°♎	

desc. node	15025 Jun 06 18:05	11° Π 23'59		morning set	15026 May 31 15:28	12° Π 20'26	
greatest brilliancy	15025 Jun 10 02:12	16° Π 19'49	-0.7m		15026 Jun 11 20:10	0° \mathfrak{E}	
	15025 Jun 19 01:11	0° \mathfrak{E}					
morning set	15025 Jun 20 13:44	2° \mathfrak{E} 21'00		superior conj	15026 Jun 16 06:10	6° \mathfrak{E} 54'10	-2°07'32
max. Earth dist.	15025 Jul 04 05:32	23° \mathfrak{E} 34'04	1.45570 AU	minimum elong	15026 Jun 16 00:17	6° \mathfrak{E} 31'14	2°08'16
				max. Earth dist.	15026 Jun 17 01:44	8° \mathfrak{E} 10'32	1.45942 AU
superior conj	15025 Jul 06 21:25	27° \mathfrak{E} 44'54	-2°13'30		15026 Jul 01 01:21	0° \mathcal{O}	
minimum elong	15025 Jul 06 23:10	27° \mathfrak{E} 51'46	2°14'23	evening rise	15026 Jul 02 05:07	1° \mathcal{O} 48'39	
	15025 Jul 08 07:41	0° \mathcal{O}		greatest brilliancy	15026 Jul 12 00:34	17° \mathcal{O} 05'27	-0.8m
evening rise	15025 Jul 21 17:49	21° \mathcal{O} 33'00		asc. node	15026 Jul 18 18:56	27° \mathcal{O} 03'42	
	15025 Jul 26 22:17	0° \mathfrak{M}			15026 Jul 20 23:53	0° \mathfrak{M}	
asc. node	15025 Jul 31 22:12	7° \mathfrak{M} 59'00		evening max el	15026 Jul 24 16:04	4° \mathfrak{M} 12'43	18°55'01
evening max el	15025 Aug 10 04:45	20° \mathfrak{M} 25'55	18°20'42	retrograde	15026 Jul 31 09:33	7° \mathfrak{M} 53'53	
retrograde	15025 Aug 16 14:02	23° \mathfrak{M} 50'09		evening set	15026 Aug 03 19:06	6° \mathfrak{M} 47'15	
evening set	15025 Aug 19 14:24	22° \mathfrak{M} 59'52		inferior conj	15026 Aug 09 07:45	1° \mathfrak{M} 02'48	2°46'17
inferior conj	15025 Aug 25 11:10	17° \mathfrak{M} 29'54	2°13'37	minimum elong	15026 Aug 09 09:38	0° \mathfrak{M} 56'51	2°45'23
minimum elong	15025 Aug 25 13:33	17° \mathfrak{M} 22'57	2°12'40		15026 Aug 10 03:29	30° \mathcal{R} \mathcal{O}	
min. Earth dist.	15025 Aug 27 17:54	14° \mathfrak{M} 50'16	0.64668 AU	min. Earth dist.	15026 Aug 11 00:19	28° \mathcal{O} 54'21	0.66428 AU
morning rise	15025 Aug 31 11:16	11° \mathfrak{M} 08'57		morning rise	15026 Aug 14 23:21	24° \mathcal{O} 37'07	
desc. node	15025 Sep 02 15:36	9° \mathfrak{M} 41'04		desc. node	15026 Aug 20 13:04	22° \mathcal{O} 00'41	
direct	15025 Sep 07 00:01	8° \mathfrak{M} 32'41		direct	15026 Aug 21 04:25	21° \mathcal{O} 59'08	
morning max el	15025 Sep 20 14:52	16° \mathfrak{M} 29'06	27°22'46	morning max el	15026 Sep 03 02:25	29° \mathcal{O} 39'31	26°22'01
	15025 Oct 01 19:52	0° \mathfrak{L}			15026 Sep 03 10:28	0° \mathfrak{M}	
	15025 Oct 20 14:21	0° \mathfrak{M}			15026 Sep 25 17:04	0° \mathfrak{L}	
morning set	15025 Oct 25 22:59	10° \mathfrak{M} 08'38		morning set	15026 Oct 09 00:04	22° \mathfrak{L} 58'02	
asc. node	15025 Oct 28 00:05	14° \mathfrak{M} 12'41			15026 Oct 12 16:16	0° \mathfrak{M}	
max. Earth dist.	15025 Oct 30 11:04	19° \mathfrak{M} 13'53	1.32977 AU	max. Earth dist.	15026 Oct 12 21:01	0° \mathfrak{M} 23'17	1.34685 AU
				asc. node	15026 Oct 14 20:48	4° \mathfrak{M} 19'54	
superior conj	15025 Nov 03 03:51	27° \mathfrak{M} 01'47	0°54'47				
minimum elong	15025 Nov 03 01:36	26° \mathfrak{M} 49'44	0°55'09	superior conj	15026 Oct 18 01:39	10° \mathfrak{M} 50'38	0°29'19
	15025 Nov 04 13:02	0° \mathcal{J}		minimum elong	15026 Oct 18 00:06	10° \mathfrak{M} 42'39	0°29'35
evening rise	15025 Nov 10 04:26	12° \mathcal{J} 10'35		evening rise	15026 Oct 25 13:32	26° \mathfrak{M} 32'26	
	15025 Nov 19 03:33	0° \mathfrak{Z}			15026 Oct 27 05:33	0° \mathcal{J}	
desc. node	15025 Nov 29 12:31	15° \mathfrak{Z} 16'16		evening max el	15026 Nov 13 15:22	28° \mathcal{J} 01'43	20°54'50
evening max el	15025 Dec 01 21:37	17° \mathfrak{Z} 47'04	22°29'31		15026 Nov 15 19:58	0° \mathfrak{Z}	
retrograde	15025 Dec 14 18:12	24° \mathfrak{Z} 09'15		desc. node	15026 Nov 16 09:40	0° \mathfrak{Z} 26'49	
evening set	15025 Dec 18 11:35	23° \mathfrak{Z} 38'52		retrograde	15026 Nov 25 04:33	3° \mathfrak{Z} 45'51	
min. Earth dist.	15025 Dec 26 05:20	20° \mathfrak{Z} 09'03	0.54627 AU	evening set	15026 Nov 27 17:16	3° \mathfrak{Z} 30'32	
inferior conj	15025 Dec 26 22:53	19° \mathfrak{Z} 44'23	-6°00'26		15026 Dec 05 22:12	30° \mathcal{R} \mathcal{J}	
minimum elong	15025 Dec 26 22:20	19° \mathfrak{Z} 45'09	5°59'29	inferior conj	15026 Dec 06 13:49	29° \mathcal{J} 37'46	-5°26'50
morning rise	15026 Jan 04 10:16	15° \mathfrak{Z} 56'57		minimum elong	15026 Dec 06 05:14	29° \mathcal{J} 50'00	5°24'15
direct	15026 Jan 07 15:36	15° \mathfrak{Z} 33'28		min. Earth dist.	15026 Dec 07 10:55	29° \mathcal{J} 07'40	0.54495 AU
morning max el	15026 Jan 19 12:11	21° \mathfrak{Z} 15'26	21°21'39	morning rise	15026 Dec 14 17:23	25° \mathcal{J} 44'34	
asc. node	15026 Jan 23 23:24	26° \mathfrak{Z} 16'58		direct	15026 Dec 18 22:48	25° \mathcal{J} 06'15	
	15026 Jan 26 15:46	0° \approx			15026 Dec 30 10:06	0° \mathfrak{Z}	
morning set	15026 Feb 08 13:21	23° \approx 45'29		morning max el	15027 Jan 01 01:58	1° \mathfrak{Z} 29'00	23°06'30
	15026 Feb 11 12:33	0° \mathcal{H}		asc. node	15027 Jan 10 20:41	13° \mathfrak{Z} 44'33	
					15027 Jan 19 22:32	0° \approx	
superior conj	15026 Feb 15 19:36	9° \mathcal{H} 00'49	1°14'30	morning set	15027 Jan 24 00:52	8° \approx 30'13	
minimum elong	15026 Feb 15 22:05	9° \mathcal{H} 13'42	1°14'38				
max. Earth dist.	15026 Feb 20 10:54	18° \mathcal{H} 26'18	1.35077 AU	superior conj	15027 Jan 30 22:52	23° \approx 26'07	1°28'33
evening rise	15026 Feb 24 12:35	26° \mathcal{H} 18'40		minimum elong	15027 Jan 31 00:40	23° \approx 35'46	1°29'04
desc. node	15026 Feb 25 13:14	28° \mathcal{H} 14'02		max. Earth dist.	15027 Feb 03 04:15	0° \mathcal{H} 16'42	1.33345 AU
	15026 Feb 26 12:11	0° \mathcal{Y}			15027 Feb 03 01:04	0° \mathcal{H}	
	15026 Mar 17 00:16	0° \mathfrak{B}		evening rise	15027 Feb 07 20:37	9° \mathcal{H} 48'16	
evening max el	15026 Mar 31 19:00	18° \mathfrak{B} 01'30	26°33'27	desc. node	15027 Feb 12 09:49	18° \mathcal{H} 29'57	
retrograde	15026 Apr 13 20:16	25° \mathfrak{B} 25'17			15027 Feb 18 22:50	0° \mathcal{Y}	
evening set	15026 Apr 20 04:53	22° \mathfrak{B} 53'01			15027 Mar 12 18:58	0° \mathfrak{B}	
asc. node	15026 Apr 21 20:02	21° \mathfrak{B} 24'31		evening max el	15027 Mar 14 08:21	1° \mathfrak{B} 33'21	27°17'44
min. Earth dist.	15026 Apr 24 06:05	18° \mathfrak{B} 45'20	0.66582 AU	retrograde	15027 Mar 27 22:13	9° \mathfrak{B} 04'01	
inferior conj	15026 Apr 26 04:25	16° \mathfrak{B} 26'16	1°18'35	evening set	15027 Apr 03 14:33	6° \mathfrak{B} 33'39	
minimum elong	15026 Apr 26 02:37	16° \mathfrak{B} 31'40	1°17'19	min. Earth dist.	15027 Apr 07 11:11	2° \mathfrak{B} 58'17	0.64912 AU
morning rise	15026 May 02 01:25	10° \mathfrak{B} 46'03		asc. node	15027 Apr 08 17:26	1° \mathfrak{B} 35'56	
direct	15026 May 05 02:56	9° \mathfrak{B} 53'37		inferior conj	15027 Apr 09 21:50	0° \mathfrak{B} 17'23	0°22'19
morning max el	15026 May 11 13:15	13° \mathfrak{B} 17'20	18°21'20	minimum elong	15027 Apr 09 21:13	0° \mathfrak{B} 19'05	0°21'40
	15026 May 23 19:57	0° Π			15027 Apr 10 04:09	30° \mathcal{R} \mathcal{Y}	
desc. node	15026 May 24 15:00	1° Π 14'20		morning rise	15027 Apr 16 05:46	24° \mathcal{Y} 50'33	

direct	15027 Apr 18 21:52	24° Υ 13'08		morning rise	15028 Mar 30 02:04	8° Υ 36'25	
morning max el	15027 Apr 25 05:34	27° Υ 29'07	17°55'03	direct	15028 Apr 01 10:11	8° Υ 10'33	
	15027 Apr 27 12:42	0° \mathcal{B}		morning max el	15028 Apr 07 23:18	11° Υ 30'21	17°46'10
desc. node	15027 May 11 11:48	21° \mathcal{B} 22'48			15028 Apr 20 13:51	0° \mathcal{B}	
morning set	15027 May 12 20:50	23° \mathcal{B} 39'28		morning set	15028 Apr 24 03:28	6° \mathcal{B} 10'22	
	15027 May 16 17:06	0° Π		desc. node	15028 Apr 27 08:32	11° \mathcal{B} 44'03	
superior conj	15027 May 26 21:15	16° Π 26'16	-1°43'05	superior conj	15028 May 06 08:01	26° \mathcal{B} 54'43	-1°07'21
minimum elong	15027 May 26 12:24	15° Π 51'05	1°43'10	minimum elong	15028 May 06 01:32	26° \mathcal{B} 27'57	1°07'13
max. Earth dist.	15027 May 30 21:42	22° Π 46'53	1.45566 AU		15028 May 08 05:08	0° Π	
	15027 Jun 04 12:43	0° \mathcal{E}		max. Earth dist.	15028 May 12 15:25	7° Π 09'15	1.44488 AU
evening rise	15027 Jun 11 21:01	11° \mathcal{E} 19'39		evening rise	15028 May 21 08:11	20° Π 46'27	
	15027 Jun 24 05:25	0° Ω			15028 May 27 09:53	0° \mathcal{E}	
greatest brilliancy	15027 Jun 26 04:39	2° Ω 53'16	-0.6m		15028 Jun 18 02:56	0° Ω	
asc. node	15027 Jul 05 15:44	15° Ω 35'54		evening max el	15028 Jun 19 22:32	1° Ω 55'15	20°50'23
evening max el	15027 Jul 07 22:15	18° Ω 03'22	19°45'37	asc. node	15028 Jun 21 12:37	3° Ω 24'49	
retrograde	15027 Jul 15 07:55	22° Ω 13'41		retrograde	15028 Jun 28 06:53	6° Ω 44'09	
evening set	15027 Jul 19 03:15	20° Ω 49'47		evening set	15028 Jul 02 12:45	5° Ω 03'00	
inferior conj	15027 Jul 24 11:02	14° Ω 52'30	3°04'24		15028 Jul 06 23:25	30° \mathcal{R} \mathcal{E}	
minimum elong	15027 Jul 24 12:02	14° Ω 49'09	3°03'32	inferior conj	15028 Jul 07 18:31	28° \mathcal{E} 54'13	3°10'04
min. Earth dist.	15027 Jul 25 13:30	13° Ω 23'48	0.67769 AU	minimum elong	15028 Jul 07 18:32	28° \mathcal{E} 54'10	3°09'09
morning rise	15027 Jul 29 20:22	8° Ω 27'29		min. Earth dist.	15028 Jul 08 07:18	28° \mathcal{E} 09'58	0.68649 AU
direct	15027 Aug 04 15:07	5° Ω 55'49		morning rise	15028 Jul 13 00:01	22° \mathcal{E} 33'31	
desc. node	15027 Aug 07 10:30	6° Ω 26'10		direct	15028 Jul 18 07:01	20° \mathcal{E} 14'46	
morning max el	15027 Aug 16 13:22	13° Ω 04'42	25°02'33	desc. node	15028 Jul 24 07:53	22° \mathcal{E} 34'22	
	15027 Aug 30 06:12	0° \mathcal{M}		morning max el	15028 Jul 29 00:02	26° \mathcal{E} 38'09	23°34'06
	15027 Sep 18 11:33	0° $\underline{\mathcal{A}}$			15028 Aug 01 02:46	0° Ω	
morning set	15027 Sep 21 09:05	5° $\underline{\mathcal{A}}$ 04'10			15028 Aug 22 19:44	0° \mathcal{M}	
max. Earth dist.	15027 Sep 24 22:14	11° $\underline{\mathcal{A}}$ 29'38	1.36817 AU	morning set	15028 Sep 01 21:37	16° \mathcal{M} 16'04	
				max. Earth dist.	15028 Sep 05 20:15	23° \mathcal{M} 01'41	1.39186 AU
					15028 Sep 09 18:26	0° $\underline{\mathcal{A}}$	
superior conj	15027 Oct 01 13:39	24° $\underline{\mathcal{A}}$ 10'28	-0°01'27				
minimum elong	15027 Oct 01 13:43	24° $\underline{\mathcal{A}}$ 10'46	0°01'07	superior conj	15028 Sep 13 12:08	6° $\underline{\mathcal{A}}$ 52'15	-0°36'09
behind sun begin	15027 Oct 01 07:14	23° $\underline{\mathcal{A}}$ 38'54		minimum elong	15028 Sep 13 14:46	7° $\underline{\mathcal{A}}$ 04'35	0°35'39
behind sun end	15027 Oct 01 20:12	24° $\underline{\mathcal{A}}$ 42'43		asc. node	15028 Sep 17 13:59	14° $\underline{\mathcal{A}}$ 36'20	
asc. node	15027 Oct 01 17:26	24° $\underline{\mathcal{A}}$ 29'08		evening rise	15028 Sep 22 17:02	24° $\underline{\mathcal{A}}$ 33'13	
	15027 Oct 04 11:51	0° \mathcal{M}			15028 Sep 25 12:43	0° \mathcal{M}	
evening rise	15027 Oct 09 18:39	10° \mathcal{M} 42'22		evening max el	15028 Oct 08 20:44	20° \mathcal{M} 51'26	18°45'59
	15027 Oct 20 02:21	0° \mathcal{X}		retrograde	15028 Oct 17 06:07	25° \mathcal{M} 05'15	
evening max el	15027 Oct 26 23:14	9° \mathcal{X} 01'42	19°39'21	evening set	15028 Oct 19 03:47	24° \mathcal{M} 53'00	
desc. node	15027 Nov 03 06:54	13° \mathcal{X} 38'59		desc. node	15028 Oct 20 04:14	24° \mathcal{M} 36'52	
retrograde	15027 Nov 05 21:06	13° \mathcal{X} 58'45		inferior conj	15028 Oct 27 07:18	20° \mathcal{M} 30'52	-2°16'28
evening set	15027 Nov 07 19:38	13° \mathcal{X} 48'14		minimum elong	15028 Oct 27 01:41	20° \mathcal{M} 41'06	2°13'34
inferior conj	15027 Nov 16 13:09	9° \mathcal{X} 45'08	-4°02'14	min. Earth dist.	15028 Oct 30 08:48	18° \mathcal{M} 17'33	0.56893 AU
minimum elong	15027 Nov 16 03:33	10° \mathcal{X} 00'14	3°58'14	morning rise	15028 Nov 03 20:25	15° \mathcal{M} 36'25	
min. Earth dist.	15027 Nov 18 19:20	8° \mathcal{X} 19'59	0.55300 AU	direct	15028 Nov 09 18:49	14° \mathcal{M} 11'06	
morning rise	15027 Nov 24 09:40	5° \mathcal{X} 26'35		morning max el	15028 Nov 23 23:40	21° \mathcal{M} 33'18	26°29'53
direct	15027 Nov 29 13:52	4° \mathcal{X} 26'59			15028 Dec 01 09:14	0° \mathcal{X}	
morning max el	15027 Dec 13 10:59	11° \mathcal{X} 23'31	24°55'30	asc. node	15028 Dec 14 14:57	20° \mathcal{X} 58'46	
	15027 Dec 27 12:56	0° \mathcal{Z}			15028 Dec 19 06:16	0° \mathcal{Z}	
asc. node	15027 Dec 28 17:52	2° \mathcal{Z} 02'58		morning set	15028 Dec 22 23:14	7° \mathcal{Z} 45'38	
morning set	15028 Jan 08 12:45	23° \mathcal{Z} 12'06					
	15028 Jan 11 15:34	0° \approx		superior conj	15028 Dec 29 17:45	22° \mathcal{Z} 42'46	1°37'48
superior conj	15028 Jan 15 06:59	8° \approx 02'29	1°36'14	minimum elong	15028 Dec 29 17:29	22° \mathcal{Z} 41'19	1°38'45
minimum elong	15028 Jan 15 07:48	8° \approx 06'57	1°37'03	max. Earth dist.	15028 Dec 30 11:03	24° \mathcal{Z} 19'16	1.31313 AU
max. Earth dist.	15028 Jan 17 04:58	12° \approx 14'21	1.32074 AU		15029 Jan 02 00:34	0° \approx	
evening rise	15028 Jan 22 14:44	23° \approx 42'05		evening rise	15029 Jan 05 16:13	7° \approx 52'37	
	15028 Jan 25 18:10	0° \mathcal{H}		desc. node	15029 Jan 16 03:06	28° \approx 08'40	
desc. node	15028 Jan 30 06:26	8° \mathcal{H} 30'31			15029 Jan 17 04:44	0° \mathcal{H}	
	15028 Feb 12 14:32	0° Υ		evening max el	15029 Feb 06 03:24	27° \mathcal{H} 03'00	27°20'12
evening max el	15028 Feb 24 19:57	14° Υ 38'16	27°35'15		15029 Feb 09 13:33	0° Υ	
retrograde	15028 Mar 09 17:06	22° Υ 06'25		retrograde	15029 Feb 20 03:18	4° Υ 22'15	
evening set	15028 Mar 16 13:16	19° Υ 45'28		evening set	15029 Feb 26 22:01	2° Υ 18'21	
min. Earth dist.	15028 Mar 20 07:33	16° Υ 37'45	0.62923 AU		15029 Mar 02 03:45	30° \mathcal{R} \mathcal{H}	
inferior conj	15028 Mar 23 04:45	13° Υ 47'33	-0°46'47	min. Earth dist.	15029 Mar 02 17:48	29° \mathcal{H} 31'13	0.60739 AU
minimum elong	15028 Mar 23 06:18	13° Υ 43'44	0°46'18	inferior conj	15029 Mar 05 21:42	26° \mathcal{H} 47'02	-2°07'43
asc. node	15028 Mar 25 14:50	11° Υ 30'20		minimum elong	15029 Mar 06 02:22	26° \mathcal{H} 36'54	2°05'43

asc. node	15029 Mar 12 12:16	22° K 12'53		morning rise	15030 Feb 23 23:46	4° K 34'41	
morning rise	15029 Mar 13 09:59	21° K 54'28		direct	15030 Feb 25 23:38	4° K 20'56	
direct	15029 Mar 15 12:12	21° K 36'27		asc. node	15030 Feb 27 09:44	4° K 28'12	
morning max el	15029 Mar 22 15:09	25° K 10'46	17°55'32	morning max el	15030 Mar 06 01:28	8° K 20'15	18°24'35
	15029 Mar 26 15:35	0° Y			15030 Mar 19 23:39	0° Y	
morning set	15029 Apr 07 05:21	19° Y 34'26		morning set	15030 Mar 21 20:53	3° Y 34'57	
	15029 Apr 12 23:22	0° B					
desc. node	15029 Apr 14 05:10	2° B 13'01		superior conj	15030 Mar 31 02:33	21° Y 00'07	0°07'57
				minimum elong	15030 Mar 31 03:06	21° Y 02'40	0°07'35
superior conj	15029 Apr 17 18:30	8° B 28'08	-0°28'28	behind sun begin	15030 Mar 30 20:41	20° Y 33'12	
minimum elong	15029 Apr 17 15:58	8° B 17'09	0°28'35	behind sun end	15030 Mar 31 09:31	21° Y 32'03	
max. Earth dist.	15029 Apr 25 05:25	21° B 04'18	1.42816 AU	desc. node	15030 Apr 01 01:43	22° Y 45'56	
	15029 Apr 30 18:11	0° II			15030 Apr 05 02:53	0° B	
evening rise	15029 May 01 06:17	0° II 47'51		max. Earth dist.	15030 Apr 07 15:01	4° B 20'43	1.40724 AU
	15029 May 20 22:18	0° B		evening rise	15030 Apr 12 00:01	11° B 42'06	
evening max el	15029 Jun 02 17:25	15° B 47'42	22°05'46		15030 Apr 23 15:44	0° II	
asc. node	15029 Jun 08 09:35	20° B 16'39		evening max el	15030 May 16 08:32	29° II 40'37	23°26'38
retrograde	15029 Jun 12 04:46	21° B 20'24			15030 May 16 16:23	0° B	
evening set	15029 Jun 16 21:50	19° B 22'46		asc. node	15030 May 26 06:40	5° B 54'00	
inferior conj	15029 Jun 22 04:03	13° B 04'09	3°04'41	retrograde	15030 May 27 00:13	5° B 56'21	
minimum elong	15029 Jun 22 03:09	13° B 07'21	3°03'37	evening set	15030 Jun 01 04:52	3° B 44'11	
min. Earth dist.	15029 Jun 22 03:36	13° B 05'45	0.69043 AU		15030 Jun 04 13:51	30° R II	
morning rise	15029 Jun 27 08:17	6° B 49'58		min. Earth dist.	15030 Jun 06 00:17	28° II 04'09	0.68950 AU
direct	15029 Jul 02 02:50	4° B 48'43		inferior conj	15030 Jun 06 13:43	27° II 17'57	2°48'51
desc. node	15029 Jul 11 05:11	10° B 00'50		minimum elong	15030 Jun 06 12:03	27° II 23'40	2°47'36
morning max el	15029 Jul 11 12:53	10° B 19'58	22°05'53	morning rise	15030 Jun 11 19:12	21° II 11'41	
	15029 Jul 27 00:17	0° Q		direct	15030 Jun 16 01:22	19° II 30'20	
morning set	15029 Aug 13 10:14	26° Q 26'15		morning max el	15030 Jun 24 06:59	24° II 12'09	20°45'07
	15029 Aug 15 15:06	0° P		desc. node	15030 Jun 28 02:22	28° II 24'38	
max. Earth dist.	15029 Aug 18 21:54	5° P 24'42	1.41519 AU		15030 Jun 29 09:28	0° B	
					15030 Jul 20 08:06	0° Q	
superior conj	15029 Aug 26 16:49	18° P 46'35	-1°12'10	morning set	15030 Jul 24 00:13	5° Q 39'07	
minimum elong	15029 Aug 26 22:30	19° P 11'43	1°11'38	max. Earth dist.	15030 Aug 01 06:07	18° Q 41'13	1.43535 AU
	15029 Sep 01 22:11	0° A					
asc. node	15029 Sep 04 10:32	4° A 38'29		superior conj	15030 Aug 07 23:27	29° Q 43'27	-1°44'58
evening rise	15029 Sep 06 05:16	7° A 56'38		minimum elong	15030 Aug 08 07:02	0° P 15'14	1°44'47
	15029 Sep 19 05:57	0° M			15030 Aug 08 03:24	0° P	
evening max el	15029 Sep 22 04:04	3° M 23'46	18°14'02	evening rise	15030 Aug 20 02:49	20° P 40'36	
retrograde	15029 Sep 29 10:41	7° M 06'17		asc. node	15030 Aug 22 07:06	24° P 31'05	
evening set	15029 Oct 01 13:43	6° M 47'52			15030 Aug 25 10:25	0° A	
desc. node	15029 Oct 07 01:40	3° M 38'46		evening max el	15030 Sep 05 16:57	16° A 27'52	18°02'01
inferior conj	15029 Oct 08 23:20	2° M 04'12	-0°36'15	retrograde	15030 Sep 12 07:38	19° A 52'48	
minimum elong	15029 Oct 08 22:01	2° M 06'59	0°35'17	evening set	15030 Sep 14 18:16	19° A 24'30	
	15029 Oct 11 09:27	30° R A		inferior conj	15030 Sep 21 11:03	14° A 21'00	0°45'48
min. Earth dist.	15029 Oct 12 05:52	29° A 17'53	0.58986 AU	minimum elong	15030 Sep 21 12:24	14° A 17'41	0°45'27
morning rise	15029 Oct 16 02:56	26° A 34'08		desc. node	15030 Sep 23 23:09	11° A 53'17	
direct	15029 Oct 22 13:13	24° A 42'21		min. Earth dist.	15030 Sep 24 12:28	11° A 21'42	0.61273 AU
	15029 Nov 03 04:51	0° M		morning rise	15030 Sep 28 03:41	8° A 23'08	
morning max el	15029 Nov 05 20:18	2° M 24'12	27°33'32	direct	15030 Oct 04 19:23	6° A 08'03	
	15029 Nov 25 20:34	0° X		morning max el	15030 Oct 19 00:29	14° A 03'50	27°58'40
asc. node	15029 Dec 01 11:57	10° X 22'06			15030 Oct 31 21:03	0° M	
morning set	15029 Dec 07 06:34	22° X 06'41		asc. node	15030 Nov 18 08:50	0° X 04'42	
	15029 Dec 10 21:53	0° B			15030 Nov 18 07:53	0° X	
				morning set	15030 Nov 21 08:47	6° X 10'06	
superior conj	15029 Dec 14 05:15	7° B 21'51	1°33'24	max. Earth dist.	15030 Nov 27 01:21	18° X 22'25	1.31377 AU
minimum elong	15029 Dec 14 04:01	7° B 14'53	1°34'19				
max. Earth dist.	15029 Dec 13 19:09	6° B 25'16	1.31078 AU	superior conj	15030 Nov 28 15:40	21° X 54'12	1°23'05
evening rise	15029 Dec 20 22:48	22° B 14'29		minimum elong	15030 Nov 28 13:41	21° X 43'10	1°23'49
	15029 Dec 24 15:49	0° A			15030 Dec 02 07:06	0° B	
desc. node	15030 Jan 02 23:53	17° A 16'05		evening rise	15030 Dec 05 08:29	6° B 42'23	
	15030 Jan 11 13:25	0° K			15030 Dec 17 07:38	0° A	
evening max el	15030 Jan 19 03:56	8° K 37'06	26°30'03	desc. node	15030 Dec 20 20:47	5° A 41'14	
retrograde	15030 Feb 02 03:15	15° K 45'06		evening max el	15030 Dec 31 19:52	19° A 18'43	25°08'49
evening set	15030 Feb 08 13:21	14° K 04'48		retrograde	15031 Jan 14 15:35	26° A 14'43	
min. Earth dist.	15030 Feb 12 17:28	11° K 27'33	0.58539 AU	evening set	15031 Jan 20 07:30	25° A 02'31	
inferior conj	15030 Feb 15 21:01	9° K 05'53	-3°35'27	min. Earth dist.	15031 Jan 25 08:01	22° A 19'37	0.56561 AU
minimum elong	15030 Feb 16 04:58	8° K 50'55	3°32'15	inferior conj	15031 Jan 27 23:46	20° A 35'46	-4°57'30

minimum elong	15031 Jan 28 08:50	20° \approx 20'59	4°54'36	inferior conj	15032 Jan 08 06:16	1° \approx 15'00	-5°51'52
morning rise	15031 Feb 05 12:42	16° \approx 26'24		minimum elong	15032 Jan 08 10:51	1° \approx 08'18	5°50'34
direct	15031 Feb 07 16:15	16° \approx 13'10			15032 Jan 10 10:39	30° \approx 3	
asc. node	15031 Feb 14 07:11	18° \approx 28'28		morning rise	15032 Jan 16 20:40	27° \approx 22'24	
morning max el	15031 Feb 17 02:11	20° \approx 47'45	19°15'17	direct	15032 Jan 19 13:32	27° \approx 04'40	
	15031 Feb 24 03:52	0° \approx			15032 Jan 27 17:51	0° \approx	
morning set	15031 Mar 05 21:47	17° \approx 59'22		morning max el	15032 Jan 30 13:23	2° \approx 22'07	20°29'05
	15031 Mar 11 22:46	0° \approx		asc. node	15032 Feb 01 04:36	4° \approx 03'17	
					15032 Feb 16 21:59	0° \approx	
superior conj	15031 Mar 14 03:53	4° \approx 18'56	0°38'55	morning set	15032 Feb 18 04:44	2° \approx 37'16	
minimum elong	15031 Mar 14 06:04	4° \approx 29'32	0°38'35				
desc. node	15031 Mar 18 22:17	13° \approx 19'32		superior conj	15032 Feb 25 18:01	18° \approx 11'13	1°03'25
max. Earth dist.	15031 Mar 20 21:25	16° \approx 54'47	1.38446 AU	minimum elong	15032 Feb 25 20:39	18° \approx 24'32	1°03'21
evening rise	15031 Mar 24 14:56	23° \approx 31'08		max. Earth dist.	15032 Mar 02 04:40	28° \approx 56'13	1.36233 AU
	15031 Mar 28 10:24	0° \approx			15032 Mar 02 18:01	0° \approx	
	15031 Apr 17 10:26	0° \approx		desc. node	15032 Mar 04 18:48	3° \approx 49'29	
evening max el	15031 Apr 28 22:03	13° \approx 34'33	24°46'37	evening rise	15032 Mar 06 00:35	6° \approx 06'44	
retrograde	15031 May 10 16:09	20° \approx 26'18			15032 Mar 20 06:36	0° \approx	
asc. node	15031 May 13 03:53	19° \approx 59'47		evening max el	15032 Apr 10 11:34	27° \approx 26'15	25°58'41
evening set	15031 May 16 08:16	18° \approx 02'46			15032 Apr 13 06:55	0° \approx	
min. Earth dist.	15031 May 20 19:23	12° \approx 59'25	0.68381 AU	retrograde	15032 Apr 23 03:26	4° \approx 42'20	
inferior conj	15031 May 21 21:37	11° \approx 32'16	2°22'35	evening set	15032 Apr 29 06:19	2° \approx 11'53	
minimum elong	15031 May 21 19:31	11° \approx 39'17	2°21'10	asc. node	15032 Apr 29 01:12	2° \approx 22'22	
morning rise	15031 May 27 07:00	5° \approx 34'57			15032 May 01 12:32	30° \approx 8	
direct	15031 May 31 01:17	4° \approx 13'48		min. Earth dist.	15032 May 03 10:45	27° \approx 44'08	0.67358 AU
morning max el	15031 Jun 07 08:16	8° \approx 15'42	19°36'55	inferior conj	15032 May 05 01:44	25° \approx 41'53	1°45'21
desc. node	15031 Jun 14 23:27	17° \approx 30'43		minimum elong	15032 May 04 23:39	25° \approx 48'26	1°43'56
greatest brilliancy	15031 Jun 20 01:05	24° \approx 43'17	-0.6m	morning rise	15032 May 10 17:41	19° \approx 54'46	
	15031 Jun 23 14:40	0° \approx		direct	15032 May 14 01:00	18° \approx 52'32	
morning set	15031 Jul 03 03:13	14° \approx 27'29		morning max el	15032 May 20 16:39	22° \approx 26'45	18°44'06
	15031 Jul 13 03:39	0° \approx			15032 May 26 22:36	0° \approx	
max. Earth dist.	15031 Jul 14 20:12	2° \approx 39'33	1.45014 AU	desc. node	15032 May 31 20:25	7° \approx 07'11	
				greatest brilliancy	15032 Jun 04 11:52	12° \approx 40'07	-0.8m
superior conj	15031 Jul 19 06:36	9° \approx 42'11	-2°07'46	morning set	15032 Jun 11 15:34	23° \approx 46'30	
minimum elong	15031 Jul 19 12:03	10° \approx 04'01	2°08'20		15032 Jun 15 15:24	0° \approx	
	15031 Jul 31 16:04	0° \approx		max. Earth dist.	15032 Jun 26 14:18	17° \approx 04'26	1.45816 AU
evening rise	15031 Aug 02 04:32	2° \approx 32'34					
asc. node	15031 Aug 09 03:44	14° \approx 09'54		superior conj	15032 Jun 27 19:38	18° \approx 58'59	-2°13'29
	15031 Aug 20 09:42	0° \approx		minimum elong	15032 Jun 27 18:00	18° \approx 52'34	2°14'26
evening max el	15031 Aug 20 07:39	29° \approx 54'59	18°08'43		15032 Jul 04 20:03	0° \approx	
retrograde	15031 Aug 26 16:22	3° \approx 15'46		evening rise	15032 Jul 13 05:54	13° \approx 22'06	
evening set	15031 Aug 29 11:30	2° \approx 34'23		greatest brilliancy	15032 Jul 19 07:38	23° \approx 04'42	-0.9m
	15031 Sep 01 23:00	30° \approx 8			15032 Jul 23 17:20	0° \approx	
inferior conj	15031 Sep 04 14:34	27° \approx 13'37	1°47'04	asc. node	15032 Jul 26 00:25	3° \approx 29'01	
minimum elong	15031 Sep 04 16:54	27° \approx 07'08	1°46'12	evening max el	15032 Aug 02 20:59	13° \approx 36'46	18°33'17
min. Earth dist.	15031 Sep 07 05:02	24° \approx 21'35	0.63497 AU	retrograde	15032 Aug 09 08:48	17° \approx 06'36	
morning rise	15031 Sep 10 20:21	20° \approx 58'15		evening set	15032 Aug 12 12:57	16° \approx 09'41	
desc. node	15031 Sep 10 20:39	20° \approx 57'39		inferior conj	15032 Aug 18 05:53	10° \approx 33'38	2°29'23
direct	15031 Sep 17 11:40	18° \approx 26'52		minimum elong	15032 Aug 18 08:07	10° \approx 26'52	2°28'26
morning max el	15031 Oct 01 09:32	26° \approx 27'18	27°45'27	min. Earth dist.	15032 Aug 20 06:46	8° \approx 05'36	0.65464 AU
	15031 Oct 04 17:05	0° \approx		morning rise	15032 Aug 24 02:07	4° \approx 09'53	
	15031 Oct 25 11:52	0° \approx		desc. node	15032 Aug 27 18:08	1° \approx 59'32	
morning set	15031 Nov 05 03:35	19° \approx 50'23		direct	15032 Aug 30 12:08	1° \approx 31'27	
asc. node	15031 Nov 05 05:38	20° \approx 00'44		morning max el	15032 Sep 12 20:35	9° \approx 23'18	26°59'45
max. Earth dist.	15031 Nov 10 01:41	0° \approx 01'30	1.32231 AU		15032 Sep 29 01:23	0° \approx	
	15031 Nov 10 01:24	0° \approx			15032 Oct 16 22:06	0° \approx	
				morning set	15032 Oct 18 12:08	3° \approx 01'06	
superior conj	15031 Nov 12 23:01	6° \approx 14'40	1°06'50	asc. node	15032 Oct 22 02:22	10° \approx 05'25	
minimum elong	15031 Nov 12 20:41	6° \approx 02'03	1°07'20	max. Earth dist.	15032 Oct 22 17:05	11° \approx 19'41	1.33639 AU
evening rise	15031 Nov 19 19:26	21° \approx 11'43					
	15031 Nov 24 00:17	0° \approx		superior conj	15032 Oct 27 01:05	20° \approx 17'39	0°44'41
desc. node	15031 Dec 07 17:47	23° \approx 08'07		minimum elong	15032 Oct 26 23:01	20° \approx 06'49	0°45'00
evening max el	15031 Dec 13 05:51	29° \approx 23'03	23°28'41		15032 Oct 31 14:22	0° \approx	
	15031 Dec 13 21:32	0° \approx		evening rise	15032 Nov 03 05:48	5° \approx 38'16	
retrograde	15031 Dec 26 14:53	6° \approx 01'16			15032 Nov 16 06:04	0° \approx	
evening set	15031 Dec 31 02:36	5° \approx 17'33		desc. node	15032 Nov 23 14:53	9° \approx 16'18	
min. Earth dist.	15032 Jan 06 16:33	2° \approx 10'03	0.55109 AU	evening max el	15032 Nov 23 18:14	9° \approx 24'33	21°47'25

retrograde	15032 Dec 06 03:05	15° ♁ 31'46		retrograde	15033 Nov 16 14:06	25° ♁ 21'00	
evening set	15032 Dec 09 06:54	15° ♁ 09'23		evening set	15033 Nov 18 19:06	25° ♁ 08'36	
inferior conj	15032 Dec 17 23:17	11° ♁ 17'43	-5°53'44	inferior conj	15033 Nov 27 16:02	21° ♁ 12'51	-4°55'33
minimum elong	15032 Dec 17 18:45	11° ♁ 24'03	5°52'21	minimum elong	15033 Nov 27 06:06	21° ♁ 27'29	4°52'06
min. Earth dist.	15032 Dec 17 22:23	11° ♁ 18'59	0.54456 AU	min. Earth dist.	15033 Nov 29 04:31	20° ♁ 19'12	0.54737 AU
morning rise	15032 Dec 26 07:22	7° ♁ 29'57		morning rise	15033 Dec 05 16:33	17° ♁ 11'20	
direct	15032 Dec 29 22:52	7° ♁ 00'48		direct	15033 Dec 10 08:24	16° ♁ 24'31	
morning max el	15033 Jan 11 09:50	13° ♁ 01'26	22°04'32	morning max el	15033 Dec 23 20:12	23° ♁ 01'53	23°53'19
asc. node	15033 Jan 18 01:55	20° ♁ 55'16			15033 Dec 30 00:05	0° ♁	
	15033 Jan 23 19:02	0° ♁		asc. node	15034 Jan 04 23:09	8° ♁ 46'20	
morning set	15033 Feb 01 15:11	17° ♁ 21'34			15034 Jan 16 03:28	0° ♁	
	15033 Feb 07 13:34	0° ♁		morning set	15034 Jan 17 03:05	2° ♁ 05'49	
superior conj	15033 Feb 08 17:22	2° ♁ 27'07	1°21'14	superior conj	15034 Jan 23 22:58	16° ♁ 57'44	1°32'34
minimum elong	15033 Feb 08 19:37	2° ♁ 38'57	1°21'32	minimum elong	15034 Jan 24 00:22	17° ♁ 05'21	1°33'13
max. Earth dist.	15033 Feb 12 17:47	10° ♁ 46'47	1.34294 AU	max. Earth dist.	15034 Jan 26 14:40	22° ♁ 40'58	1.32754 AU
evening rise	15033 Feb 17 01:29	19° ♁ 19'43			15034 Jan 30 02:35	0° ♁	
desc. node	15033 Feb 19 15:22	24° ♁ 12'03		evening rise	15034 Jan 31 14:11	3° ♁ 00'34	
	15033 Feb 22 20:04	0° ♁		desc. node	15034 Feb 06 11:58	14° ♁ 22'15	
	15033 Mar 14 08:15	0° ♁			15034 Feb 15 15:57	0° ♁	
evening max el	15033 Mar 24 01:28	11° ♁ 09'08	26°55'11	evening max el	15034 Mar 06 14:29	24° ♁ 31'41	27°28'50
retrograde	15033 Apr 06 08:57	18° ♁ 36'52			15034 Mar 13 15:09	0° ♁	
evening set	15033 Apr 12 21:04	16° ♁ 04'55		retrograde	15034 Mar 20 07:45	2° ♁ 01'15	
asc. node	15033 Apr 15 22:33	13° ♁ 11'08			15034 Mar 26 11:26	30° ♁	
min. Earth dist.	15033 Apr 16 20:14	12° ♁ 11'05	0.65916 AU	evening set	15034 Mar 27 02:21	29° ♁ 34'10	
inferior conj	15033 Apr 18 23:48	9° ♁ 41'39	0°56'17	min. Earth dist.	15034 Mar 30 21:47	26° ♁ 11'13	0.64103 AU
minimum elong	15033 Apr 18 22:24	9° ♁ 45'44	0°55'13	inferior conj	15034 Apr 02 13:08	23° ♁ 25'00	-0°05'26
morning rise	15033 Apr 25 01:06	4° ♁ 06'32		minimum elong	15034 Apr 02 13:18	23° ♁ 24'33	0°05'40
direct	15033 Apr 27 22:28	3° ♁ 20'49		transit middle	15034 Apr 02 13:18	23° ♁ 24'33	0°05'40
morning max el	15033 May 04 06:40	6° ♁ 39'56	18°07'58	transit begin	15034 Apr 02 10:24	23° ♁ 32'14	
desc. node	15033 May 18 17:16	27° ♁ 05'50		transit end	15034 Apr 02 16:13	23° ♁ 16'53	
	15033 May 20 12:34	0° ♁		asc. node	15034 Apr 02 19:57	23° ♁ 07'04	
morning set	15033 May 23 04:47	4° ♁ 19'01		morning rise	15034 Apr 09 02:28	18° ♁ 04'21	
				direct	15034 Apr 11 15:06	17° ♁ 32'08	
superior conj	15033 Jun 07 04:50	28° ♁ 11'51	-1°59'05	morning max el	15034 Apr 17 23:55	20° ♁ 48'08	17°49'06
minimum elong	15033 Jun 06 20:53	27° ♁ 40'39	1°59'32		15034 Apr 25 01:42	0° ♁	
	15033 Jun 08 08:28	0° ♁		morning set	15034 May 04 21:35	16° ♁ 11'06	
max. Earth dist.	15033 Jun 09 10:38	1° ♁ 42'18	1.45875 AU	desc. node	15034 May 05 14:02	17° ♁ 20'32	
evening rise	15033 Jun 23 07:30	23° ♁ 14'16			15034 May 13 04:01	0° ♁	
	15033 Jun 27 16:34	0° ♁		superior conj	15034 May 18 03:09	8° ♁ 05'06	-1°28'46
greatest brilliancy	15033 Jul 05 06:18	11° ♁ 32'56	-0.7m	minimum elong	15034 May 17 18:52	7° ♁ 31'40	1°28'41
asc. node	15033 Jul 12 21:10	22° ♁ 20'54		max. Earth dist.	15034 May 23 06:29	16° ♁ 16'50	1.45189 AU
evening max el	15033 Jul 17 06:21	27° ♁ 25'55	19°14'45		15034 Jun 01 01:58	0° ♁	
	15033 Jul 20 08:55	0° ♁		evening rise	15034 Jun 02 19:22	2° ♁ 38'40	
retrograde	15033 Jul 24 05:39	1° ♁ 17'40			15034 Jun 21 06:49	0° ♁	
evening set	15033 Jul 27 19:22	0° ♁ 03'40		asc. node	15034 Jun 29 18:00	10° ♁ 36'33	
	15033 Jul 27 21:29	30° ♁		evening max el	15034 Jun 30 10:05	11° ♁ 17'42	20°11'38
inferior conj	15033 Aug 02 05:36	24° ♁ 13'49	2°55'35	retrograde	15034 Jul 08 04:31	15° ♁ 43'13	
minimum elong	15033 Aug 02 07:07	24° ♁ 08'50	2°54'42	evening set	15034 Jul 12 04:21	14° ♁ 11'41	
min. Earth dist.	15033 Aug 03 16:08	22° ♁ 21'30	0.67054 AU	inferior conj	15034 Jul 17 10:56	8° ♁ 09'16	3°08'12
morning rise	15033 Aug 07 18:15	17° ♁ 48'09		minimum elong	15034 Jul 17 11:31	8° ♁ 07'16	3°07'21
direct	15033 Aug 13 19:19	15° ♁ 11'51		min. Earth dist.	15034 Jul 18 07:25	6° ♁ 59'26	0.68200 AU
desc. node	15033 Aug 14 15:36	15° ♁ 14'36		morning rise	15034 Jul 22 18:21	1° ♁ 45'59	
morning max el	15033 Aug 26 07:42	22° ♁ 40'06	25°49'57		15034 Jul 25 08:37	30° ♁	
	15033 Sep 01 18:52	0° ♁		direct	15034 Jul 28 08:12	29° ♁ 19'22	
	15033 Sep 22 08:27	0° ♁			15034 Jul 31 13:10	0° ♁	
morning set	15033 Oct 01 06:50	15° ♁ 33'06		desc. node	15034 Aug 01 13:00	0° ♁ 27'11	
max. Earth dist.	15033 Oct 04 22:52	22° ♁ 24'56	1.35550 AU	morning max el	15034 Aug 08 18:25	6° ♁ 09'42	24°25'36
asc. node	15033 Oct 08 22:59	0° ♁ 13'53			15034 Aug 27 06:38	0° ♁	
	15033 Oct 08 20:11	0° ♁		morning set	15034 Sep 13 07:39	27° ♁ 17'25	
superior conj	15033 Oct 10 19:06	3° ♁ 55'28	0°16'53		15034 Sep 14 20:48	0° ♁	
minimum elong	15033 Oct 10 18:07	3° ♁ 50'29	0°17'10	max. Earth dist.	15034 Sep 16 22:21	3° ♁ 40'48	1.37814 AU
evening rise	15033 Oct 18 13:28	19° ♁ 55'59					
	15033 Oct 23 13:40	0° ♁		superior conj	15034 Sep 24 01:50	17° ♁ 00'22	-0°15'46
evening max el	15033 Nov 05 17:44	19° ♁ 57'04	20°20'04	minimum elong	15034 Sep 24 02:53	17° ♁ 05'27	0°15'23
desc. node	15033 Nov 10 12:05	23° ♁ 40'00		behind sun begin	15034 Sep 24 00:48	16° ♁ 55'23	

































































































































behind sun end	15034 Sep 24 04:58	17° Ω 15'31		superior conj	15035 Sep 06 17:13	29° Π 22'39	-0°51'29
asc. node	15034 Sep 25 19:34	20° Ω 22'51		minimum elong	15035 Sep 06 21:10	29° Π 40'37	0°50'57
	15034 Sep 30 16:09	0° Π			15035 Sep 07 01:24	0° Ω	
evening rise	15034 Oct 02 16:06	3° Π 59'11		asc. node	15035 Sep 12 16:08	10° Ω 28'22	
	15034 Oct 18 02:16	0° \mathcal{A}		evening rise	15035 Sep 16 10:38	17° Ω 39'30	
evening max el	15034 Oct 19 07:37	1° \mathcal{A} 18'10	19°13'52		15035 Sep 23 01:51	0° Π	
desc. node	15034 Oct 28 09:22	5° \mathcal{A} 56'05		evening max el	15035 Oct 02 09:44	13° Π 26'53	18°29'53
retrograde	15034 Oct 28 13:07	5° \mathcal{A} 56'09		retrograde	15035 Oct 10 06:41	17° Π 26'09	
evening set	15034 Oct 30 10:06	5° \mathcal{A} 45'30		evening set	15035 Oct 12 05:59	17° Π 11'55	
inferior conj	15034 Nov 07 22:32	1° \mathcal{A} 34'28	-3°18'05	desc. node	15035 Oct 15 06:44	15° Π 59'42	
minimum elong	15034 Nov 07 14:20	1° \mathcal{A} 48'11	3°14'18	inferior conj	15035 Oct 20 02:02	12° Π 40'44	-1°32'18
	15034 Nov 10 07:03	30° $\mathcal{R}\Pi$		minimum elong	15035 Oct 19 22:23	12° Π 47'51	1°30'13
min. Earth dist.	15034 Nov 10 14:31	29° Π 47'49	0.55900 AU	min. Earth dist.	15035 Oct 23 07:13	10° Π 10'53	0.57733 AU
morning rise	15034 Nov 15 16:08	27° Π 01'20		morning rise	15035 Oct 27 11:17	7° Π 30'07	
direct	15034 Nov 21 04:31	25° Π 51'32		direct	15035 Nov 02 15:19	5° Π 53'25	
	15034 Dec 01 18:08	0° \mathcal{A}		morning max el	15035 Nov 16 22:08	13° Π 25'34	27°01'25
morning max el	15034 Dec 05 06:01	2° \mathcal{A} 59'12	25°38'33		15035 Nov 30 01:40	0° \mathcal{A}	
asc. node	15034 Dec 22 20:16	27° \mathcal{A} 22'03		asc. node	15035 Dec 09 17:19	16° \mathcal{A} 30'56	
	15034 Dec 24 07:00	0° \mathcal{B}			15035 Dec 16 10:00	0° \mathcal{B}	
morning set	15035 Jan 01 14:36	16° \mathcal{B} 45'02		morning set	15035 Dec 17 00:01	1° \mathcal{B} 14'42	
	15035 Jan 07 15:03	0° \approx					
superior conj	15035 Jan 08 08:27	1° \approx 36'33	1°37'39	superior conj	15035 Dec 23 19:49	16° \mathcal{B} 17'51	1°36'41
minimum elong	15035 Jan 08 08:49	1° \approx 38'31	1°38'31	minimum elong	15035 Dec 23 19:07	16° \mathcal{B} 13'57	1°37'37
max. Earth dist.	15035 Jan 09 18:09	4° \approx 42'53	1.31691 AU	max. Earth dist.	15035 Dec 24 01:30	16° \mathcal{B} 49'39	1.31142 AU
evening rise	15035 Jan 15 11:44	17° \approx 02'08			15035 Dec 30 00:56	0° \approx	
	15035 Jan 22 01:06	0° \mathcal{H}		evening rise	15035 Dec 30 15:39	1° \approx 18'42	
desc. node	15035 Jan 24 08:37	4° \mathcal{H} 14'19		desc. node	15036 Jan 11 05:20	23° \approx 41'13	
	15035 Feb 10 08:06	0° \mathcal{Y}			15036 Jan 15 01:06	0° \mathcal{H}	
evening max el	15035 Feb 17 00:31	7° \mathcal{Y} 20'36	27°32'57	evening max el	15036 Jan 30 05:11	19° \mathcal{H} 24'55	27°03'03
retrograde	15035 Mar 02 22:57	14° \mathcal{Y} 45'23		retrograde	15036 Feb 13 05:26	26° \mathcal{H} 40'28	
evening set	15035 Mar 09 19:31	12° \mathcal{Y} 30'30		evening set	15036 Feb 19 21:26	24° \mathcal{H} 45'38	
min. Earth dist.	15035 Mar 13 13:43	9° \mathcal{Y} 32'58	0.62011 AU	min. Earth dist.	15036 Feb 23 19:29	22° \mathcal{H} 04'20	0.59790 AU
inferior conj	15035 Mar 16 14:33	6° \mathcal{Y} 43'14	-1°19'53	inferior conj	15036 Feb 27 00:29	19° \mathcal{H} 27'20	-2°44'37
minimum elong	15035 Mar 16 17:19	6° \mathcal{Y} 36'44	1°18'46	minimum elong	15036 Feb 27 06:37	19° \mathcal{H} 14'47	2°42'00
asc. node	15035 Mar 20 17:24	3° \mathcal{Y} 14'36		morning rise	15036 Mar 05 19:13	14° \mathcal{H} 43'56	
morning rise	15035 Mar 23 18:08	1° \mathcal{Y} 39'56		asc. node	15036 Mar 06 14:51	14° \mathcal{H} 33'54	
direct	15035 Mar 25 23:31	1° \mathcal{Y} 17'48		direct	15036 Mar 07 19:44	14° \mathcal{H} 28'18	
morning max el	15035 Apr 01 17:20	4° \mathcal{Y} 42'07	17°47'55	morning max el	15036 Mar 15 07:27	18° \mathcal{H} 12'02	18°05'24
morning set	15035 Apr 17 13:08	29° \mathcal{Y} 06'55			15036 Mar 23 19:10	0° \mathcal{Y}	
	15035 Apr 18 01:07	0° \mathcal{B}		morning set	15036 Mar 30 21:29	12° \mathcal{Y} 48'47	
desc. node	15035 Apr 22 10:43	7° \mathcal{B} 45'42		desc. node	15036 Apr 08 07:20	28° \mathcal{Y} 17'16	
					15036 Apr 09 06:16	0° \mathcal{B}	
superior conj	15035 Apr 29 00:03	19° \mathcal{B} 01'48	-0°50'49	superior conj	15036 Apr 09 20:17	1° \mathcal{B} 02'25	-0°12'31
minimum elong	15035 Apr 28 19:15	18° \mathcal{B} 41'35	0°50'47	minimum elong	15036 Apr 09 19:14	0° \mathcal{B} 57'44	0°12'46
	15035 May 05 15:32	0° Π		behind sun begin	15036 Apr 09 14:32	0° \mathcal{B} 36'51	
max. Earth dist.	15035 May 05 22:59	0° Π 30'07	1.43836 AU	behind sun end	15036 Apr 09 23:55	1° \mathcal{B} 18'36	
evening rise	15035 May 13 09:33	12° Π 16'18		max. Earth dist.	15036 Apr 17 10:40	14° \mathcal{B} 08'30	1.41962 AU
	15035 May 25 03:40	0° \mathcal{E}		evening rise	15036 Apr 22 15:29	22° \mathcal{B} 39'39	
evening max el	15035 Jun 13 07:47	25° \mathcal{E} 09'15	21°21'23		15036 Apr 27 07:03	0° Π	
asc. node	15035 Jun 16 14:56	28° \mathcal{E} 03'11			15036 May 18 05:31	0° \mathcal{E}	
	15035 Jun 20 06:42	0° \mathcal{Q}		evening max el	15036 May 26 00:43	9° \mathcal{E} 01'38	22°39'49
retrograde	15035 Jun 22 03:18	0° \mathcal{Q} 16'55		asc. node	15036 Jun 02 11:58	14° \mathcal{E} 25'40	
	15035 Jun 23 22:04	30° $\mathcal{R}\mathcal{E}$		retrograde	15036 Jun 05 00:27	14° \mathcal{E} 53'44	
evening set	15035 Jun 26 13:52	28° \mathcal{E} 28'26		evening set	15036 Jun 09 22:17	12° \mathcal{E} 49'45	
inferior conj	15035 Jul 01 19:31	22° \mathcal{E} 14'59	3°09'04	inferior conj	15036 Jun 15 05:22	6° \mathcal{E} 27'21	2°59'14
minimum elong	15035 Jul 01 19:08	22° \mathcal{E} 16'21	3°08'07	minimum elong	15036 Jun 15 04:07	6° \mathcal{E} 31'45	2°58'05
min. Earth dist.	15035 Jul 02 02:33	21° \mathcal{E} 50'29	0.68872 AU	min. Earth dist.	15036 Jun 14 23:24	6° \mathcal{E} 48'09	0.69062 AU
morning rise	15035 Jul 07 00:10	15° \mathcal{E} 56'48		morning rise	15036 Jun 20 09:48	0° \mathcal{E} 16'08	
direct	15035 Jul 12 01:46	13° \mathcal{E} 45'20			15036 Jun 20 17:48	30° $\mathcal{R}\Pi$	
desc. node	15035 Jul 19 10:21	17° \mathcal{E} 11'26		direct	15036 Jun 24 22:59	28° Π 23'11	
morning max el	15035 Jul 22 05:50	19° \mathcal{E} 47'12	22°56'08		15036 Jun 29 14:41	0° \mathcal{E}	
	15035 Jul 30 21:45	0° \mathcal{Q}		morning max el	15036 Jul 03 20:34	3° \mathcal{E} 33'11	21°30'08
	15035 Aug 20 10:37	0° Π		desc. node	15036 Jul 05 07:38	5° \mathcal{E} 04'28	
morning set	15035 Aug 25 10:17	8° Π 03'42			15036 Jul 23 21:26	0° \mathcal{Q}	
max. Earth dist.	15035 Aug 29 21:16	15° Π 32'33	1.40196 AU	morning set	15036 Aug 04 12:34	17° \mathcal{Q} 47'22	
				max. Earth dist.	15036 Aug 11 00:54	28° \mathcal{Q} 16'12	1.42427 AU

































































































































	15036 Aug 12 02:07	0°♎		morning set	15037 Jul 14 19:43	26°♊43'52	
					15037 Jul 16 22:29	0°♏	
superior conj	15036 Aug 18 12:55	10°♎53'03	-1°26'51	max. Earth dist.	15037 Jul 24 11:43	11°♏52'16	1.44242 AU
minimum elong	15036 Aug 18 19:42	11°♎22'20	1°26'24				
	15036 Aug 29 06:48	0°♊		superior conj	15037 Jul 30 09:32	21°♏25'24	-1°56'19
evening rise	15036 Aug 29 17:11	0°♊47'12		minimum elong	15037 Jul 30 16:53	21°♏55'32	1°56'26
asc. node	15036 Aug 29 12:41	0°♊26'48			15037 Aug 04 13:35	0°♎	
evening max el	15036 Sep 14 19:57	26°♊14'00	18°06'40	evening rise	15037 Aug 12 06:56	13°♎10'45	
retrograde	15036 Sep 21 18:31	29°♊47'10		asc. node	15037 Aug 16 09:18	20°♎14'26	
evening set	15036 Sep 24 00:37	29°♊25'02			15037 Aug 22 06:27	0°♊	
inferior conj	15036 Oct 01 02:48	24°♊33'01	0°01'06	evening max el	15037 Aug 29 10:08	9°♊29'45	18°02'42
minimum elong	15036 Oct 01 02:51	24°♊32'55	0°01'24	retrograde	15037 Sep 04 20:55	12°♊50'55	
transit middle	15036 Oct 01 02:51	24°♊32'55	0°01'24	evening set	15037 Sep 07 11:14	12°♊17'16	
transit begin	15036 Sep 30 23:31	24°♊40'29		inferior conj	15037 Sep 13 21:45	7°♊06'10	1°14'17
transit end	15036 Oct 01 06:11	24°♊25'19		minimum elong	15037 Sep 13 23:41	7°♊01'08	1°13'38
desc. node	15036 Oct 01 04:12	24°♊29'50		min. Earth dist.	15037 Sep 16 19:01	4°♊07'48	0.62243 AU
min. Earth dist.	15036 Oct 04 08:19	21°♊38'19	0.59948 AU	desc. node	15037 Sep 18 01:42	2°♊54'34	
morning rise	15036 Oct 08 01:49	18°♊49'59		morning rise	15037 Sep 20 09:42	0°♊59'59	
direct	15036 Oct 14 15:22	16°♊47'12			15037 Sep 21 23:41	30°♎	
morning max el	15036 Oct 28 22:02	24°♊36'32	27°49'06	direct	15037 Sep 27 02:05	28°♎36'55	
	15036 Nov 02 20:31	0°♎			15037 Oct 02 12:53	0°♊	
	15036 Nov 22 10:11	0°♊		morning max el	15037 Oct 11 04:24	6°♊35'16	27°57'30
asc. node	15036 Nov 25 14:16	6°♊03'13			15037 Oct 29 00:03	0°♎	
morning set	15036 Nov 30 05:25	15°♊28'53		asc. node	15037 Nov 12 11:07	25°♎52'15	
max. Earth dist.	15036 Dec 06 09:03	28°♊52'09	1.31130 AU	morning set	15037 Nov 14 04:46	29°♎23'00	
	15036 Dec 06 21:13	0°♊			15037 Nov 14 11:58	0°♊	
				max. Earth dist.	15037 Nov 19 13:11	10°♊42'30	1.31673 AU
superior conj	15036 Dec 07 07:05	0°♊55'02	1°29'46				
minimum elong	15036 Dec 07 05:29	0°♊46'06	1°30'37	superior conj	15037 Nov 21 16:26	15°♊23'07	1°16'55
evening rise	15036 Dec 13 23:47	15°♊43'52		minimum elong	15037 Nov 21 14:15	15°♊11'03	1°17'34
	15036 Dec 20 23:21	0°♊		evening rise	15037 Nov 28 10:14	0°♊13'11	
desc. node	15036 Dec 28 02:09	12°♊32'29			15037 Nov 28 07:47	0°♊	
	15037 Jan 10 10:53	0°♊		desc. node	15037 Dec 14 23:05	0°♊34'59	
evening max el	15037 Jan 11 02:11	0°♊36'55	25°58'55		15037 Dec 14 13:25	0°♊	
retrograde	15037 Jan 25 00:55	7°♊40'15		evening max el	15037 Dec 23 15:09	11°♊00'14	24°27'36
evening set	15037 Jan 31 04:15	6°♊11'50		retrograde	15038 Jan 06 07:17	17°♊48'52	
min. Earth dist.	15037 Feb 04 15:22	3°♊34'00	0.57651 AU	evening set	15038 Jan 11 12:23	16°♊49'18	
inferior conj	15037 Feb 07 15:21	1°♊26'48	-4°11'59	min. Earth dist.	15038 Jan 17 02:53	13°♊58'26	0.55868 AU
minimum elong	15037 Feb 08 00:15	1°♊11'03	4°08'42	inferior conj	15038 Jan 19 09:08	12°♊34'39	-5°25'30
	15037 Feb 09 17:37	30°♎		minimum elong	15038 Jan 19 17:07	12°♊22'18	5°23'14
morning rise	15037 Feb 15 23:14	27°♊04'46		morning rise	15038 Jan 27 23:51	8°♊33'06	
direct	15037 Feb 17 23:32	26°♊51'50		direct	15038 Jan 30 08:00	8°♊18'32	
asc. node	15037 Feb 21 12:20	27°♊34'03		asc. node	15038 Feb 08 09:45	12°♊16'04	
	15037 Feb 25 09:32	0°♊		morning max el	15038 Feb 09 09:27	13°♊10'46	19°43'44
morning max el	15037 Feb 26 14:13	1°♊05'28	18°43'17		15038 Feb 20 23:23	0°♊	
morning set	15037 Mar 14 17:29	27°♊01'00		morning set	15038 Feb 26 21:18	11°♊32'22	
	15037 Mar 16 06:16	0°♊					
superior conj	15037 Mar 23 12:14	13°♊55'46	0°21'48	superior conj	15038 Mar 06 19:27	27°♊29'57	0°50'07
minimum elong	15037 Mar 23 13:39	14°♊02'26	0°21'26	minimum elong	15038 Mar 06 21:57	27°♊42'17	0°49'52
desc. node	15037 Mar 26 03:53	18°♊50'55			15038 Mar 08 02:02	0°♊	
max. Earth dist.	15037 Mar 30 18:15	27°♊05'22	1.39769 AU	max. Earth dist.	15038 Mar 13 00:49	9°♊25'13	1.37493 AU
	15037 Apr 01 10:27	0°♊		desc. node	15038 Mar 13 00:24	9°♊23'19	
evening rise	15037 Apr 03 18:24	3°♊58'16		evening rise	15038 Mar 16 17:41	16°♊08'13	
	15037 Apr 20 11:10	0°♊			15038 Mar 24 22:02	0°♊	
evening max el	15037 May 08 15:04	22°♊55'48	24°01'14	evening max el	15038 Apr 14 23:48	0°♊	
retrograde	15037 May 19 18:30	29°♊27'49		retrograde	15038 Apr 21 04:38	6°♊50'00	25°18'43
asc. node	15037 May 20 09:08	29°♊26'12			15038 May 03 08:24	13°♊52'43	
evening set	15037 May 25 03:59	27°♊10'42		asc. node	15038 May 07 06:24	12°♊48'36	
min. Earth dist.	15037 May 29 19:46	21°♊46'07	0.68767 AU	evening set	15038 May 09 05:18	11°♊25'43	
inferior conj	15037 May 30 14:33	20°♊42'16	2°39'01	min. Earth dist.	15038 May 13 13:28	6°♊37'47	0.68006 AU
minimum elong	15037 May 30 12:39	20°♊48'43	2°37'41	inferior conj	15038 May 14 21:06	4°♊55'04	2°08'11
morning rise	15037 Jun 04 21:21	14°♊39'27		minimum elong	15038 May 14 18:56	5°♊02'07	2°06'44
direct	15037 Jun 08 22:26	13°♊06'33			15038 May 19 03:35	30°♎	
morning max el	15037 Jun 16 17:28	17°♊29'56	20°14'15	morning rise	15038 May 20 08:56	29°♊01'59	
	15037 Jun 22 04:47	23°♊47'59		direct	15038 May 23 22:33	27°♊48'56	
desc. node	15037 Jun 26 19:33	0°♊			15038 May 29 02:01	0°♊	
				morning max el	15038 May 30 21:50	1°♊37'03	19°12'26

desc. node	15038 Jun 09 01:48	13°♊08'02		morning set	15039 Jun 03 22:02	15°♊26'40	
greatest brilliancy	15038 Jun 12 17:28	18°♊28'29	-0.7m		15039 Jun 13 04:08	0°♊	
	15038 Jun 20 08:02	0°♊					
morning set	15038 Jun 24 00:09	5°♊38'28		superior conj	15039 Jun 19 16:59	10°♊12'28	-2°09'45
max. Earth dist.	15038 Jul 07 04:25	26°♊06'16	1.45447 AU	minimum elong	15039 Jun 19 12:06	9°♊53'24	2°10'33
	15038 Jul 09 15:50	0°♊		max. Earth dist.	15039 Jun 20 00:02	10°♊39'58	1.45935 AU
					15039 Jul 02 08:52	0°♊	
superior conj	15038 Jul 10 07:42	1°♊02'38	-2°12'36	evening rise	15039 Jul 05 13:27	5°♊00'59	
minimum elong	15038 Jul 10 10:34	1°♊13'57	2°13'27	greatest brilliancy	15039 Jul 14 13:50	19°♊08'51	-0.8m
evening rise	15038 Jul 24 22:39	24°♊36'58		asc. node	15039 Jul 21 02:40	28°♊54'26	
	15038 Jul 28 05:21	0°♊			15039 Jul 21 21:27	0°♊	
asc. node	15038 Aug 03 05:57	9°♊45'40		evening max el	15039 Jul 27 12:26	6°♊49'22	18°48'50
evening max el	15038 Aug 13 00:37	23°♊04'00	18°17'00	retrograde	15039 Aug 03 04:16	10°♊27'21	
retrograde	15038 Aug 19 09:28	26°♊26'59		evening set	15039 Aug 06 12:21	9°♊23'19	
evening set	15038 Aug 22 08:26	25°♊39'05		inferior conj	15039 Aug 12 02:01	3°♊40'59	2°42'17
inferior conj	15038 Aug 28 06:44	20°♊11'18	2°07'11	minimum elong	15039 Aug 12 04:00	3°♊34'45	2°41'22
minimum elong	15038 Aug 28 09:07	20°♊04'23	2°06'14	min. Earth dist.	15039 Aug 13 20:44	1°♊27'04	0.66191 AU
min. Earth dist.	15038 Aug 30 15:28	17°♊28'06	0.64375 AU		15039 Aug 15 01:53	30°♊	
morning rise	15038 Sep 03 08:14	13°♊51'30		morning rise	15039 Aug 17 18:44	27°♊15'29	
desc. node	15038 Sep 04 23:13	12°♊43'28		desc. node	15039 Aug 22 20:42	24°♊42'23	
direct	15038 Sep 09 21:44	11°♊16'20		direct	15039 Aug 24 01:07	24°♊37'05	
morning max el	15038 Sep 23 14:40	19°♊14'09	27°29'35		15039 Sep 03 14:53	0°♊	
	15038 Oct 02 18:39	0°♊		morning max el	15039 Sep 06 02:10	2°♊21'14	26°32'25
	15038 Oct 21 23:51	0°♊			15039 Sep 26 23:07	0°♊	
morning set	15038 Oct 28 19:31	12°♊51'04		morning set	15039 Oct 11 22:38	25°♊46'22	
asc. node	15038 Oct 30 07:52	15°♊52'14			15039 Oct 14 03:43	0°♊	
max. Earth dist.	15038 Nov 02 10:13	22°♊13'19	1.32770 AU	max. Earth dist.	15039 Oct 15 21:30	3°♊24'27	1.34398 AU
				asc. node	15039 Oct 17 04:32	5°♊58'53	
superior conj	15038 Nov 05 21:47	29°♊36'23	0°58'08				
minimum elong	15038 Nov 05 19:29	29°♊24'03	0°58'34	superior conj	15039 Oct 20 20:45	13°♊29'05	0°33'32
	15038 Nov 06 02:11	0°♊		minimum elong	15039 Oct 20 19:02	13°♊20'12	0°33'49
evening rise	15038 Nov 12 21:09	14°♊41'46		evening rise	15039 Oct 28 06:36	29°♊04'57	
	15038 Nov 20 10:42	0°♊			15039 Oct 28 17:07	0°♊	
desc. node	15038 Dec 01 20:08	17°♊30'57			15039 Nov 15 14:30	0°♊	
evening max el	15038 Dec 05 00:44	20°♊57'35	22°44'36	evening max el	15039 Nov 16 16:48	1°♊07'51	21°07'52
retrograde	15038 Dec 18 01:00	27°♊24'31		desc. node	15039 Nov 18 17:17	2°♊57'42	
evening set	15038 Dec 21 23:09	26°♊50'56		retrograde	15039 Nov 28 11:32	6°♊58'29	
min. Earth dist.	15038 Dec 29 09:23	23°♊27'28	0.54722 AU	evening set	15039 Dec 01 03:38	6°♊41'44	
inferior conj	15038 Dec 30 08:28	22°♊54'47	-6°00'10	inferior conj	15039 Dec 09 23:27	2°♊49'40	-5°35'44
minimum elong	15038 Dec 30 09:21	22°♊53'31	5°59'12	minimum elong	15039 Dec 09 15:43	3°♊00'38	5°33'30
morning rise	15039 Jan 07 20:52	19°♊06'39		min. Earth dist.	15039 Dec 10 15:01	2°♊27'39	0.54452 AU
direct	15039 Jan 10 22:41	18°♊44'55			15039 Dec 15 08:48	30°♊	
morning max el	15039 Jan 22 14:07	24°♊20'31	21°07'28	morning rise	15039 Dec 18 04:08	28°♊58'26	
asc. node	15039 Jan 26 07:06	28°♊25'39		direct	15039 Dec 22 05:53	28°♊22'43	
	15039 Jan 27 12:22	0°♊			15039 Dec 28 18:55	0°♊	
morning set	15039 Feb 11 06:02	26°♊14'12		morning max el	15040 Jan 04 05:26	4°♊40'15	22°50'13
	15039 Feb 13 01:13	0°♊		asc. node	15040 Jan 13 04:22	15°♊44'31	
					15040 Jan 21 08:43	0°♊	
superior conj	15039 Feb 18 13:55	11°♊33'48	1°11'47	morning set	15040 Jan 26 17:18	10°♊58'57	
minimum elong	15039 Feb 18 16:28	11°♊46'54	1°11'52				
max. Earth dist.	15039 Feb 23 10:22	21°♊21'09	1.35362 AU	superior conj	15040 Feb 02 16:14	25°♊56'58	1°26'50
evening rise	15039 Feb 27 10:14	29°♊00'56		minimum elong	15040 Feb 02 18:10	26°♊07'16	1°27'17
desc. node	15039 Feb 27 20:56	29°♊50'52			15040 Feb 04 14:00	0°♊	
	15039 Feb 27 22:54	0°♊		max. Earth dist.	15040 Feb 06 02:25	3°♊10'32	1.33572 AU
	15039 Mar 18 03:18	0°♊		evening rise	15040 Feb 10 16:29	12°♊26'29	
evening max el	15039 Apr 03 18:15	20°♊39'15	26°24'59	desc. node	15040 Feb 14 17:29	20°♊08'39	
retrograde	15039 Apr 16 17:16	28°♊01'38			15040 Feb 20 06:41	0°♊	
evening set	15039 Apr 23 00:31	25°♊29'32			15040 Mar 12 06:47	0°♊	
asc. node	15039 Apr 24 03:43	24°♊29'20		evening max el	15040 Mar 16 07:43	4°♊14'15	27°12'42
min. Earth dist.	15039 Apr 27 02:27	21°♊16'49	0.66798 AU	retrograde	15040 Mar 29 20:15	11°♊44'47	
inferior conj	15039 Apr 28 22:56	19°♊01'42	1°26'04	evening set	15040 Apr 05 11:32	9°♊13'46	
minimum elong	15039 Apr 28 21:02	19°♊07'28	1°24'45	min. Earth dist.	15040 Apr 09 08:44	5°♊33'43	0.65182 AU
morning rise	15039 May 04 18:33	13°♊19'44		asc. node	15040 Apr 10 01:05	4°♊48'51	
direct	15039 May 07 21:31	12°♊24'55		inferior conj	15040 Apr 11 17:36	2°♊55'19	0°31'41
morning max el	15039 May 14 08:59	15°♊50'55	18°26'42	minimum elong	15040 Apr 11 16:45	2°♊57'43	0°30'55
	15039 May 25 01:08	0°♊			15040 Apr 14 12:04	30°♊	
desc. node	15039 May 26 22:43	2°♊55'11		morning rise	15040 Apr 17 23:44	27°♊26'16	

direct	15040 Apr 20 17:08	26° Υ 46'51		morning rise	15041 Apr 01 21:27	11° Υ 15'17	
	15040 Apr 26 23:21	0° B		direct	15041 Apr 04 06:40	10° Υ 47'53	
morning max el	15040 Apr 27 00:46	0° B 03'26	17°57'50	morning max el	15041 Apr 10 18:26	14° Υ 06'26	17°46'20
desc. node	15040 May 12 19:31	23° B 01'19			15041 Apr 21 21:23	0° B	
morning set	15040 May 14 23:14	26° B 33'52		morning set	15041 Apr 27 02:27	8° B 55'12	
	15040 May 17 01:28	0° II		desc. node	15041 Apr 29 16:13	13° B 20'50	
superior conj	15040 May 29 06:04	19° II 38'38	-1°47'43	superior conj	15041 May 09 13:22	29° B 57'17	-1°13'07
minimum elong	15040 May 28 21:15	19° II 03'43	1°47'52	minimum elong	15041 May 09 06:20	29° B 28'26	1°12'59
max. Earth dist.	15040 Jun 01 19:56	25° II 16'33	1.45670 AU		15041 May 09 14:02	0° II	
	15040 Jun 04 20:33	0° B		max. Earth dist.	15041 May 15 14:15	9° II 42'30	1.44691 AU
evening rise	15040 Jun 14 07:25	14° B 36'14		evening rise	15041 May 24 18:11	24° II 01'05	
	15040 Jun 24 10:14	0° Ω			15041 May 28 16:24	0° B	
greatest brilliancy	15040 Jun 28 02:28	5° Ω 27'25	-0.6m		15041 Jun 18 19:27	0° Ω	
asc. node	15040 Jul 06 23:26	17° Ω 32'23		evening max el	15041 Jun 22 20:41	4° Ω 32'12	20°40'01
evening max el	15040 Jul 09 19:28	20° Ω 39'55	19°37'10	asc. node	15041 Jun 23 20:19	5° Ω 29'05	
retrograde	15040 Jul 17 02:16	24° Ω 45'05		retrograde	15041 Jul 01 01:13	9° Ω 14'40	
evening set	15040 Jul 20 20:06	23° Ω 23'50		evening set	15041 Jul 05 05:32	7° Ω 35'58	
inferior conj	15040 Jul 26 04:27	17° Ω 28'30	3°02'26	inferior conj	15041 Jul 10 11:26	1° Ω 28'54	3°09'55
minimum elong	15040 Jul 26 05:35	17° Ω 24'42	3°01'36	minimum elong	15041 Jul 10 11:36	1° Ω 28'20	3°09'02
min. Earth dist.	15040 Jul 27 09:01	15° Ω 53'23	0.67598 AU	min. Earth dist.	15041 Jul 11 02:13	0° Ω 37'55	0.68549 AU
morning rise	15040 Jul 31 14:33	11° Ω 03'10			15041 Jul 11 13:17	30° R B	
direct	15040 Aug 06 11:02	8° Ω 29'59		morning rise	15041 Jul 15 17:22	25° B 07'31	
desc. node	15040 Aug 08 18:08	8° Ω 50'16		direct	15041 Jul 21 02:13	22° B 46'31	
morning max el	15040 Aug 18 13:07	15° Ω 44'31	25°15'10	desc. node	15041 Jul 26 15:32	24° B 44'57	
	15040 Aug 30 07:40	0° np		morning max el	15041 Jul 31 23:40	29° B 16'58	23°47'30
	15040 Sep 18 20:28	0° $\underline{\text{A}}$			15041 Aug 01 16:25	0° Ω	
morning set	15040 Sep 23 10:18	7° $\underline{\text{A}}$ 59'54			15041 Aug 24 01:58	0° np	
max. Earth dist.	15040 Sep 26 23:39	14° $\underline{\text{A}}$ 29'30	1.36475 AU	morning set	15041 Sep 05 02:08	19° np 20'29	
				max. Earth dist.	15041 Sep 08 21:49	25° np 56'37	1.38830 AU
					15041 Sep 11 04:35	0° $\underline{\text{A}}$	
superior conj	15040 Oct 03 10:25	26° $\underline{\text{A}}$ 54'13	0°03'34	superior conj	15041 Sep 16 11:11	9° $\underline{\text{A}}$ 42'34	-0°30'42
minimum elong	15040 Oct 03 10:11	26° $\underline{\text{A}}$ 53'03	0°03'52	minimum elong	15041 Sep 16 13:23	9° $\underline{\text{A}}$ 52'56	0°30'15
behind sun begin	15040 Oct 03 03:57	26° $\underline{\text{A}}$ 22'07		asc. node	15041 Sep 19 21:43	16° $\underline{\text{A}}$ 16'18	
behind sun end	15040 Oct 03 16:25	27° $\underline{\text{A}}$ 24'02		evening rise	15041 Sep 25 12:03	27° $\underline{\text{A}}$ 11'49	
asc. node	15040 Oct 03 01:09	26° $\underline{\text{A}}$ 08'17			15041 Sep 26 22:31	0° ml	
	15040 Oct 04 23:39	0° ml		evening max el	15041 Oct 11 18:14	23° ml 43'54	18°52'33
evening rise	15040 Oct 11 12:27	13° ml 17'23		retrograde	15041 Oct 20 08:28	28° ml 03'34	
	15040 Oct 20 05:42	0° A		evening set	15041 Oct 22 05:46	27° ml 51'51	
evening max el	15040 Oct 28 22:34	12° A 01'15	19°49'15	desc. node	15041 Oct 22 11:53	27° ml 48'32	
desc. node	15040 Nov 04 14:32	16° A 30'01		inferior conj	15041 Oct 30 11:46	23° ml 32'38	-2°32'37
retrograde	15040 Nov 08 02:11	17° A 05'04		minimum elong	15041 Oct 30 05:26	23° ml 43'54	2°29'26
evening set	15040 Nov 10 01:58	16° A 54'17		min. Earth dist.	15041 Nov 02 11:14	21° ml 25'55	0.56619 AU
inferior conj	15040 Nov 18 20:47	12° A 53'33	-4°17'08	morning rise	15041 Nov 07 02:07	18° ml 43'56	
minimum elong	15040 Nov 18 10:53	13° A 08'49	4°13'12	direct	15041 Nov 12 22:11	17° ml 22'43	
min. Earth dist.	15040 Nov 20 22:50	11° A 36'23	0.55128 AU	morning max el	15041 Nov 27 02:13	24° ml 40'59	26°17'27
morning rise	15040 Nov 26 18:18	8° A 39'51			15041 Dec 01 23:59	0° A	
direct	15040 Dec 01 19:33	7° A 43'37		asc. node	15041 Dec 16 22:39	22° A 47'25	
morning max el	15040 Dec 15 14:30	14° A 35'32	24°39'39		15041 Dec 20 17:04	0° B	
	15040 Dec 27 16:06	0° B		morning set	15041 Dec 25 16:04	10° B 17'00	
asc. node	15040 Dec 30 01:33	3° B 56'27					
morning set	15041 Jan 10 05:14	25° B 41'42		superior conj	15042 Jan 01 10:17	25° B 12'23	1°37'58
	15041 Jan 12 04:51	0° \approx		minimum elong	15042 Jan 01 10:11	25° B 11'50	1°38'53
superior conj	15041 Jan 16 23:46	10° \approx 32'11	1°35'28	max. Earth dist.	15042 Jan 02 07:47	27° B 12'07	1.31398 AU
minimum elong	15041 Jan 17 00:45	10° \approx 37'31	1°36'14		15042 Jan 03 14:04	0° \approx	
max. Earth dist.	15041 Jan 19 02:12	15° \approx 07'19	1.32237 AU	evening rise	15042 Jan 08 09:52	10° \approx 26'01	
evening rise	15041 Jan 24 09:18	26° \approx 17'25		desc. node	15042 Jan 18 10:49	29° \approx 54'24	
	15041 Jan 26 05:32	0° H			15042 Jan 18 12:05	0° H	
desc. node	15041 Jan 31 14:06	10° H 12'04		evening max el	15042 Feb 09 04:08	29° H 56'03	27°24'37
	15041 Feb 12 15:43	0° Υ			15042 Feb 09 05:48	0° Υ	
evening max el	15041 Feb 26 19:49	17° Υ 24'14	27°34'35	retrograde	15042 Feb 23 03:39	7° Υ 16'31	
retrograde	15041 Mar 12 16:09	24° Υ 52'52		evening set	15042 Mar 01 23:05	5° Υ 09'39	
evening set	15041 Mar 19 12:00	22° Υ 30'14		min. Earth dist.	15042 Mar 05 18:19	2° Υ 20'06	0.61071 AU
min. Earth dist.	15041 Mar 23 06:33	19° Υ 18'38	0.63236 AU		15042 Mar 08 09:57	30° R H	
inferior conj	15041 Mar 26 02:17	16° Υ 29'05	-0°35'32	inferior conj	15042 Mar 08 21:35	29° H 34'04	-1°54'51
minimum elong	15041 Mar 26 03:26	16° Υ 26'11	0°35'14	minimum elong	15042 Mar 09 01:44	29° H 24'52	1°53'04
asc. node	15041 Mar 27 22:30	14° Υ 41'06					

asc. node	15042 Mar 14 19:57	25° K 13'06	morning rise	15043 Feb 27 00:35	7° K 25'32	
morning rise	15042 Mar 16 07:36	24° K 38'33	direct	15043 Mar 01 00:27	7° K 11'24	
direct	15042 Mar 18 10:35	24° K 19'32	asc. node	15043 Mar 01 17:26	7° K 13'14	
morning max el	15042 Mar 25 10:49	27° K 50'51 17°52'58	morning max el	15043 Mar 08 22:17	11° K 06'12 18°18'59	
	15042 Mar 27 10:05	0° Y		15043 Mar 21 09:11	0° Y	
morning set	15042 Apr 10 01:54	22° Y 12'57	morning set	15043 Mar 24 15:44	6° Y 09'10	
	15042 Apr 14 09:27	0° B				
desc. node	15042 Apr 16 12:52	3° B 49'10	superior conj	15043 Apr 03 01:36	23° Y 46'13 0°02'42	
			minimum elong	15043 Apr 03 01:46	23° Y 47'00 0°02'23	
superior conj	15042 Apr 20 20:25	11° B 21'43 -0°34'17	behind sun begin	15043 Apr 02 18:28	23° Y 13'45	
minimum elong	15042 Apr 20 17:19	11° B 08'21 0°34'22	behind sun end	15043 Apr 03 09:04	24° Y 20'10	
max. Earth dist.	15042 Apr 28 05:12	23° B 43'52 1.43094 AU	desc. node	15043 Apr 03 09:28	24° Y 21'58	
	15042 May 02 02:19	0° II		15043 Apr 06 13:00	0° B	
evening rise	15042 May 04 13:59	3° II 56'08	max. Earth dist.	15043 Apr 10 15:24	7° B 06'33 1.41050 AU	
	15042 May 22 01:07	0° B	evening rise	15043 Apr 15 04:34	14° B 42'11	
evening max el	15042 Jun 05 16:19	18° B 24'54 21°54'01		15043 Apr 24 21:49	0° II	
asc. node	15042 Jun 10 17:19	22° B 31'07		15043 May 17 03:19	0° B	
retrograde	15042 Jun 14 23:24	23° B 50'57	evening max el	15043 May 19 07:48	2° B 17'32 23°14'26	
evening set	15042 Jun 19 14:49	21° B 55'33	asc. node	15043 May 28 14:26	8° B 21'04	
inferior conj	15042 Jun 24 20:49	15° B 38'14 3°06'10	retrograde	15043 May 29 19:24	8° B 27'29	
minimum elong	15042 Jun 24 20:02	15° B 40'57 3°05'09	evening set	15043 Jun 03 22:17	6° B 17'16	
min. Earth dist.	15042 Jun 24 22:16	15° B 33'10 0.69016 AU	inferior conj	15043 Jun 09 06:36	29° II 51'51 2°51'57	
morning rise	15042 Jun 30 01:05	9° B 23'03	minimum elong	15043 Jun 09 05:02	29° II 57'15 2°50'43	
direct	15042 Jul 04 21:29	7° B 19'08	min. Earth dist.	15043 Jun 08 19:05	0° B 31'41 0.68994 AU	
desc. node	15042 Jul 13 12:49	12° B 01'22		15043 Jun 09 04:15	30° R II	
morning max el	15042 Jul 14 12:07	12° B 58'06 22°18'45	morning rise	15043 Jun 14 11:44	23° II 44'18	
	15042 Jul 28 03:26	0° Q	direct	15043 Jun 18 19:40	22° II 00'00	
morning set	15042 Aug 16 18:27	29° Q 40'21	morning max el	15043 Jun 27 05:21	26° II 48'58 20°56'27	
	15042 Aug 16 23:19	0° P	desc. node	15043 Jun 30 10:01	0° B 17'38	
max. Earth dist.	15042 Aug 21 22:55	8° P 12'30 1.41189 AU		15043 Jun 30 03:58	0° B	
				15043 Jul 21 14:39	0° Q	
superior conj	15042 Aug 29 18:49	21° P 44'38 -1°06'47	morning set	15043 Jul 27 11:25	9° Q 00'51	
minimum elong	15042 Aug 30 00:04	22° P 08'00 1°06'14	max. Earth dist.	15043 Aug 04 05:57	21° Q 20'52 1.43264 AU	
	15042 Sep 03 08:18	0° A		15043 Aug 09 12:18	0° P	
asc. node	15042 Sep 06 18:18	6° A 19'43				
evening rise	15042 Sep 09 02:05	10° A 40'14	superior conj	15043 Aug 11 04:57	2° P 50'28 -1°40'28	
	15042 Sep 20 02:53	0° M	minimum elong	15043 Aug 11 12:26	3° P 22'04 1°40'11	
evening max el	15042 Sep 25 00:19	6° M 10'09 18°17'26	evening rise	15043 Aug 23 02:10	23° P 31'03	
retrograde	15042 Oct 02 10:19	9° M 56'42	asc. node	15043 Aug 24 14:54	26° P 14'15	
evening set	15042 Oct 04 12:17	9° M 39'30		15043 Aug 26 17:56	0° A	
desc. node	15042 Oct 09 09:18	7° M 04'43	evening max el	15043 Sep 08 12:38	19° A 10'19 18°02'35	
inferior conj	15042 Oct 12 00:35	4° M 58'52 -0°50'25	retrograde	15043 Sep 15 05:06	22° A 37'03	
minimum elong	15042 Oct 11 22:43	5° M 02'46 0°49'11	evening set	15043 Sep 17 14:29	22° A 10'31	
min. Earth dist.	15042 Oct 15 07:04	2° M 16'14 0.58655 AU	inferior conj	15043 Sep 24 09:37	17° A 09'57 0°34'41	
	15042 Oct 18 11:36	30° R A	minimum elong	15043 Sep 24 10:41	17° A 07'24 0°34'29	
morning rise	15042 Oct 19 05:42	29° A 33'34	desc. node	15043 Sep 26 06:46	15° A 20'37	
direct	15042 Oct 25 14:29	27° A 45'43	min. Earth dist.	15043 Sep 27 12:19	14° A 11'05 0.60929 AU	
	15042 Nov 02 00:14	0° M	morning rise	15043 Oct 01 03:54	11° A 15'28	
morning max el	15042 Nov 08 21:44	5° M 25'08 27°26'28	direct	15043 Oct 07 19:13	9° A 03'20	
	15042 Nov 27 02:41	0° X	morning max el	15043 Oct 22 01:00	16° A 58'04 27°57'28	
asc. node	15042 Dec 03 19:40	12° X 07'03		15043 Nov 01 20:35	0° M	
morning set	15042 Dec 10 00:01	24° X 40'25		15043 Nov 19 18:43	0° X	
	15042 Dec 12 11:12	0° B	asc. node	15043 Nov 20 16:35	1° X 47'29	
			morning set	15043 Nov 24 03:11	8° X 47'18	
superior conj	15042 Dec 16 21:50	9° B 52'01 1°34'27	max. Earth dist.	15043 Nov 29 22:34	21° X 17'52 1.31291 AU	
minimum elong	15042 Dec 16 20:43	9° B 45'50 1°35'23				
max. Earth dist.	15042 Dec 16 15:53	9° B 18'45 1.31076 AU	superior conj	15043 Dec 01 08:33	24° X 26'15 1°25'02	
evening rise	15042 Dec 23 15:51	24° B 46'32	minimum elong	15043 Dec 01 06:40	24° X 15'43 1°25'49	
	15042 Dec 26 03:20	0° A		15043 Dec 03 20:30	0° B	
desc. node	15043 Jan 05 07:36	19° A 07'22	evening rise	15043 Dec 08 01:12	9° B 14'10	
	15043 Jan 12 09:17	0° K		15043 Dec 18 13:04	0° A	
evening max el	15043 Jan 22 05:47	11° K 38'04 26°39'40	desc. node	15043 Dec 23 04:28	7° A 40'09	
retrograde	15043 Feb 05 05:19	18° K 48'06	evening max el	15044 Jan 03 22:58	22° A 27'27 25°22'35	
evening set	15043 Feb 11 17:19	17° K 03'45	retrograde	15044 Jan 17 19:45	29° A 25'48	
min. Earth dist.	15043 Feb 15 19:27	14° K 26'02 0.58855 AU	evening set	15044 Jan 23 14:56	28° A 09'18	
inferior conj	15043 Feb 18 23:47	11° K 59'50 -3°22'06	min. Earth dist.	15044 Jan 28 11:23	25° A 28'17 0.56827 AU	
minimum elong	15043 Feb 19 07:18	11° K 45'22 3°19'03	inferior conj	15044 Jan 31 05:46	23° A 37'52 -4°46'14	

minimum elong	15044 Jan 31 14:57	23°  22'34	4°43'11	inferior conj	15045 Jan 10 15:01	4°  24'11	-5°46'32
morning rise	15044 Feb 08 17:40	19°  25'25		minimum elong	15045 Jan 10 20:42	4°  15'46	5°45'00
direct	15044 Feb 10 20:00	19°  12'27		morning rise	15045 Jan 19 05:48	0°  29'27	
asc. node	15044 Feb 16 14:52	20°  58'13		direct	15045 Jan 21 20:02	0°  12'44	
morning max el	15044 Feb 20 00:47	23°  41'23	19°06'14	morning max el	15045 Feb 01 14:07	5°  23'48	20°16'32
	15044 Feb 25 04:30	0°  ✕		asc. node	15045 Feb 02 12:15	6°  19'25	
morning set	15044 Mar 07 15:28	20°  ✕30'50			15045 Feb 17 09:01	0°  ✕	
	15044 Mar 12 10:28	0°  Y		morning set	15045 Feb 19 21:40	5°  ✕07'05	
superior conj	15044 Mar 16 00:38	6°  Y58'59	0°34'35	superior conj	15045 Feb 27 13:05	20°  ✕46'41	1°00'07
minimum elong	15044 Mar 16 02:40	7°  Y08'43	0°34'14	minimum elong	15045 Feb 27 15:42	20°  ✕59'53	0°59'59
desc. node	15044 Mar 20 06:00	14°  Y55'44			15045 Mar 04 05:27	0°  Y	
max. Earth dist.	15044 Mar 22 21:48	19°  Y45'33	1.38789 AU	max. Earth dist.	15045 Mar 05 04:38	1°  Y50'46	1.36555 AU
evening rise	15044 Mar 26 16:27	26°  Y23'38		desc. node	15045 Mar 07 02:32	5°  Y26'21	
	15044 Mar 28 19:17	0°  8		evening rise	15045 Mar 08 23:31	8°  Y52'53	
	15044 Apr 17 11:35	0°  II			15045 Mar 21 12:40	0°  8	
evening max el	15044 Apr 30 21:25	16°  II11'11	24°35'02		15045 Apr 13 09:24	0°  II	
retrograde	15044 May 12 11:57	22°  II58'25		evening max el	15045 Apr 13 10:59	0°  II03'53	25°48'46
asc. node	15044 May 14 11:37	22°  II41'26		retrograde	15045 Apr 25 23:56	7°  II16'46	
evening set	15044 May 18 02:20	20°  II36'26		asc. node	15045 May 01 08:53	5°  II19'34	
min. Earth dist.	15044 May 22 14:36	15°  II27'30	0.68497 AU	evening set	15045 May 02 01:16	4°  II47'10	
inferior conj	15044 May 23 14:54	14°  II06'13	2°27'18		15045 May 06 11:10	30°  R8	
minimum elong	15044 May 23 12:50	14°  II13'08	2°25'53	min. Earth dist.	15045 May 06 06:39	0°  II14'09	0.67540 AU
morning rise	15044 May 28 23:31	8°  II07'21		inferior conj	15045 May 07 19:42	28°  816'48	1°51'46
direct	15044 Jun 01 19:30	6°  II43'13		minimum elong	15045 May 07 17:34	28°  823'33	1°50'20
morning max el	15044 Jun 09 05:26	10°  II50'27	19°46'04	morning rise	15045 May 13 10:29	22°  827'59	
desc. node	15044 Jun 16 07:07	19°  II17'51		direct	15045 May 16 19:25	21°  822'58	
greatest brilliancy	15044 Jun 22 09:52	27°  II56'03	-0.6m	morning max el	15045 May 23 12:46	25°  800'23	18°50'52
	15044 Jun 23 19:38	0°  ☾			15045 May 27 21:05	0°  II	
morning set	15044 Jul 05 14:45	17°  ☾48'53		desc. node	15045 Jun 03 04:05	8°  II50'11	
	15044 Jul 13 11:28	0°  Ω		greatest brilliancy	15045 Jun 06 04:14	13°  II21'33	-0.8m
max. Earth dist.	15044 Jul 16 18:53	5°  Ω12'26	1.44834 AU	morning set	15045 Jun 15 00:26	26°  II59'54	
					15045 Jun 16 22:49	0°  ☾	
superior conj	15044 Jul 21 15:26	12°  Ω57'10	-2°05'16	max. Earth dist.	15045 Jun 29 12:44	19°  ☾35'06	1.45743 AU
minimum elong	15044 Jul 21 21:34	13°  Ω21'52	2°05'44				
	15044 Aug 01 00:24	0°  ൬		superior conj	15045 Jul 01 06:25	22°  ☾18'13	-2°13'55
evening rise	15044 Aug 04 07:07	5°  ൬31'09		minimum elong	15045 Jul 01 06:00	22°  ☾16'34	2°14'52
asc. node	15044 Aug 10 11:31	15°  ൬55'24			15045 Jul 06 03:55	0°  Ω	
	15044 Aug 19 19:48	0°  ☾		evening rise	15045 Jul 16 12:13	16°  Ω30'05	
evening max el	15044 Aug 22 03:18	2°  ☾34'39	18°06'37		15045 Jul 24 22:11	0°  ൬	
retrograde	15044 Aug 28 12:16	5°  ☾55'07		asc. node	15045 Jul 28 08:11	5°  ൬17'54	
evening set	15044 Aug 31 06:07	5°  ☾15'51		evening max el	15045 Aug 05 17:02	16°  ൬14'54	18°28'33
inferior conj	15044 Sep 06 11:01	29°  ൬57'37	1°39'01	retrograde	15045 Aug 12 03:44	19°  ൬42'23	
minimum elong	15044 Sep 06 13:17	29°  ൬51'26	1°38'12	evening set	15045 Aug 15 06:35	18°  ൬47'49	
	15044 Sep 06 10:08	30°  R൬		inferior conj	15045 Aug 21 00:47	13°  ൬13'55	2°24'00
min. Earth dist.	15044 Sep 09 03:24	27°  ൬03'18	0.63178 AU	minimum elong	15045 Aug 21 03:05	13°  ൬07'02	2°23'04
desc. node	15044 Sep 12 04:16	24°  ൬11'54		min. Earth dist.	15045 Aug 23 03:44	10°  ൬41'35	0.65193 AU
morning rise	15044 Sep 12 18:21	23°  ൬44'22		morning rise	15045 Aug 26 22:20	6°  ൬51'03	
direct	15044 Sep 19 10:09	21°  ൬14'43		desc. node	15045 Aug 30 01:44	4°  ൬53'46	
morning max el	15044 Oct 03 09:20	29°  ൬15'08	27°49'40	direct	15045 Sep 02 09:26	4°  ൬13'11	
	15044 Oct 04 03:00	0°  ☾		morning max el	15045 Sep 15 20:10	12°  ൬06'47	27°08'19
	15044 Oct 25 19:04	0°  ൬			15045 Sep 30 03:57	0°  ☾	
morning set	15044 Nov 06 23:12	22°  ൬31'15			15045 Oct 18 08:29	0°  ൬	
asc. node	15044 Nov 06 13:22	21°  ൬41'44		morning set	15045 Oct 21 09:25	5°  ൬46'25	
	15044 Nov 10 14:06	0°  ✕		asc. node	15045 Oct 24 10:04	11°  ൬45'12	
max. Earth dist.	15044 Nov 11 23:53	2°  ✕59'31	1.32066 AU	max. Earth dist.	15045 Oct 25 16:46	14°  ൬20'44	1.33400 AU
superior conj	15044 Nov 14 16:28	8°  ✕48'49	1°09'41	superior conj	15045 Oct 29 19:26	22°  ൬54'35	0°48'26
minimum elong	15044 Nov 14 14:10	8°  ✕36'15	1°10'14	minimum elong	15045 Oct 29 17:17	22°  ൬43'13	0°48'46
evening rise	15044 Nov 21 12:03	23°  ✕43'31			15045 Nov 02 03:02	0°  ✕	
	15044 Nov 24 11:11	0°  ☾		evening rise	15045 Nov 05 22:35	8°  ✕10'35	
desc. node	15044 Dec 09 01:27	25°  ☾17'00			15045 Nov 17 07:06	0°  ☾	
	15044 Dec 12 21:31	0°  ≈		desc. node	15045 Nov 25 22:32	11°  ☾38'14	
evening max el	15044 Dec 15 09:30	2°  ≈35'46	23°44'11	evening max el	15045 Nov 26 20:51	12°  ☾34'43	22°01'51
retrograde	15044 Dec 28 20:53	9°  ≈16'58		retrograde	15045 Dec 09 10:00	18°  ☾47'12	
evening set	15045 Jan 02 13:14	8°  ≈29'25		evening set	15045 Dec 12 18:27	18°  ☾22'15	
min. Earth dist.	15045 Jan 08 20:41	5°  ≈26'47	0.55281 AU	inferior conj	15045 Dec 21 09:11	14°  ☾29'59	-5°57'24

minimum elong	15045 Dec 21 06:01	14°  34'24	5°56'15	minimum elong	15046 Nov 30 15:22	24°  37'43	5°04'27
min. Earth dist.	15045 Dec 21 02:27	14°  39'24	0.54500 AU	min. Earth dist.	15046 Dec 02 08:15	23°  38'20	0.54634 AU
morning rise	15045 Dec 29 18:29	10°  42'41		morning rise	15046 Dec 09 02:33	20°  25'35	
direct	15046 Jan 02 06:26	10°  35'37		direct	15046 Dec 13 14:49	19°  41'54	
morning max el	15046 Jan 14 12:28	16°  09'48	21°49'12	morning max el	15046 Dec 26 23:50	26°  14'09	23°36'58
asc. node	15046 Jan 20 09:33	23°  00'17		asc. node	15046 Dec 30 13:17	0°  3	
	15046 Jan 25 00:00	0°  ≈			15047 Jan 07 06:47	10°  343'14	
morning set	15046 Feb 04 07:44	19°  ≈50'34		morning set	15047 Jan 17 15:23	0°  ≈	
	15046 Feb 09 02:34	0°  ✕			15047 Jan 19 19:32	4°  ≈35'18	
superior conj	15046 Feb 11 11:13	4°  ✕59'13	1°18'58	superior conj	15047 Jan 26 16:04	19°  ≈28'15	1°31'16
minimum elong	15046 Feb 11 13:34	5°  ✕11'29	1°19'11	minimum elong	15047 Jan 26 17:37	19°  ≈36'38	1°31'51
max. Earth dist.	15046 Feb 15 16:49	13°  ✕42'13	1.34561 AU	max. Earth dist.	15047 Jan 29 12:33	25°  ≈35'19	1.32950 AU
evening rise	15046 Feb 19 22:21	22°  ✕00'30		evening rise	15047 Jan 31 15:05	0°  ✕	
desc. node	15046 Feb 21 23:04	25°  ✕50'02		desc. node	15047 Feb 03 09:29	5°  ✕37'41	
	15046 Feb 24 05:45	0°  Υ			15047 Feb 08 19:40	16°  ✕02'26	
	15046 Mar 15 07:27	0°  8			15047 Feb 16 21:38	0°  Υ	
evening max el	15046 Mar 27 00:52	13°  848'42	26°48'03	evening max el	15047 Mar 09 14:03	27°  Υ14'53	27°25'30
retrograde	15046 Apr 09 06:14	21°  815'04		retrograde	15047 Mar 12 16:19	0°  8	
evening set	15046 Apr 15 17:12	18°  842'56		evening set	15047 Mar 23 06:09	4°  844'57	
asc. node	15046 Apr 18 06:13	16°  820'39		asc. node	15047 Mar 30 00:04	2°  816'32	
min. Earth dist.	15046 Apr 19 17:05	14°  844'18	0.66158 AU	min. Earth dist.	15047 Apr 01 15:42	30°  RΥ	
inferior conj	15046 Apr 21 18:48	12°  818'22	1°04'33	inferior conj	15047 Apr 02 19:52	28°  Υ49'26	0.64394 AU
minimum elong	15046 Apr 21 17:15	12°  822'58	1°03'24	minimum elong	15047 Apr 05 09:38	26°  Υ04'46	0°04'47
morning rise	15046 Apr 27 18:32	6°  841'23		morning rise	15047 Apr 05 09:30	26°  Υ05'07	0°04'24
direct	15046 Apr 30 17:22	5°  853'20		direct	15047 Apr 05 09:30	26°  Υ05'07	0°04'24
morning max el	15046 May 07 02:06	9°  813'43	18°12'18	morning max el	15047 Apr 05 06:32	26°  Υ13'05	
desc. node	15046 May 21 00:57	28°  845'51		desc. node	15047 Apr 05 12:28	25°  Υ57'11	
	15046 May 21 19:33	0°  II			15047 Apr 05 03:37	26°  Υ20'57	
morning set	15046 May 26 09:33	7°  II20'32		morning set	15047 Apr 11 21:02	20°  Υ41'59	
	15046 Jun 09 16:27	0°  ☿			15047 Apr 14 10:54	20°  Υ07'59	
superior conj	15046 Jun 10 15:04	1°  ☿28'30	-2°02'28	superior conj	15047 Apr 20 19:07	23°  Υ23'38	17°50'51
minimum elong	15046 Jun 10 07:43	0°  ☿59'44	2°03'00	minimum elong	15047 Apr 26 03:36	0°  8	
max. Earth dist.	15046 Jun 12 09:09	4°  ☿12'58	1.45915 AU	max. Earth dist.	15047 May 07 22:30	19°  801'39	
evening rise	15046 Jun 26 17:01	26°  ☿29'40		evening rise	15047 May 07 21:43	18°  858'26	
	15046 Jun 28 23:13	0°  Ω			15047 May 14 12:44	0°  II	
greatest brilliancy	15046 Jul 07 22:22	13°  Ω47'01	-0.7m	greatest brilliancy	15047 May 21 10:41	11°  II14'06	-1°34'03
asc. node	15046 Jul 15 04:55	24°  Ω14'18		asc. node	15047 May 21 02:06	10°  II39'41	1°34'02
evening max el	15046 Jul 20 03:05	0°  ♍02'56	19°07'32	evening max el	15047 May 26 05:14	18°  II49'00	1.45339 AU
	15046 Jul 20 01:54	0°  ♍			15047 Jun 02 09:25	0°  ☿	
retrograde	15046 Jul 27 00:09	3°  ♍50'41		retrograde	15047 Jun 06 06:01	5°  ☿55'43	
evening set	15046 Jul 30 12:26	2°  ♍39'13		evening set	15047 Jun 21 02:47	28°  ☿11'37	-0.6m
	15046 Aug 02 09:56	30°  RΩ			15047 Jun 22 08:57	0°  Ω	
inferior conj	15046 Aug 04 23:26	26°  Ω51'10	2°52'30	inferior conj	15047 Jun 22 01:45	12°  Ω35'59	
minimum elong	15046 Aug 05 01:05	26°  Ω45'49	2°51'37	minimum elong	15047 Jul 03 07:40	13°  Ω54'09	20°02'12
min. Earth dist.	15046 Aug 06 12:03	24°  Ω53'09	0.66844 AU	min. Earth dist.	15047 Jul 10 22:54	18°  Ω14'10	
morning rise	15046 Aug 10 13:05	20°  Ω25'28		morning rise	15047 Jul 14 21:09	16°  Ω45'16	
direct	15046 Aug 16 15:35	17°  Ω48'29		direct	15047 Jul 20 04:06	10°  Ω44'32	3°07'04
desc. node	15046 Aug 16 23:13	17°  Ω48'53		desc. node	15047 Jul 20 04:50	10°  Ω42'02	3°06'13
morning max el	15046 Aug 29 07:25	25°  Ω21'06	26°01'32	morning max el	15047 Jul 21 02:39	9°  Ω28'03	0.68061 AU
	15046 Sep 02 13:14	0°  ♍			15047 Jul 25 12:09	4°  Ω20'31	
	15046 Sep 23 15:53	0°  ♎			15047 Jul 31 03:42	1°  Ω52'07	
morning set	15046 Oct 04 06:24	18°  ♎24'22		morning set	15047 Aug 03 20:39	2°  Ω44'58	
max. Earth dist.	15046 Oct 07 24:00	25°  ♎27'00	1.35240 AU	max. Earth dist.	15047 Aug 11 18:16	8°  Ω49'12	24°38'38
	15046 Oct 10 07:56	0°  ♏			15047 Aug 28 10:49	0°  ♍	
asc. node	15046 Oct 11 06:43	1°  ♏53'07		asc. node	15047 Sep 16 10:10	0°  ♎16'03	
superior conj	15046 Oct 13 14:49	6°  ♏36'08	0°21'27	superior conj	15047 Sep 16 06:29	0°  ♎	
minimum elong	15046 Oct 13 13:37	6°  ♏30'00	0°21'43	minimum elong	15047 Sep 19 23:59	6°  ♎38'37	1.37460 AU
evening rise	15046 Oct 21 06:47	22°  ♏29'43		evening rise	15047 Sep 26 23:27	19°  ♎45'54	-0°10'35
	15046 Oct 24 23:12	0°  ♏			15047 Sep 27 00:08	19°  ♎49'13	0°10'14
evening max el	15046 Nov 08 18:12	23°  ♏00'22	20°31'47	evening max el	15047 Sep 27 18:54	19°  ♎23'52	
desc. node	15046 Nov 12 19:43	26°  ♏19'09		desc. node	15047 Sep 26 05:21	20°  ♎14'37	
retrograde	15046 Nov 19 20:30	28°  ♏31'31		retrograde	15047 Sep 28 03:19	22°  ♎01'54	
evening set	15046 Nov 22 03:56	28°  ♏18'15		evening set	15047 Oct 02 03:38	0°  ♏	
inferior conj	15046 Dec 01 01:00	24°  ♏23'44	-5°07'37	inferior conj	15047 Oct 05 10:20	6°  ♏35'01	

	15047 Oct 18 15:52	0°♊		evening rise	15048 Sep 18 06:20	20°♎19'19	
evening max el	15047 Oct 22 06:00	4°♊13'42	19°22'22		15048 Sep 23 09:14	0°♎	
desc. node	15047 Oct 30 17:02	8°♊55'18		evening max el	15048 Oct 04 06:39	16°♎16'05	18°35'07
retrograde	15047 Oct 31 17:11	8°♊58'24		retrograde	15048 Oct 12 07:45	20°♎20'10	
evening set	15047 Nov 02 14:27	8°♊47'55		evening set	15048 Oct 14 06:22	20°♎06'44	
inferior conj	15047 Nov 11 04:50	4°♊39'47	-3°34'05	desc. node	15048 Oct 16 14:25	19°♎17'45	
minimum elong	15047 Nov 10 20:03	4°♊54'08	3°30'10	inferior conj	15048 Oct 22 05:05	15°♎38'50	-1°47'48
min. Earth dist.	15047 Nov 13 17:40	3°♊00'29	0.55671 AU	minimum elong	15048 Oct 22 00:45	15°♎47'05	1°45'26
morning rise	15047 Nov 18 23:26	0°♊11'53		min. Earth dist.	15048 Oct 25 09:17	13°♎14'22	0.57428 AU
	15047 Nov 19 11:57	30°♎		morning rise	15048 Oct 29 15:42	10°♎33'48	
direct	15047 Nov 24 09:01	29°♎05'46		direct	15048 Nov 04 17:56	9°♎00'58	
	15047 Nov 29 05:35	0°♊		morning max el	15048 Nov 19 00:10	16°♎29'58	26°51'07
morning max el	15047 Dec 08 09:17	6°♊09'50	25°23'57		15048 Nov 30 01:50	0°♊	
asc. node	15047 Dec 25 03:56	29°♊12'54		asc. node	15048 Dec 11 01:00	18°♊17'08	
	15047 Dec 25 14:32	0°♊			15048 Dec 16 22:19	0°♊	
morning set	15048 Jan 04 07:14	19°♊15'28		morning set	15048 Dec 18 17:05	3°♊46'32	
	15048 Jan 09 04:41	0°♊					
				superior conj	15048 Dec 25 12:20	18°♊47'19	1°37'12
superior conj	15048 Jan 11 01:07	4°♊06'15	1°37'16	minimum elong	15048 Dec 25 11:47	18°♊44'17	1°38'09
minimum elong	15048 Jan 11 01:38	4°♊09'08	1°38'07	max. Earth dist.	15048 Dec 25 22:03	19°♊41'37	1.31189 AU
max. Earth dist.	15048 Jan 12 15:07	7°♊35'46	1.31812 AU		15048 Dec 30 13:58	0°♊	
evening rise	15048 Jan 18 05:52	19°♊36'29		evening rise	15049 Jan 01 09:00	3°♊51'00	
	15048 Jan 23 11:13	0°♊		desc. node	15049 Jan 12 13:04	25°♊28'41	
desc. node	15048 Jan 26 16:19	5°♊57'36			15049 Jan 15 05:24	0°♊	
	15048 Feb 11 02:55	0°♊		evening max el	15049 Feb 01 06:19	22°♊20'49	27°09'47
evening max el	15048 Feb 20 00:38	10°♊09'18	27°34'26	retrograde	15049 Feb 15 06:36	29°♊37'51	
retrograde	15048 Mar 04 22:44	17°♊35'35		evening set	15049 Feb 21 23:40	27°♊39'46	
evening set	15048 Mar 11 19:16	15°♊18'20		min. Earth dist.	15049 Feb 25 20:47	24°♊56'34	0.60122 AU
min. Earth dist.	15048 Mar 15 13:23	12°♊17'27	0.62334 AU	inferior conj	15049 Mar 01 01:33	22°♊16'40	-2°31'20
inferior conj	15048 Mar 18 13:04	9°♊27'08	-1°07'49	minimum elong	15049 Mar 01 07:10	22°♊04'56	2°28'56
minimum elong	15048 Mar 18 15:23	9°♊21'36	1°06'55	morning rise	15049 Mar 08 18:03	17°♊30'00	
asc. node	15048 Mar 22 01:04	6°♊22'04		asc. node	15049 Mar 08 22:31	17°♊27'11	
morning rise	15048 Mar 25 14:26	4°♊21'07		direct	15049 Mar 10 19:03	17°♊13'37	
direct	15048 Mar 27 20:42	3°♊57'46		morning max el	15049 Mar 18 03:32	20°♊53'54	18°01'29
morning max el	15048 Apr 03 12:44	7°♊20'18	17°46'56		15049 Mar 25 00:09	0°♊	
	15048 Apr 18 10:17	0°♊		morning set	15049 Apr 02 17:12	15°♊24'26	
morning set	15048 Apr 19 11:02	1°♊48'50		desc. node	15049 Apr 10 15:02	29°♊52'24	
desc. node	15048 Apr 23 18:24	9°♊21'58			15049 Apr 10 16:44	0°♊	
superior conj	15048 May 01 04:01	22°♊00'49	-0°56'45	superior conj	15049 Apr 12 20:52	3°♊51'40	-0°18'09
minimum elong	15048 Apr 30 22:36	21°♊38'11	0°56'40	minimum elong	15049 Apr 12 19:19	3°♊44'49	0°18'21
	15048 May 06 00:16	0°♊		max. Earth dist.	15049 Apr 20 10:25	16°♊48'44	1.42269 AU
max. Earth dist.	15048 May 07 22:07	3°♊05'18	1.44076 AU	evening rise	15049 Apr 25 21:51	25°♊43'41	
evening rise	15048 May 15 18:49	15°♊28'39			15049 Apr 28 14:43	0°♊	
	15048 May 25 09:10	0°♊			15049 May 19 05:05	0°♊	
evening max el	15048 Jun 15 06:16	27°♊45'49	21°10'18	evening max el	15049 May 28 23:53	11°♊38'08	22°27'50
asc. node	15048 Jun 17 22:42	0°♊10'59		asc. node	15049 Jun 04 19:45	16°♊44'15	
	15048 Jun 17 17:12	0°♊		retrograde	15049 Jun 07 19:17	17°♊23'29	
retrograde	15048 Jun 23 21:52	2°♊46'56		evening set	15049 Jun 12 15:26	15°♊21'45	
evening set	15048 Jun 28 06:45	1°♊01'01		inferior conj	15049 Jun 17 22:11	9°♊00'41	3°01'24
	15048 Jun 29 09:25	30°♎		minimum elong	15049 Jun 17 21:03	9°♊04'39	3°00'17
inferior conj	15048 Jul 03 12:23	24°♊49'09	3°09'39	min. Earth dist.	15049 Jun 17 18:10	9°♊14'42	0.69066 AU
minimum elong	15048 Jul 03 12:08	24°♊50'00	3°08'43	morning rise	15049 Jun 23 02:29	2°♊48'21	
min. Earth dist.	15048 Jul 03 21:26	24°♊17'40	0.68805 AU	direct	15049 Jun 27 17:33	0°♊52'24	
morning rise	15048 Jul 08 17:17	18°♊29'56		morning max el	15049 Jul 06 19:24	6°♊09'44	21°42'25
direct	15048 Jul 13 20:46	16°♊15'50		desc. node	15049 Jul 07 15:14	7°♊00'33	
desc. node	15048 Jul 20 17:59	19°♊16'51			15049 Jul 25 02:38	0°♊	
morning max el	15048 Jul 24 05:26	22°♊25'31	23°09'20	morning set	15049 Aug 07 22:14	21°♊04'26	
	15048 Jul 30 20:07	0°♊			15049 Aug 13 10:54	0°♊	
	15048 Aug 20 18:02	0°♊		max. Earth dist.	15049 Aug 14 01:15	0°♊59'04	1.42120 AU
morning set	15048 Aug 27 16:22	11°♊11'42					
max. Earth dist.	15048 Aug 31 22:23	18°♊22'47	1.39844 AU	superior conj	15049 Aug 21 16:25	13°♊54'24	-1°21'43
	15048 Sep 07 11:52	0°♊		minimum elong	15049 Aug 21 22:51	14°♊22'23	1°21'13
					15049 Aug 30 16:29	0°♊	
superior conj	15048 Sep 08 17:27	2°♊15'21	-0°46'01	asc. node	15049 Aug 31 20:31	2°♊08'09	
minimum elong	15048 Sep 08 20:55	2°♊31'19	0°45'28	evening rise	15049 Sep 01 15:00	3°♊32'42	
asc. node	15048 Sep 13 23:56	12°♊08'16		evening max el	15049 Sep 17 15:57	28°♊58'06	18°08'48

	15049 Sep 18 18:45	0°♌		superior conj	15050 Aug 02 16:34	24°♊35'28	-1°52'31
retrograde	15049 Sep 24 17:03	2°♌34'08		minimum elong	15050 Aug 03 00:06	25°♊06'36	1°52'31
evening set	15049 Sep 26 22:04	2°♌13'22			15050 Aug 05 22:35	0°♐	
	15049 Sep 30 23:54	30°♐♌		evening rise	15050 Aug 15 07:36	16°♐03'48	
desc. node	15049 Oct 03 11:51	27°♌57'14		asc. node	15050 Aug 18 17:08	21°♐57'49	
inferior conj	15049 Oct 04 02:49	27°♌24'13	-0°11'47		15050 Aug 23 10:49	0°♌	
minimum elong	15049 Oct 04 02:25	27°♌25'06	0°11'17	evening max el	15050 Sep 01 05:45	12°♌10'00	18°02'01
transit middle	15049 Oct 04 02:25	27°♌25'06	0°11'17	retrograde	15050 Sep 07 17:39	15°♌32'10	
transit begin	15049 Oct 03 24:00	27°♌30'29		evening set	15050 Sep 10 06:41	15°♌00'25	
transit end	15049 Oct 04 04:51	27°♌19'42		inferior conj	15050 Sep 16 19:19	9°♌51'49	1°04'29
min. Earth dist.	15049 Oct 07 08:55	24°♌32'00	0.59613 AU	minimum elong	15050 Sep 16 21:04	9°♌47'21	1°03'56
morning rise	15049 Oct 11 03:27	21°♌45'37		min. Earth dist.	15050 Sep 19 18:06	6°♌52'50	0.61911 AU
direct	15049 Oct 17 16:04	19°♌46'31		desc. node	15050 Sep 20 09:18	6°♌16'30	
morning max el	15049 Oct 31 22:52	27°♌33'12	27°44'30	morning rise	15050 Sep 23 08:54	3°♌48'22	
	15049 Nov 03 07:35	0°♌		direct	15050 Sep 30 01:10	1°♌28'00	
	15049 Nov 23 19:01	0°♌		morning max el	15050 Oct 14 04:31	9°♌25'24	27°58'40
asc. node	15049 Nov 27 21:59	7°♌46'02			15050 Oct 30 04:04	0°♌	
morning set	15049 Dec 02 23:12	18°♌02'47		asc. node	15050 Nov 14 18:51	27°♌32'50	
	15049 Dec 08 11:00	0°♌			15050 Nov 16 00:06	0°♌	
max. Earth dist.	15049 Dec 09 05:50	1°♌45'00	1.31099 AU	morning set	15050 Nov 16 23:34	1°♌59'57	
				max. Earth dist.	15050 Nov 22 10:48	13°♌37'45	1.31559 AU
superior conj	15049 Dec 09 23:44	3°♌24'55	1°31'12				
minimum elong	15049 Dec 09 22:15	3°♌16'40	1°32'04	superior conj	15050 Nov 24 09:28	17°♌54'17	1°19'15
evening rise	15049 Dec 16 16:38	18°♌14'47		minimum elong	15050 Nov 24 07:21	17°♌42'33	1°19'55
	15049 Dec 22 09:16	0°♌			15050 Nov 29 20:47	0°♌	
desc. node	15049 Dec 30 09:54	14°♌25'42		evening rise	15050 Dec 01 02:50	2°♌43'27	
	15050 Jan 10 15:47	0°♌			15050 Dec 15 13:26	0°♌	
evening max el	15050 Jan 14 04:39	3°♌40'34	26°10'29	desc. node	15050 Dec 17 06:48	2°♌36'19	
retrograde	15050 Jan 28 03:42	10°♌45'24		evening max el	15050 Dec 26 18:33	14°♌09'28	24°42'20
evening set	15050 Feb 03 09:32	9°♌12'52		retrograde	15051 Jan 09 11:59	21°♌00'43	
min. Earth dist.	15050 Feb 07 17:58	6°♌35'32	0.57952 AU	evening set	15051 Jan 14 21:08	19°♌56'42	
inferior conj	15050 Feb 10 19:26	4°♌23'03	-3°59'11	min. Earth dist.	15051 Jan 20 06:23	17°♌09'06	0.56094 AU
minimum elong	15050 Feb 11 04:03	4°♌07'27	3°55'54	inferior conj	15051 Jan 22 16:16	15°♌38'10	-5°16'18
	15050 Feb 18 21:35	30°♌♌		minimum elong	15051 Jan 23 00:46	15°♌24'47	5°13'48
morning rise	15050 Feb 19 01:37	29°♌57'44		morning rise	15051 Jan 31 06:34	11°♌34'03	
direct	15050 Feb 21 01:37	29°♌44'34		direct	15051 Feb 02 12:54	11°♌20'04	
	15050 Feb 23 04:24	0°♌		asc. node	15051 Feb 10 17:21	14°♌37'59	
asc. node	15050 Feb 23 19:57	0°♌11'01		morning max el	15051 Feb 12 08:48	16°♌05'56	19°33'22
morning max el	15050 Mar 01 11:37	3°♌53'06	18°36'17		15051 Feb 22 06:52	0°♌	
morning set	15050 Mar 17 11:45	29°♌33'02		morning set	15051 Mar 01 14:36	14°♌02'01	
	15050 Mar 17 17:20	0°♌					
superior conj	15050 Mar 26 10:10	16°♌37'57	0°16'57	superior conj	15051 Mar 09 15:23	0°♌06'48	0°46'15
minimum elong	15050 Mar 26 11:18	16°♌43'15	0°16'35	minimum elong	15051 Mar 09 17:48	0°♌18'37	0°45'57
desc. node	15050 Mar 28 11:36	20°♌26'01			15051 Mar 09 14:00	0°♌	
	15050 Apr 02 20:23	0°♌		desc. node	15051 Mar 15 08:08	10°♌58'50	
max. Earth dist.	15050 Apr 02 18:50	29°♌53'16	1.40106 AU	max. Earth dist.	15051 Mar 16 01:19	12°♌18'02	1.37820 AU
evening rise	15050 Apr 06 21:36	6°♌54'09		evening rise	15051 Mar 19 17:58	18°♌56'41	
	15050 Apr 21 15:58	0°♌			15051 Mar 26 06:09	0°♌	
evening max el	15050 May 11 14:31	25°♌32'14	23°49'10		15051 Apr 15 20:35	0°♌	
	15050 May 16 22:42	0°♌		evening max el	15051 Apr 24 03:58	9°♌26'13	25°07'40
retrograde	15050 May 22 13:50	1°♌58'31		retrograde	15051 May 06 04:24	16°♌25'18	
asc. node	15050 May 22 16:52	1°♌58'27		asc. node	15051 May 09 14:04	15°♌36'29	
evening set	15050 May 27 21:38	29°♌43'03		evening set	15051 May 11 23:42	13°♌59'21	
	15050 May 27 13:32	30°♌♌		min. Earth dist.	15051 May 16 08:50	9°♌06'08	0.68150 AU
min. Earth dist.	15050 Jun 01 14:40	24°♌13'07	0.68844 AU	inferior conj	15051 May 17 14:36	7°♌28'40	2°13'35
inferior conj	15050 Jun 02 07:34	23°♌15'23	2°42'46	minimum elong	15051 May 17 12:27	7°♌35'44	2°12'09
minimum elong	15050 Jun 02 05:45	23°♌21'37	2°41'28	morning rise	15051 May 23 01:32	1°♌34'09	
morning rise	15050 Jun 07 13:51	17°♌11'22		direct	15051 May 26 16:46	0°♌18'19	
direct	15050 Jun 11 16:44	15°♌35'28		morning max el	15051 Jun 02 18:34	4°♌10'53	19°20'40
morning max el	15050 Jun 19 15:17	20°♌04'58	20°24'46	desc. node	15051 Jun 11 09:25	14°♌52'22	
desc. node	15050 Jun 24 12:23	25°♌37'16		greatest brilliancy	15051 Jun 15 10:55	20°♌45'12	-0.7m
	15050 Jun 27 20:54	0°♌			15051 Jun 21 14:33	0°♌	
morning set	15050 Jul 18 07:29	0°♌05'58		morning set	15051 Jun 27 10:56	8°♌57'03	
	15050 Jul 18 05:56	0°♌		max. Earth dist.	15051 Jul 10 03:10	28°♌38'05	1.45313 AU
max. Earth dist.	15050 Jul 27 11:21	14°♌29'19	1.44011 AU		15051 Jul 10 24:00	0°♌	
				superior conj	15051 Jul 13 17:38	4°♌19'24	-2°11'17

minimum elong	15051 Jul 13 21:31	4°♄34'49	2°12'02	minimum elong	15052 Jun 22 00:04	13°♄15'46	2°12'22
evening rise	15051 Jul 28 02:51	27°♄39'01		max. Earth dist.	15052 Jun 21 22:12	13°♄08'32	1.45910 AU
	15051 Jul 29 12:57	0°♄			15052 Jul 02 16:42	0°♄	
asc. node	15051 Aug 05 13:45	11°♄31'48		evening rise	15052 Jul 07 21:15	8°♄11'29	
evening max el	15051 Aug 15 20:19	25°♄41'43	18°13'43	greatest brilliancy	15052 Jul 16 01:17	21°♄04'45	-0.8m
retrograde	15051 Aug 22 04:59	29°♄03'45			15052 Jul 21 22:11	0°♄	
evening set	15051 Aug 25 02:35	28°♄18'13		asc. node	15052 Jul 22 10:25	0°♄44'15	
inferior conj	15051 Aug 31 02:28	22°♄52'46	2°00'17	evening max el	15052 Jul 29 08:41	9°♄25'41	18°43'04
minimum elong	15051 Aug 31 04:51	22°♄45'57	1°59'23	retrograde	15052 Aug 04 22:59	13°♄00'38	
min. Earth dist.	15051 Sep 02 13:13	20°♄06'11	0.64073 AU	evening set	15052 Aug 08 05:40	11°♄59'10	
morning rise	15051 Sep 06 05:26	16°♄34'17		inferior conj	15052 Aug 13 20:25	6°♄19'02	2°37'56
desc. node	15051 Sep 07 06:46	15°♄48'28		minimum elong	15052 Aug 13 22:30	6°♄12'34	2°37'01
direct	15051 Sep 12 19:37	14°♄00'19		min. Earth dist.	15052 Aug 15 17:19	3°♄59'53	0.65944 AU
morning max el	15051 Sep 26 14:29	21°♄59'24	27°35'47		15052 Aug 19 11:29	30°♄	
	15051 Oct 03 15:17	0°♄		morning rise	15052 Aug 19 14:19	29°♄53'56	
	15051 Oct 23 08:53	0°♄		desc. node	15052 Aug 24 04:16	27°♄26'43	
morning set	15051 Oct 31 15:47	15°♄32'43		direct	15052 Aug 25 22:01	27°♄15'19	
asc. node	15051 Nov 01 15:37	17°♄31'49			15052 Sep 02 05:15	0°♄	
max. Earth dist.	15051 Nov 05 09:05	25°♄12'06	1.32569 AU	morning max el	15052 Sep 08 01:51	5°♄02'42	26°42'24
	15051 Nov 07 15:19	0°♄			15052 Sep 27 04:32	0°♄	
				morning set	15052 Oct 13 20:51	28°♄33'25	
superior conj	15051 Nov 08 15:33	2°♄10'23	1°01'23		15052 Oct 14 15:00	0°♄	
minimum elong	15051 Nov 08 13:14	1°♄57'53	1°01'50	max. Earth dist.	15052 Oct 17 21:46	6°♄25'05	1.34121 AU
evening rise	15051 Nov 15 13:48	17°♄12'39		asc. node	15052 Oct 18 12:18	7°♄37'49	
	15051 Nov 21 19:15	0°♄					
desc. node	15051 Dec 04 03:49	19°♄43'59		superior conj	15052 Oct 22 15:38	16°♄06'39	0°37'39
evening max el	15051 Dec 08 04:02	24°♄08'35	22°59'57	minimum elong	15052 Oct 22 13:47	15°♄56'59	0°37'56
	15051 Dec 17 03:36	0°♄			15052 Oct 29 05:13	0°♄	
retrograde	15051 Dec 21 07:41	0°♄39'57		evening rise	15052 Oct 29 23:35	1°♄36'52	
evening set	15051 Dec 25 10:39	0°♄02'57			15052 Nov 15 00:26	0°♄	
	15051 Dec 25 14:39	30°♄		evening max el	15052 Nov 18 18:38	4°♄15'02	21°21'23
min. Earth dist.	15052 Jan 01 13:31	26°♄45'26	0.54837 AU	desc. node	15052 Nov 20 00:57	5°♄25'59	
inferior conj	15052 Jan 02 17:57	26°♄04'49	-5°58'27	retrograde	15052 Nov 30 18:38	10°♄11'44	
minimum elong	15052 Jan 02 20:13	26°♄01'33	5°57'26	evening set	15052 Dec 03 14:31	9°♄53'17	
morning rise	15052 Jan 11 07:13	22°♄15'28		inferior conj	15052 Dec 12 09:20	6°♄01'40	-5°43'23
direct	15052 Jan 14 05:41	21°♄55'20		minimum elong	15052 Dec 12 02:36	6°♄11'08	5°41'29
morning max el	15052 Jan 25 15:49	27°♄24'36	20°53'38	min. Earth dist.	15052 Dec 12 19:13	5°♄47'46	0.54433 AU
	15052 Jan 28 02:35	0°♄		morning rise	15052 Dec 20 15:11	2°♄11'59	
asc. node	15052 Jan 28 14:42	0°♄35'36		direct	15052 Dec 24 13:20	1°♄38'40	
morning set	15052 Feb 13 22:44	28°♄42'37		morning max el	15053 Jan 06 08:48	7°♄50'39	22°34'00
	15052 Feb 14 13:38	0°♄		asc. node	15053 Jan 14 12:00	17°♄45'06	
					15053 Jan 21 17:58	0°♄	
superior conj	15052 Feb 21 08:25	14°♄06'55	1°08'56	morning set	15053 Jan 28 09:45	13°♄27'05	
minimum elong	15052 Feb 21 11:00	14°♄20'10	1°08'56				
max. Earth dist.	15052 Feb 26 09:53	24°♄15'04	1.35659 AU	superior conj	15053 Feb 04 09:45	28°♄27'31	1°24'57
	15052 Feb 29 09:59	0°♄		minimum elong	15053 Feb 04 11:48	28°♄38'26	1°25'21
evening rise	15052 Mar 01 08:11	1°♄43'35			15053 Feb 05 03:10	0°♄	
desc. node	15052 Mar 01 04:41	1°♄27'23		max. Earth dist.	15053 Feb 08 00:49	6°♄04'05	1.33816 AU
	15052 Mar 18 07:31	0°♄		evening rise	15053 Feb 12 12:39	15°♄04'49	
evening max el	15052 Apr 05 17:29	23°♄16'10	26°16'06	desc. node	15053 Feb 16 01:16	21°♄46'53	
	15052 Apr 15 06:19	0°♄			15053 Feb 20 15:20	0°♄	
retrograde	15052 Apr 18 14:09	0°♄36'46			15053 Mar 12 23:22	0°♄	
	15052 Apr 21 17:04	30°♄		evening max el	15053 Mar 19 07:08	6°♄54'01	27°07'06
evening set	15052 Apr 24 19:55	28°♄05'03		retrograde	15053 Apr 01 18:07	14°♄23'56	
asc. node	15052 Apr 25 11:20	27°♄31'46		evening set	15053 Apr 08 08:18	11°♄52'29	
min. Earth dist.	15052 Apr 28 22:40	23°♄47'10	0.67004 AU	asc. node	15053 Apr 12 08:42	8°♄00'37	
inferior conj	15052 Apr 30 17:16	21°♄36'15	1°33'14	min. Earth dist.	15053 Apr 12 06:10	8°♄07'37	0.65443 AU
minimum elong	15052 Apr 30 15:17	21°♄42'21	1°31'53	inferior conj	15053 Apr 14 13:11	5°♄32'07	0°40'47
morning rise	15052 May 06 11:33	15°♄52'30		minimum elong	15053 Apr 14 12:06	5°♄35'10	0°39'54
direct	15052 May 09 15:59	14°♄55'10		morning rise	15053 Apr 20 17:33	0°♄00'52	
morning max el	15052 May 16 04:47	18°♄23'49	18°32'25		15053 Apr 20 18:15	30°♄	
	15052 May 25 05:17	0°♄		direct	15053 Apr 23 12:18	29°♄19'20	
desc. node	15052 May 28 06:21	4°♄35'46			15053 Apr 26 07:03	0°♄	
morning set	15052 Jun 06 05:11	18°♄34'04		morning max el	15053 Apr 29 20:01	2°♄36'40	18°01'03
	15052 Jun 13 12:08	0°♄		desc. node	15053 May 15 03:12	24°♄39'26	
				morning set	15053 May 18 02:16	29°♄29'25	
superior conj	15052 Jun 22 03:51	13°♄30'34	-2°11'30		15053 May 18 09:46	0°♄	

superior conj	15053 Jun 01 15:21	22° Π 51'42	-1°52'03	superior conj	15054 May 12 19:21	3° Π 00'55	-1°18'48
minimum elong	15053 Jun 01 06:41	22° Π 17'35	1°52'19	minimum elong	15054 May 12 11:49	2° Π 30'11	1°18'41
max. Earth dist.	15053 Jun 04 18:16	27° Π 45'50	1.45755 AU	max. Earth dist.	15054 May 18 13:12	12° Π 15'09	1.44877 AU
	15053 Jun 06 04:37	0° \mathfrak{E}		evening rise	15054 May 28 04:30	27° Π 16'05	
evening rise	15053 Jun 17 17:42	17° \mathfrak{E} 52'19			15054 May 29 23:25	0° \mathfrak{E}	
	15053 Jun 25 15:53	0° Ω			15054 Jun 19 16:16	0° Ω	
greatest brilliancy	15053 Jun 30 22:22	7° Ω 54'20	-0.7m	evening max el	15054 Jun 25 18:46	7° Ω 08'38	20°29'50
asc. node	15053 Jul 09 07:12	19° Ω 27'43		asc. node	15054 Jun 26 04:04	7° Ω 31'32	
evening max el	15053 Jul 12 16:38	23° Ω 16'20	19°29'01	retrograde	15054 Jul 03 19:35	11° Ω 44'52	
retrograde	15053 Jul 19 20:39	27° Ω 16'30		evening set	15054 Jul 07 22:21	10° Ω 08'37	
evening set	15053 Jul 23 13:01	25° Ω 57'50		inferior conj	15054 Jul 13 04:27	4° Ω 03'13	3°09'32
inferior conj	15053 Jul 28 21:58	20° Ω 04'28	3°00'14	minimum elong	15054 Jul 13 04:45	4° Ω 02'08	3°08'39
minimum elong	15053 Jul 28 23:15	20° Ω 00'12	2°59'22	min. Earth dist.	15054 Jul 13 21:13	3° Ω 05'36	0.68439 AU
min. Earth dist.	15053 Jul 30 04:39	18° Ω 23'08	0.67419 AU		15054 Jul 16 06:11	30° \mathfrak{R} \mathfrak{E}	
morning rise	15053 Aug 03 08:56	13° Ω 38'56		morning rise	15054 Jul 18 10:52	27° \mathfrak{E} 41'10	
direct	15053 Aug 09 07:06	11° Ω 04'26		direct	15054 Jul 23 21:29	25° \mathfrak{E} 18'07	
desc. node	15053 Aug 11 01:43	11° Ω 16'34		desc. node	15054 Jul 28 23:07	26° \mathfrak{E} 56'48	
morning max el	15053 Aug 21 12:51	18° Ω 24'04	25°27'33		15054 Aug 01 23:12	0° Ω	
	15053 Aug 31 07:52	0° \mathfrak{M}		morning max el	15054 Aug 03 23:24	1° Ω 55'29	24°00'53
	15053 Sep 20 05:12	0° $\underline{\mathfrak{L}}$			15054 Aug 25 07:54	0° \mathfrak{M}	
morning set	15053 Sep 26 11:05	10° $\underline{\mathfrak{L}}$ 53'44		morning set	15054 Sep 08 06:09	22° \mathfrak{M} 22'47	
max. Earth dist.	15053 Sep 30 01:00	17° $\underline{\mathfrak{L}}$ 29'20	1.36147 AU	max. Earth dist.	15054 Sep 11 23:36	28° \mathfrak{M} 52'20	1.38478 AU
asc. node	15053 Oct 05 08:57	27° $\underline{\mathfrak{L}}$ 47'10			15054 Sep 12 14:49	0° $\underline{\mathfrak{L}}$	
superior conj	15053 Oct 06 06:56	29° $\underline{\mathfrak{L}}$ 36'35	0°08'25	superior conj	15054 Sep 19 09:53	12° $\underline{\mathfrak{L}}$ 30'58	-0°25'19
minimum elong	15053 Oct 06 06:25	29° $\underline{\mathfrak{L}}$ 33'57	0°08'43	minimum elong	15054 Sep 19 11:40	12° $\underline{\mathfrak{L}}$ 39'23	0°24'53
behind sun begin	15053 Oct 06 01:04	29° $\underline{\mathfrak{L}}$ 07'16		asc. node	15054 Sep 22 05:33	17° $\underline{\mathfrak{L}}$ 55'40	
behind sun end	15053 Oct 06 11:45	0° \mathfrak{M} 00'41		evening rise	15054 Sep 28 06:53	29° $\underline{\mathfrak{L}}$ 49'00	
	15053 Oct 06 11:37	0° \mathfrak{M}			15054 Sep 28 09:07	0° \mathfrak{M}	
evening rise	15053 Oct 14 06:09	15° \mathfrak{M} 51'22		evening max el	15054 Oct 14 15:54	26° \mathfrak{M} 36'02	18°59'30
	15053 Oct 21 11:41	0° \mathfrak{J}			15054 Oct 19 04:50	0° \mathfrak{J}	
evening max el	15053 Oct 31 22:13	15° \mathfrak{J} 01'00	19°59'34	retrograde	15054 Oct 23 11:15	1° \mathfrak{J} 01'54	
desc. node	15053 Nov 06 22:11	19° \mathfrak{J} 17'03		desc. node	15054 Oct 24 19:31	0° \mathfrak{J} 56'05	
retrograde	15053 Nov 11 07:38	20° \mathfrak{J} 11'40		evening set	15054 Oct 25 08:19	0° \mathfrak{J} 50'37	
evening set	15053 Nov 13 08:58	20° \mathfrak{J} 00'27			15054 Oct 27 23:28	30° \mathfrak{R} \mathfrak{M}	
inferior conj	15053 Nov 22 04:48	16° \mathfrak{J} 01'44	-4°31'28	inferior conj	15054 Nov 02 16:41	26° \mathfrak{M} 34'17	-2°48'46
minimum elong	15053 Nov 21 18:43	16° \mathfrak{J} 16'58	4°27'38	minimum elong	15054 Nov 02 09:40	26° \mathfrak{M} 46'31	2°45'21
min. Earth dist.	15053 Nov 24 02:24	14° \mathfrak{J} 52'41	0.54977 AU	min. Earth dist.	15054 Nov 05 13:50	24° \mathfrak{M} 34'22	0.56357 AU
morning rise	15053 Nov 30 03:20	11° \mathfrak{J} 52'38		morning rise	15054 Nov 10 08:12	21° \mathfrak{M} 51'10	
direct	15053 Dec 05 01:28	10° \mathfrak{J} 59'43		direct	15054 Nov 16 01:43	20° \mathfrak{M} 34'03	
morning max el	15053 Dec 18 18:03	17° \mathfrak{J} 46'39	24°23'35	morning max el	15054 Nov 30 04:59	27° \mathfrak{M} 48'33	26°04'28
	15053 Dec 28 17:03	0° \mathfrak{Z}			15054 Dec 02 08:49	0° \mathfrak{J}	
asc. node	15054 Jan 01 09:14	5° \mathfrak{Z} 49'54		asc. node	15054 Dec 19 06:23	24° \mathfrak{J} 35'50	
morning set	15054 Jan 12 21:44	28° \mathfrak{Z} 10'17			15054 Dec 22 03:20	0° \mathfrak{Z}	
	15054 Jan 13 18:04	0° \approx		morning set	15054 Dec 28 08:52	12° \mathfrak{Z} 47'21	
superior conj	15054 Jan 19 16:39	13° \approx 01'06	1°34'32	superior conj	15055 Jan 04 02:52	27° \mathfrak{Z} 41'06	1°37'57
minimum elong	15054 Jan 19 17:47	13° \approx 07'16	1°35'17	minimum elong	15055 Jan 04 02:56	27° \mathfrak{Z} 41'27	1°38'53
max. Earth dist.	15054 Jan 21 23:37	17° \approx 59'44	1.32410 AU	max. Earth dist.	15055 Jan 05 04:38	0° \approx 04'18	1.31488 AU
evening rise	15054 Jan 27 04:05	28° \approx 52'17			15055 Jan 05 03:52	0° \approx	
	15054 Jan 27 17:29	0° \mathfrak{H}		evening rise	15055 Jan 11 03:40	12° \approx 58'47	
desc. node	15054 Feb 02 21:53	11° \mathfrak{H} 52'43			15055 Jan 19 20:30	0° \mathfrak{H}	
	15054 Feb 13 18:44	0° \mathfrak{Y}		desc. node	15055 Jan 20 18:34	1° \mathfrak{H} 38'57	
evening max el	15054 Mar 01 19:40	20° \mathfrak{Y} 08'44	27°33'15		15055 Feb 09 10:51	0° \mathfrak{Y}	
retrograde	15054 Mar 15 15:02	27° \mathfrak{Y} 37'43		evening max el	15055 Feb 12 04:43	2° \mathfrak{Y} 47'18	27°28'18
evening set	15054 Mar 22 10:31	25° \mathfrak{Y} 13'29		retrograde	15055 Feb 26 03:50	10° \mathfrak{Y} 09'12	
min. Earth dist.	15054 Mar 26 05:21	21° \mathfrak{Y} 57'59	0.63542 AU	evening set	15055 Mar 04 23:50	7° \mathfrak{Y} 59'23	
inferior conj	15054 Mar 28 23:34	19° \mathfrak{Y} 09'22	-0°24'29	min. Earth dist.	15055 Mar 08 18:36	5° \mathfrak{Y} 07'18	0.61402 AU
minimum elong	15054 Mar 29 00:21	19° \mathfrak{Y} 07'23	0°24'24	inferior conj	15055 Mar 11 21:09	2° \mathfrak{Y} 19'38	-1°42'08
asc. node	15054 Mar 30 06:08	17° \mathfrak{Y} 52'31		minimum elong	15055 Mar 12 00:48	2° \mathfrak{Y} 11'24	1°40'36
morning rise	15054 Apr 04 16:38	13° \mathfrak{Y} 53'03			15055 Mar 14 14:08	30° \mathfrak{R} \mathfrak{H}	
direct	15054 Apr 07 03:02	13° \mathfrak{Y} 24'00		asc. node	15055 Mar 17 03:36	28° \mathfrak{H} 15'01	
morning max el	15054 Apr 13 13:35	16° \mathfrak{Y} 41'27	17°46'58	morning rise	15055 Mar 19 04:54	27° \mathfrak{H} 21'21	
	15054 Apr 23 04:08	0° \mathfrak{B}		direct	15055 Mar 21 08:42	27° \mathfrak{H} 01'17	
morning set	15054 Apr 30 01:58	11° \mathfrak{B} 40'51			15055 Mar 27 17:49	0° \mathfrak{Y}	
desc. node	15054 May 01 23:57	14° \mathfrak{B} 57'15		morning max el	15055 Mar 28 06:27	0° \mathfrak{Y} 29'50	17°50'48
	15054 May 10 23:08	0° Π		morning set	15055 Apr 12 22:47	24° \mathfrak{Y} 51'33	

	15055 Apr 15 19:32	0°♄		superior conj	15056 Apr 05 00:59	26°♄32'23	-0°02'41
desc. node	15055 Apr 18 20:36	5°♄24'43		minimum elong	15056 Apr 05 00:45	26°♄31'19	0°02'59
				behind sun begin	15056 Apr 04 17:22	25°♄57'55	
superior conj	15055 Apr 23 22:53	14°♄15'56	-0°40'11	behind sun end	15056 Apr 05 08:09	27°♄04'38	
minimum elong	15055 Apr 23 19:11	14°♄00'08	0°40'12		15056 Apr 06 23:23	0°♄	
max. Earth dist.	15055 May 01 04:55	26°♄21'48	1.43364 AU	max. Earth dist.	15056 Apr 12 15:31	9°♄49'50	1.41375 AU
	15055 May 03 10:54	0°♄		evening rise	15056 Apr 17 09:34	17°♄42'30	
evening rise	15055 May 07 22:06	7°♄04'38			15056 Apr 25 04:38	0°♄	
	15055 May 23 05:04	0°♄			15056 May 16 19:56	0°♄	
evening max el	15055 Jun 08 15:06	21°♄00'59	21°42'25	evening max el	15056 May 21 06:59	4°♄53'13	23°02'17
asc. node	15055 Jun 13 01:03	24°♄42'48		asc. node	15056 May 29 22:08	10°♄44'46	
retrograde	15055 Jun 17 18:03	26°♄20'30		retrograde	15056 May 31 14:29	10°♄57'14	
evening set	15055 Jun 22 07:47	24°♄27'24		evening set	15056 Jun 05 15:37	8°♄49'06	
inferior conj	15055 Jun 27 13:36	18°♄11'21	3°07'25	inferior conj	15056 Jun 10 23:26	2°♄24'37	2°54'45
minimum elong	15055 Jun 27 12:58	18°♄13'36	3°06'25	minimum elong	15056 Jun 10 21:59	2°♄29'41	2°53'34
min. Earth dist.	15055 Jun 27 16:58	17°♄59'35	0.68977 AU	min. Earth dist.	15056 Jun 10 13:51	2°♄57'52	0.69027 AU
morning rise	15055 Jul 02 17:58	11°♄55'09			15056 Jun 12 18:01	30°♄	
direct	15055 Jul 07 16:10	9°♄48'36		morning rise	15056 Jun 16 04:16	26°♄15'43	
desc. node	15055 Jul 15 20:25	14°♄02'10		direct	15056 Jun 20 13:59	24°♄28'26	
morning max el	15055 Jul 17 11:29	15°♄35'31	22°31'42	morning max el	15056 Jun 29 03:48	29°♄24'44	21°07'59
	15055 Jul 29 05:54	0°♄			15056 Jun 29 17:42	0°♄	
	15055 Aug 18 07:33	0°♄		desc. node	15056 Jul 01 17:37	2°♄10'23	
morning set	15055 Aug 20 02:07	2°♄52'00			15056 Jul 21 21:07	0°♄	
max. Earth dist.	15055 Aug 24 23:57	11°♄00'05	1.40849 AU	morning set	15056 Jul 29 22:13	12°♄20'32	
				max. Earth dist.	15056 Aug 06 05:40	23°♄59'46	1.42978 AU
superior conj	15055 Sep 01 20:20	24°♄40'18	-1°01'21		15056 Aug 09 21:20	0°♄	
minimum elong	15055 Sep 02 01:07	25°♄01'49	1°00'48				
	15055 Sep 04 18:46	0°♄		superior conj	15056 Aug 13 09:52	5°♄55'08	-1°35'46
asc. node	15055 Sep 09 02:08	7°♄59'58		minimum elong	15056 Aug 13 17:11	6°♄26'12	1°35'25
evening rise	15055 Sep 11 22:35	13°♄21'57		evening rise	15056 Aug 25 01:04	26°♄19'24	
	15055 Sep 21 04:33	0°♄		asc. node	15056 Aug 25 22:43	27°♄56'22	
evening max el	15055 Sep 27 20:41	8°♄56'18	18°21'19		15056 Aug 27 02:21	0°♄	
retrograde	15055 Oct 05 10:20	12°♄47'07		evening max el	15056 Sep 10 08:21	21°♄52'37	18°03'37
evening set	15055 Oct 07 11:15	12°♄31'03		retrograde	15056 Sep 17 02:47	25°♄21'22	
desc. node	15055 Oct 11 16:54	10°♄28'17		evening set	15056 Sep 19 10:57	24°♄56'30	
inferior conj	15055 Oct 15 02:15	7°♄53'38	-1°04'58	inferior conj	15056 Sep 26 08:31	19°♄58'56	0°23'04
minimum elong	15055 Oct 14 23:47	7°♄58'40	1°03'27	minimum elong	15056 Sep 26 09:15	19°♄57'12	0°23'02
min. Earth dist.	15055 Oct 18 08:30	5°♄15'05	0.58326 AU	desc. node	15056 Sep 27 14:19	18°♄48'07	
morning rise	15055 Oct 22 08:50	2°♄33'17		min. Earth dist.	15056 Sep 29 12:22	17°♄01'02	0.60585 AU
direct	15055 Oct 28 16:04	0°♄49'19		morning rise	15056 Oct 03 04:26	14°♄08'12	
morning max el	15055 Nov 11 23:21	8°♄26'24	27°18'34	direct	15056 Oct 09 19:15	11°♄59'07	
	15055 Nov 28 07:44	0°♄		morning max el	15056 Oct 24 01:30	19°♄52'18	27°55'21
asc. node	15055 Dec 06 03:23	13°♄51'52			15056 Nov 01 17:55	0°♄	
morning set	15055 Dec 12 17:22	27°♄13'06			15056 Nov 20 05:10	0°♄	
	15055 Dec 14 00:25	0°♄		asc. node	15056 Nov 22 00:18	3°♄29'47	
				morning set	15056 Nov 25 21:20	11°♄22'56	
superior conj	15055 Dec 19 14:22	12°♄21'25	1°35'23	max. Earth dist.	15056 Dec 01 19:33	24°♄11'42	1.31223 AU
minimum elong	15055 Dec 19 13:24	12°♄16'02	1°36'18				
max. Earth dist.	15055 Dec 19 12:32	12°♄11'12	1.31085 AU	superior conj	15056 Dec 03 01:19	26°♄57'04	1°26'53
evening rise	15055 Dec 26 08:56	27°♄17'57		minimum elong	15056 Dec 02 23:31	26°♄47'05	1°27'39
	15055 Dec 27 15:29	0°♄			15056 Dec 04 10:08	0°♄	
desc. node	15056 Jan 07 15:20	20°♄57'10		evening rise	15056 Dec 09 17:54	11°♄45'00	
	15056 Jan 13 08:21	0°♄			15056 Dec 18 20:12	0°♄	
evening max el	15056 Jan 25 07:23	14°♄37'03	26°48'35	desc. node	15056 Dec 24 12:10	9°♄36'54	
retrograde	15056 Feb 08 07:13	21°♄49'14		evening max el	15057 Jan 06 01:49	25°♄34'00	25°35'47
evening set	15056 Feb 14 20:50	20°♄01'01			15057 Jan 11 17:46	0°♄	
min. Earth dist.	15056 Feb 18 21:17	17°♄22'25	0.59179 AU	retrograde	15057 Jan 19 23:30	2°♄34'19	
inferior conj	15056 Feb 22 02:07	14°♄52'00	-3°08'45	evening set	15057 Jan 25 21:40	1°♄13'39	
minimum elong	15056 Feb 22 09:10	14°♄38'09	3°05'49		15057 Jan 28 07:17	30°♄	
morning rise	15056 Mar 01 00:52	10°♄14'36		min. Earth dist.	15057 Jan 30 14:32	28°♄34'04	0.57105 AU
direct	15056 Mar 03 00:50	10°♄00'02		inferior conj	15057 Feb 02 11:09	26°♄37'28	-4°34'29
asc. node	15056 Mar 03 01:04	10°♄00'02		minimum elong	15057 Feb 02 20:20	26°♄21'51	4°31'18
morning max el	15056 Mar 10 18:56	13°♄50'39	18°13'46	morning rise	15057 Feb 10 21:50	22°♄21'45	
	15056 Mar 21 18:02	0°♄		direct	15057 Feb 12 23:13	22°♄08'55	
morning set	15056 Mar 26 10:45	8°♄42'56		asc. node	15057 Feb 17 22:28	23°♄28'48	
desc. node	15056 Apr 04 17:11	25°♄57'07		morning max el	15057 Feb 21 22:59	26°♄32'26	18°57'43
					15057 Feb 25 00:26	0°♄	

morning set	15057 Mar 10 09:14	23° H 01'26		morning set	15058 Feb 22 14:41	7° H 36'22	
	15057 Mar 13 22:15	0° Y					
superior conj	15057 Mar 18 21:37	9° Y 38'33	0°30'09	superior conj	15058 Mar 02 08:19	23° H 21'57	0°56'40
minimum elong	15057 Mar 18 23:28	9° Y 47'18	0°29'46	minimum elong	15058 Mar 02 10:55	23° H 34'56	0°56'29
desc. node	15057 Mar 22 13:46	16° Y 31'08			15058 Mar 05 17:10	0° Y	
max. Earth dist.	15057 Mar 25 22:05	22° Y 34'16	1.39133 AU	max. Earth dist.	15058 Mar 08 04:47	4° Y 44'43	1.36878 AU
evening rise	15057 Mar 29 18:19	29° Y 16'05		desc. node	15058 Mar 09 10:19	7° Y 02'47	
	15057 Mar 30 04:38	0° B		evening rise	15058 Mar 11 22:46	11° Y 39'12	
	15057 Apr 18 14:11	0° II			15058 Mar 22 19:26	0° B	
evening max el	15057 May 03 20:46	18° II 47'02	24°23'21	evening max el	15058 Apr 13 20:09	0° II	
retrograde	15057 May 15 07:36	25° II 29'15		retrograde	15058 Apr 16 10:24	2° II 41'04	25°38'32
asc. node	15057 May 16 19:17	25° II 19'41		asc. node	15058 Apr 28 20:14	9° II 50'31	
evening set	15057 May 20 20:14	23° II 08'56		evening set	15058 May 03 16:30	8° II 14'15	
min. Earth dist.	15057 May 25 09:42	17° II 54'28	0.68601 AU	min. Earth dist.	15058 May 04 20:02	7° II 21'48	
inferior conj	15057 May 26 08:03	16° II 39'12	2°31'42	inferior conj	15058 May 09 02:24	2° II 43'34	0.67713 AU
minimum elong	15057 May 26 06:03	16° II 46'00	2°30'20	minimum elong	15058 May 10 13:32	0° II 51'17	1°57'55
morning rise	15057 May 31 15:58	10° II 38'53			15058 May 10 11:23	0° II 58'11	1°56'29
direct	15057 Jun 04 13:43	9° II 11'41			15058 May 11 05:39	30° R B	
morning max el	15057 Jun 12 02:42	13° II 24'25	19°55'34	morning rise	15058 May 16 03:14	25° B 00'52	
desc. node	15057 Jun 18 14:44	21° II 04'50		direct	15058 May 19 13:47	23° B 53'02	
	15057 Jun 25 00:01	0° B		morning max el	15058 May 26 09:02	27° B 33'53	18°58'04
morning set	15057 Jul 09 02:24	21° B 10'06			15058 May 28 15:30	0° II	
	15057 Jul 14 19:20	0° Ω		desc. node	15058 Jun 05 11:45	10° II 33'26	
max. Earth dist.	15057 Jul 19 17:45	7° Ω 45'39	1.44638 AU	greatest brilliancy	15058 Jun 08 15:46	15° II 16'26	-0.7m
				morning set	15058 Jun 18 09:55	0° B 14'49	
superior conj	15057 Jul 24 23:48	16° Ω 10'26	-2°02'25		15058 Jun 18 06:05	0° B	
minimum elong	15057 Jul 25 06:29	16° Ω 37'31	2°02'44	max. Earth dist.	15058 Jul 02 11:21	22° B 06'16	1.45658 AU
	15057 Aug 02 09:04	0° H					
evening rise	15057 Aug 07 09:08	8° H 27'39		superior conj	15058 Jul 04 17:05	25° B 36'52	-2°13'53
asc. node	15057 Aug 12 19:18	17° H 39'53		minimum elong	15058 Jul 04 17:53	25° B 39'59	2°14'48
	15057 Aug 20 15:10	0° Ω			15058 Jul 07 11:57	0° Ω	
evening max el	15057 Aug 24 22:55	5° Ω 14'08	18°04'54	evening rise	15058 Jul 19 18:00	19° Ω 36'23	
retrograde	15057 Aug 31 08:19	8° Ω 34'30			15058 Jul 26 04:07	0° H	
evening set	15057 Sep 03 00:55	7° Ω 57'15		asc. node	15058 Jul 30 15:57	7° H 05'44	
inferior conj	15057 Sep 09 07:43	2° Ω 41'33	1°30'32	evening max el	15058 Aug 08 12:59	18° H 52'36	18°24'10
minimum elong	15057 Sep 09 09:53	2° Ω 35'44	1°29'46	retrograde	15058 Aug 14 22:49	22° H 18'09	
	15057 Sep 11 20:15	30° R H		evening set	15058 Aug 18 00:20	21° H 25'55	
min. Earth dist.	15057 Sep 12 01:54	29° H 45'26	0.62854 AU	inferior conj	15058 Aug 23 19:54	15° H 54'06	2°18'17
desc. node	15057 Sep 14 11:48	27° H 28'09		minimum elong	15058 Aug 23 22:14	15° H 47'09	2°17'21
morning rise	15057 Sep 15 16:39	26° H 30'39		min. Earth dist.	15058 Aug 26 00:52	13° H 17'47	0.64915 AU
direct	15057 Sep 22 08:49	24° H 03'03		morning rise	15058 Aug 29 18:49	9° H 32'14	
	15057 Oct 04 05:14	0° Ω		desc. node	15058 Sep 01 09:17	7° H 50'34	
morning max el	15057 Oct 06 09:08	2° Ω 02'59	27°53'07	direct	15058 Sep 05 06:50	6° H 55'11	
	15057 Oct 27 01:37	0° L		morning max el	15058 Sep 18 19:48	14° H 50'18	27°16'19
asc. node	15057 Nov 08 21:06	23° L 22'25			15058 Oct 01 05:23	0° Ω	
morning set	15057 Nov 09 18:33	25° L 10'36			15058 Oct 19 18:37	0° L	
	15057 Nov 12 02:44	0° X		morning set	15058 Oct 24 06:25	8° L 30'21	
max. Earth dist.	15057 Nov 14 21:53	5° X 56'25	1.31917 AU	asc. node	15058 Oct 26 17:51	13° L 24'54	
				max. Earth dist.	15058 Oct 28 16:15	17° L 20'58	1.33169 AU
superior conj	15057 Nov 17 09:46	11° X 21'48	1°12'26				
minimum elong	15057 Nov 17 07:30	11° X 09'21	1°12'59	superior conj	15058 Nov 01 13:37	25° L 30'23	0°52'02
evening rise	15057 Nov 24 04:37	26° X 14'29		minimum elong	15058 Nov 01 11:24	25° L 18'36	0°52'24
	15057 Nov 25 22:51	0° B			15058 Nov 03 15:56	0° X	
desc. node	15057 Dec 11 09:07	27° B 23'14		evening rise	15058 Nov 08 15:20	10° X 42'18	
	15057 Dec 13 08:32	0° \approx			15058 Nov 18 11:01	0° B	
evening max el	15057 Dec 18 13:07	5° \approx 47'12	23°59'31	desc. node	15058 Nov 28 06:11	13° B 57'29	
retrograde	15058 Jan 01 02:25	12° \approx 31'02		evening max el	15058 Nov 29 23:41	15° B 45'05	22°16'37
evening set	15058 Jan 05 23:20	11° \approx 39'26		retrograde	15058 Dec 12 16:53	22° B 02'49	
min. Earth dist.	15058 Jan 12 00:35	8° \approx 41'15	0.55471 AU	evening set	15058 Dec 16 06:09	21° B 35'00	
inferior conj	15058 Jan 13 23:17	7° \approx 31'14	-5°40'00	inferior conj	15058 Dec 24 19:03	17° B 41'44	-5°59'42
minimum elong	15058 Jan 14 05:55	7° \approx 21'16	5°38'14	minimum elong	15058 Dec 24 17:19	17° B 44'11	5°58'41
morning rise	15058 Jan 22 14:14	3° \approx 34'11		min. Earth dist.	15058 Dec 24 06:31	17° B 59'18	0.54559 AU
direct	15058 Jan 25 02:07	3° \approx 18'21		morning rise	15059 Jan 02 05:31	13° B 54'32	
morning max el	15058 Feb 04 14:24	8° \approx 22'55	20°04'37	direct	15059 Jan 05 13:52	13° B 29'27	
asc. node	15058 Feb 04 19:50	8° \approx 36'13		morning max el	15059 Jan 17 14:54	19° B 17'06	21°34'15
	15058 Feb 18 19:25	0° H		asc. node	15059 Jan 22 17:11	25° B 06'29	
					15059 Jan 26 02:34	0° \approx	

morning set	15059 Feb 07 00:19	22° \approx 19'35			15059 Dec 30 17:16	0° \approx	
	15059 Feb 10 15:29	0° \approx		asc. node	15060 Jan 09 14:29	12° \approx 41'40	
					15060 Jan 19 02:41	0° \approx	
superior conj	15059 Feb 14 05:14	7° \approx 31'40	1°16'31	morning set	15060 Jan 22 12:01	7° \approx 04'57	
minimum elong	15059 Feb 14 07:40	7° \approx 44'19	1°16'42				
max. Earth dist.	15059 Feb 18 16:04	16° \approx 37'47	1.34833 AU	superior conj	15060 Jan 29 09:18	21° \approx 59'20	1°29'47
evening rise	15059 Feb 22 19:28	24° \approx 41'51		minimum elong	15060 Jan 29 10:59	22° \approx 08'27	1°30'20
desc. node	15059 Feb 24 06:52	27° \approx 28'01		max. Earth dist.	15060 Feb 01 10:36	28° \approx 30'07	1.33160 AU
	15059 Feb 25 15:52	0° \approx			15060 Feb 02 03:45	0° \approx	
	15059 Mar 16 08:20	0° \approx		evening rise	15060 Feb 06 05:01	8° \approx 15'32	
evening max el	15059 Mar 30 00:14	16° \approx 27'50	26°40'24	desc. node	15060 Feb 11 03:27	17° \approx 42'40	
retrograde	15059 Apr 12 03:27	23° \approx 52'55			15060 Feb 18 04:13	0° \approx	
evening set	15059 Apr 18 13:11	21° \approx 20'40		evening max el	15060 Mar 11 13:32	29° \approx 57'19	27°21'31
asc. node	15059 Apr 20 13:50	19° \approx 29'05			15060 Mar 11 14:39	0° \approx	
min. Earth dist.	15059 Apr 22 13:45	17° \approx 17'14	0.66391 AU	retrograde	15060 Mar 25 04:26	7° \approx 27'46	
inferior conj	15059 Apr 24 13:39	14° \approx 54'53	1°12'34	evening set	15060 Mar 31 21:34	4° \approx 58'12	
minimum elong	15059 Apr 24 11:58	14° \approx 59'57	1°11'21	min. Earth dist.	15060 Apr 04 17:46	1° \approx 26'44	0.64679 AU
morning rise	15059 Apr 30 11:53	9° \approx 16'10		asc. node	15060 Apr 06 11:14	29° \approx 34'55	
direct	15059 May 03 12:11	8° \approx 25'45			15060 Apr 06 02:03	30° \approx 10'00	
morning max el	15059 May 09 21:40	11° \approx 47'45	18°17'01	inferior conj	15060 Apr 07 05:54	28° \approx 43'55	0°14'44
desc. node	15059 May 23 08:40	0° \approx 26'22		minimum elong	15060 Apr 07 05:29	28° \approx 45'03	0°14'11
	15059 May 23 01:58	0° \approx		transit middle	15060 Apr 07 05:29	28° \approx 45'03	0°14'11
morning set	15059 May 29 15:01	10° \approx 24'08		transit begin	15060 Apr 07 04:04	28° \approx 48'54	
	15059 Jun 11 00:25	0° \approx		transit end	15060 Apr 07 06:54	28° \approx 41'12	
				morning rise	15060 Apr 13 15:24	23° \approx 18'58	
superior conj	15059 Jun 14 01:37	4° \approx 46'14	-2°05'26	direct	15060 Apr 16 06:29	22° \approx 43'10	
minimum elong	15059 Jun 13 19:01	4° \approx 20'29	2°06'05	morning max el	15060 Apr 22 14:20	25° \approx 58'51	17°52'57
max. Earth dist.	15059 Jun 15 07:43	6° \approx 43'45	1.45942 AU		15060 Apr 26 02:01	0° \approx	
evening rise	15059 Jun 30 02:13	29° \approx 44'27		desc. node	15060 May 09 05:29	20° \approx 36'50	
	15059 Jun 30 06:12	0° \approx		morning set	15060 May 09 23:54	21° \approx 53'28	
greatest brilliancy	15059 Jul 10 13:26	15° \approx 57'30	-0.8m		15060 May 14 21:20	0° \approx	
asc. node	15059 Jul 17 12:41	26° \approx 06'46					
	15059 Jul 20 13:28	0° \approx		superior conj	15060 May 23 18:42	14° \approx 24'26	-1°39'09
evening max el	15059 Jul 22 23:42	2° \approx 39'50	19°00'37	minimum elong	15060 May 23 09:55	13° \approx 49'26	1°39'10
retrograde	15059 Jul 29 18:46	6° \approx 23'55		max. Earth dist.	15060 May 28 03:48	21° \approx 20'19	1.45471 AU
evening set	15059 Aug 02 05:34	5° \approx 15'02			15060 Jun 02 17:02	0° \approx	
	15059 Aug 07 07:41	30° \approx 10'00		evening rise	15060 Jun 08 16:38	9° \approx 12'52	
inferior conj	15059 Aug 07 17:26	29° \approx 28'53	2°49'06		15060 Jun 22 12:15	0° \approx	
minimum elong	15059 Aug 07 19:13	29° \approx 23'11	2°48'13	greatest brilliancy	15060 Jun 23 08:34	1° \approx 13'53	-0.6m
min. Earth dist.	15059 Aug 09 08:10	27° \approx 25'11	0.66627 AU	asc. node	15060 Jul 03 09:30	14° \approx 34'32	
morning rise	15059 Aug 13 08:08	23° \approx 03'08		evening max el	15060 Jul 05 05:10	16° \approx 30'52	19°53'06
desc. node	15059 Aug 19 06:47	20° \approx 25'47		retrograde	15060 Jul 12 17:20	20° \approx 45'33	
direct	15059 Aug 19 12:00	20° \approx 25'36		evening set	15060 Jul 16 14:01	19° \approx 19'22	
morning max el	15059 Sep 01 07:13	28° \approx 02'29	26°12'42	inferior conj	15060 Jul 21 21:23	13° \approx 20'26	3°05'39
	15059 Sep 03 03:59	0° \approx		minimum elong	15060 Jul 21 22:16	13° \approx 17'28	3°04'47
	15059 Sep 24 22:50	0° \approx		min. Earth dist.	15060 Jul 22 22:02	11° \approx 57'21	0.67911 AU
morning set	15059 Oct 07 05:39	21° \approx 14'38		morning rise	15060 Jul 27 06:07	6° \approx 55'48	
max. Earth dist.	15059 Oct 11 00:59	28° \approx 29'03	1.34933 AU	direct	15060 Aug 01 23:22	4° \approx 25'39	
	15059 Oct 11 19:36	0° \approx		desc. node	15060 Aug 05 04:14	5° \approx 05'09	
asc. node	15059 Oct 13 14:33	3° \approx 32'39		morning max el	15060 Aug 13 18:09	11° \approx 29'16	24°51'31
					15060 Aug 28 14:03	0° \approx	
superior conj	15059 Oct 16 10:20	9° \approx 16'04	0°25'53		15060 Sep 16 15:50	0° \approx	
minimum elong	15059 Oct 16 08:56	9° \approx 08'51	0°26'10	morning set	15060 Sep 18 12:16	3° \approx 14'06	
evening rise	15059 Oct 24 00:03	25° \approx 03'11		max. Earth dist.	15060 Sep 22 01:33	9° \approx 37'24	1.37110 AU
	15059 Oct 26 09:39	0° \approx					
evening max el	15059 Nov 11 19:05	26° \approx 05'08	20°44'05	superior conj	15060 Sep 28 20:48	22° \approx 31'11	-0°05'29
desc. node	15059 Nov 15 03:21	28° \approx 55'37		minimum elong	15060 Sep 28 21:09	22° \approx 32'50	0°05'08
	15059 Nov 16 20:18	0° \approx		behind sun begin	15060 Sep 28 14:52	22° \approx 02'07	
retrograde	15059 Nov 23 03:18	1° \approx 43'28		behind sun end	15060 Sep 29 03:25	23° \approx 03'37	
evening set	15059 Nov 25 13:30	1° \approx 29'09		asc. node	15060 Sep 29 11:10	23° \approx 41'39	
	15059 Nov 29 22:39	30° \approx 10'00			15060 Oct 02 15:16	0° \approx	
inferior conj	15059 Dec 04 10:21	27° \approx 35'42	-5°18'44	evening rise	15060 Oct 07 04:28	9° \approx 10'55	
minimum elong	15059 Dec 04 01:14	27° \approx 48'49	5°15'52		15060 Oct 18 12:46	0° \approx	
min. Earth dist.	15059 Dec 05 12:11	26° \approx 58'34	0.54547 AU	evening max el	15060 Oct 24 04:45	7° \approx 10'59	19°31'19
morning rise	15059 Dec 12 12:58	23° \approx 40'27		desc. node	15060 Nov 01 00:37	11° \approx 51'47	
direct	15059 Dec 16 21:34	22° \approx 59'44		retrograde	15060 Nov 02 21:41	12° \approx 02'21	
morning max el	15059 Dec 30 03:35	29° \approx 26'57	23°20'31	evening set	15060 Nov 04 19:30	11° \approx 51'54	

































































































































inferior conj	15060 Nov 13 11:39	7° ♊ 46'35	-3°49'46	minimum elong	15061 Oct 25 03:31	18° ♍ 47'39	2°00'54
minimum elong	15060 Nov 13 02:22	8° ♊ 01'26	3°45'47	min. Earth dist.	15061 Oct 28 11:28	16° ♍ 19'37	0.57139 AU
min. Earth dist.	15060 Nov 15 21:01	6° ♊ 14'49	0.55461 AU	morning rise	15061 Nov 01 20:31	13° ♍ 38'57	
morning rise	15060 Nov 21 07:14	3° ♊ 23'49		direct	15061 Nov 07 20:48	12° ♍ 10'05	
direct	15060 Nov 26 14:00	2° ♊ 21'13		morning max el	15061 Nov 22 02:19	19° ♍ 35'27	26°40'02
morning max el	15060 Dec 10 12:42	9° ♊ 21'26	25°08'51		15061 Nov 30 23:10	0° ♊	
	15060 Dec 25 20:39	0° ♊		asc. node	15061 Dec 13 08:47	20° ♊ 04'42	
asc. node	15060 Dec 26 11:41	1° ♊ 05'10			15061 Dec 18 10:06	0° ♊	
morning set	15061 Jan 05 23:51	21° ♊ 46'03		morning set	15061 Dec 21 10:02	6° ♊ 18'12	
	15061 Jan 09 18:11	0° ♊					
				superior conj	15061 Dec 28 04:51	21° ♊ 16'54	1°37'36
superior conj	15061 Jan 12 17:52	6° ♊ 36'27	1°36'44	minimum elong	15061 Dec 28 04:28	21° ♊ 14'45	1°38'32
minimum elong	15061 Jan 12 18:33	6° ♊ 40'14	1°37'34	max. Earth dist.	15061 Dec 28 18:36	22° ♊ 33'42	1.31248 AU
max. Earth dist.	15061 Jan 14 12:11	10° ♊ 28'54	1.31948 AU		15062 Jan 01 03:12	0° ♊	
evening rise	15061 Jan 20 00:12	22° ♊ 11'36		evening rise	15062 Jan 04 02:26	6° ♊ 23'45	
	15061 Jan 23 21:49	0° ♊		desc. node	15062 Jan 14 20:45	27° ♊ 15'33	
desc. node	15061 Jan 28 00:04	7° ♊ 40'43			15062 Jan 16 11:00	0° ♊	
	15061 Feb 11 00:33	0° ♊		evening max el	15062 Feb 04 07:20	25° ♊ 16'06	27°15'47
evening max el	15061 Feb 22 00:38	12° ♊ 57'18	27°35'09		15062 Feb 10 07:28	0° ♊	
retrograde	15061 Mar 07 22:18	20° ♊ 24'45		retrograde	15062 Feb 18 07:30	2° ♊ 34'23	
evening set	15061 Mar 14 18:40	18° ♊ 05'26		evening set	15062 Feb 25 01:28	0° ♊ 33'11	
min. Earth dist.	15061 Mar 18 12:51	15° ♊ 00'54	0.62654 AU		15062 Feb 25 22:49	30° ♊	
inferior conj	15061 Mar 21 11:15	12° ♊ 10'28	-0°56'00	min. Earth dist.	15062 Feb 28 21:48	27° ♊ 47'58	0.60450 AU
minimum elong	15061 Mar 21 13:07	12° ♊ 05'53	0°55'20	inferior conj	15062 Mar 04 02:11	25° ♊ 05'33	-2°18'12
asc. node	15061 Mar 24 08:41	9° ♊ 31'17		minimum elong	15062 Mar 04 07:16	24° ♊ 54'41	2°16'01
morning rise	15061 Mar 28 10:25	7° ♊ 01'42		asc. node	15062 Mar 11 06:09	20° ♊ 23'22	
direct	15061 Mar 30 17:39	6° ♊ 37'02		morning rise	15062 Mar 11 16:25	20° ♊ 15'40	
morning max el	15061 Apr 06 08:02	9° ♊ 57'59	17°46'20	direct	15062 Mar 13 18:01	19° ♊ 58'28	
	15061 Apr 19 18:55	0° ♊		morning max el	15062 Mar 20 23:27	23° ♊ 35'29	17°58'04
morning set	15061 Apr 22 09:17	4° ♊ 31'52			15062 Mar 26 02:19	0° ♊	
desc. node	15061 Apr 26 02:11	10° ♊ 59'01		morning set	15062 Apr 05 13:11	18° ♊ 01'33	
					15062 Apr 12 02:59	0° ♊	
superior conj	15061 May 04 08:26	25° ♊ 01'13	-1°02'38	desc. node	15062 Apr 12 22:47	1° ♊ 28'40	
minimum elong	15061 May 04 02:26	24° ♊ 36'16	1°02'32				
	15061 May 07 09:01	0° ♊		superior conj	15062 Apr 15 21:53	6° ♊ 42'48	-0°23'51
max. Earth dist.	15061 May 10 20:59	5° ♊ 39'29	1.44302 AU	minimum elong	15062 Apr 15 19:48	6° ♊ 33'42	0°24'00
evening rise	15061 May 19 04:22	18° ♊ 42'05		max. Earth dist.	15062 Apr 23 10:14	19° ♊ 29'29	1.42566 AU
	15061 May 26 15:02	0° ♊		evening rise	15062 Apr 29 04:39	28° ♊ 49'41	
	15061 Jun 17 19:34	0° ♊			15062 Apr 29 22:26	0° ♊	
evening max el	15061 Jun 18 04:40	0° ♊ 23'01	20°59'29		15062 May 20 06:00	0° ♊	
asc. node	15061 Jun 20 06:24	2° ♊ 17'50		evening max el	15062 May 31 22:56	14° ♊ 15'25	22°15'56
retrograde	15061 Jun 26 16:21	5° ♊ 17'36		asc. node	15062 Jun 07 03:24	19° ♊ 01'38	
evening set	15061 Jun 30 23:35	3° ♊ 34'14		retrograde	15062 Jun 10 14:00	19° ♊ 53'54	
	15061 Jul 04 07:13	30° ♊		evening set	15062 Jun 15 08:29	17° ♊ 54'22	
inferior conj	15061 Jul 06 05:16	27° ♊ 24'02	3°09'57	inferior conj	15062 Jun 20 14:56	11° ♊ 34'38	3°03'18
minimum elong	15061 Jul 06 05:10	27° ♊ 24'23	3°09'02	minimum elong	15062 Jun 20 13:55	11° ♊ 38'11	3°02'14
min. Earth dist.	15061 Jul 06 16:20	26° ♊ 45'37	0.68725 AU	min. Earth dist.	15062 Jun 20 12:50	11° ♊ 41'57	0.69059 AU
morning rise	15061 Jul 11 10:29	21° ♊ 03'58		morning rise	15062 Jun 25 19:10	5° ♊ 21'17	
direct	15061 Jul 16 15:51	18° ♊ 47'19		direct	15062 Jun 30 12:07	3° ♊ 22'27	
desc. node	15061 Jul 23 01:37	21° ♊ 24'32		desc. node	15062 Jul 09 22:52	8° ♊ 58'39	
morning max el	15061 Jul 27 05:02	25° ♊ 04'31	23°22'39	morning max el	15062 Jul 09 18:20	8° ♊ 47'12	21°54'56
	15061 Jul 31 15:50	0° ♊			15062 Jul 26 06:59	0° ♊	
	15061 Aug 22 00:56	0° ♊		morning set	15062 Aug 11 07:22	24° ♊ 20'55	
morning set	15061 Aug 30 21:57	14° ♊ 19'04			15062 Aug 14 19:21	0° ♊	
max. Earth dist.	15061 Sep 03 23:40	21° ♊ 15'08	1.39494 AU	max. Earth dist.	15062 Aug 17 01:53	3° ♊ 44'26	1.41805 AU
	15061 Sep 08 22:08	0° ♊					
				superior conj	15062 Aug 24 19:20	16° ♊ 55'02	-1°16'28
superior conj	15061 Sep 11 17:18	5° ♊ 07'48	-0°40'31	minimum elong	15062 Aug 25 01:22	17° ♊ 21'31	1°15'57
minimum elong	15061 Sep 11 20:18	5° ♊ 21'45	0°40'00		15062 Sep 01 02:15	0° ♊	
asc. node	15061 Sep 16 07:45	13° ♊ 48'47		asc. node	15062 Sep 03 04:17	3° ♊ 49'52	
evening rise	15061 Sep 21 01:49	22° ♊ 59'10		evening rise	15062 Sep 04 12:24	6° ♊ 17'55	
	15061 Sep 24 17:43	0° ♊			15062 Sep 18 22:00	0° ♊	
evening max el	15061 Oct 07 03:44	19° ♊ 06'39	18°40'43	evening max el	15062 Sep 20 12:00	1° ♊ 43'27	18°11'23
retrograde	15061 Oct 15 09:11	23° ♊ 15'49		retrograde	15062 Sep 27 15:54	5° ♊ 22'46	
evening set	15061 Oct 17 07:13	23° ♊ 03'03		evening set	15062 Sep 29 19:52	5° ♊ 03'17	
desc. node	15061 Oct 18 21:58	22° ♊ 33'46		desc. node	15062 Oct 05 19:24	1° ♊ 24'59	
inferior conj	15061 Oct 25 08:34	18° ♊ 38'17	-2°03'34	inferior conj	15062 Oct 07 03:13	0° ♊ 17'02	-0°25'11

minimum elong	15062 Oct 07 02:20	0° \mathbb{M} 18'58	0°24'25	evening set	15063 Sep 13 02:21	17° \mathbb{Q} 44'52	
	15062 Oct 07 11:02	30° \mathbb{R} \mathbb{A}		inferior conj	15063 Sep 19 17:11	12° \mathbb{Q} 38'54	0°54'16
min. Earth dist.	15062 Oct 10 09:38	27° \mathbb{Q} 27'49	0.59279 AU	minimum elong	15063 Sep 19 18:44	12° \mathbb{Q} 35'03	0°53'49
morning rise	15062 Oct 14 05:27	24° \mathbb{Q} 42'58		min. Earth dist.	15063 Sep 22 17:23	9° \mathbb{Q} 39'38	0.61570 AU
direct	15062 Oct 20 16:56	22° \mathbb{Q} 47'44		desc. node	15063 Sep 22 16:52	9° \mathbb{Q} 40'54	
	15062 Nov 03 10:42	0° \mathbb{M}		morning rise	15063 Sep 26 08:24	6° \mathbb{Q} 38'22	
morning max el	15062 Nov 03 23:52	0° \mathbb{M} 31'46	27°39'00	direct	15063 Oct 03 00:25	4° \mathbb{Q} 20'47	
	15062 Nov 25 02:49	0° \mathbb{A}		morning max el	15063 Oct 17 04:45	12° \mathbb{Q} 17'20	27°59'03
asc. node	15062 Nov 30 05:45	9° \mathbb{A} 30'23			15063 Oct 31 06:28	0° \mathbb{M}	
morning set	15062 Dec 05 16:49	20° \mathbb{A} 36'54		asc. node	15063 Nov 17 02:36	29° \mathbb{M} 14'56	
	15062 Dec 10 00:33	0° \mathbb{Q}			15063 Nov 17 11:38	0° \mathbb{A}	
max. Earth dist.	15062 Dec 12 02:35	4° \mathbb{Q} 38'28	1.31078 AU	morning set	15063 Nov 19 18:10	4° \mathbb{A} 37'28	
				max. Earth dist.	15063 Nov 25 08:15	16° \mathbb{A} 33'44	1.31454 AU
superior conj	15062 Dec 12 16:18	5° \mathbb{Q} 55'12	1°32'30				
minimum elong	15062 Dec 12 14:58	5° \mathbb{Q} 47'40	1°33'22	superior conj	15063 Nov 27 02:25	20° \mathbb{A} 26'13	1°21'28
evening rise	15062 Dec 19 09:30	20° \mathbb{Q} 46'29		minimum elong	15063 Nov 27 00:21	20° \mathbb{A} 14'51	1°22'10
	15062 Dec 23 19:47	0° \approx			15063 Dec 01 09:53	0° \mathbb{Q}	
desc. node	15063 Jan 01 17:33	16° \approx 18'28		evening rise	15063 Dec 03 19:27	5° \mathbb{Q} 14'47	
	15063 Jan 11 04:09	0° \mathbb{H}			15063 Dec 16 15:47	0° \approx	
evening max el	15063 Jan 17 06:55	6° \mathbb{H} 43'53	26°21'26	desc. node	15063 Dec 19 14:27	4° \approx 37'10	
retrograde	15063 Jan 31 06:08	13° \mathbb{H} 50'26		evening max el	15063 Dec 29 21:49	17° \approx 19'05	24°56'46
evening set	15063 Feb 06 14:20	12° \mathbb{H} 13'44		retrograde	15064 Jan 12 16:30	24° \approx 13'00	
min. Earth dist.	15063 Feb 10 20:20	9° \mathbb{H} 36'38	0.58259 AU	evening set	15064 Jan 18 05:26	23° \approx 04'34	
inferior conj	15063 Feb 13 23:02	7° \mathbb{H} 19'05	-3°46'08	min. Earth dist.	15064 Jan 23 09:49	20° \approx 19'42	0.56336 AU
minimum elong	15063 Feb 14 07:19	7° \mathbb{H} 03'47	3°42'53	inferior conj	15064 Jan 25 22:59	18° \approx 41'45	-5°06'16
morning rise	15063 Feb 22 03:26	2° \mathbb{H} 50'35		minimum elong	15064 Jan 26 07:52	18° \approx 27'30	5°03'32
direct	15063 Feb 24 03:16	2° \mathbb{H} 37'09		morning rise	15064 Feb 03 12:40	14° \approx 34'55	
asc. node	15063 Feb 26 03:36	2° \mathbb{H} 51'29		direct	15064 Feb 05 17:23	14° \approx 21'24	
morning max el	15063 Mar 04 08:47	6° \mathbb{H} 40'39	18°29'48	asc. node	15064 Feb 13 01:01	17° \approx 03'19	
	15063 Mar 19 03:47	0° \mathbb{Y}		morning max el	15064 Feb 15 07:53	19° \approx 01'08	19°23'28
morning set	15063 Mar 20 06:13	2° \mathbb{Y} 06'28			15064 Feb 23 12:17	0° \mathbb{H}	
				morning set	15064 Mar 03 08:02	16° \mathbb{H} 32'49	
superior conj	15063 Mar 29 08:27	19° \mathbb{Y} 22'05	0°11'58		15064 Mar 10 01:48	0° \mathbb{Y}	
minimum elong	15063 Mar 29 09:17	19° \mathbb{Y} 25'54	0°11'36				
behind sun begin	15063 Mar 29 04:21	19° \mathbb{Y} 03'06		superior conj	15064 Mar 11 11:37	2° \mathbb{Y} 45'22	0°42'11
behind sun end	15063 Mar 29 14:13	19° \mathbb{Y} 48'40		minimum elong	15064 Mar 11 13:54	2° \mathbb{Y} 56'33	0°41'52
desc. node	15063 Mar 30 19:21	22° \mathbb{Y} 02'12		desc. node	15064 Mar 16 15:54	12° \mathbb{Y} 35'13	
	15063 Apr 04 06:17	0° \mathbb{B}		max. Earth dist.	15064 Mar 18 01:46	15° \mathbb{Y} 10'35	1.38156 AU
max. Earth dist.	15063 Apr 05 19:26	2° \mathbb{B} 41'27	1.40441 AU	evening rise	15064 Mar 21 18:41	21° \mathbb{Y} 47'07	
evening rise	15063 Apr 10 01:15	9° \mathbb{B} 52'06			15064 Mar 26 14:31	0° \mathbb{B}	
	15063 Apr 22 21:08	0° \mathbb{I}			15064 Apr 15 19:15	0° \mathbb{I}	
evening max el	15063 May 14 13:50	28° \mathbb{I} 09'13	23°36'59	evening max el	15064 Apr 26 03:17	12° \mathbb{I} 02'54	24°56'23
	15063 May 16 12:51	0° \mathbb{E}		retrograde	15064 May 08 00:20	18° \mathbb{I} 58'09	
retrograde	15063 May 25 09:01	4° \mathbb{E} 29'45		asc. node	15064 May 10 21:42	18° \mathbb{I} 22'39	
asc. node	15063 May 25 00:30	4° \mathbb{E} 29'12		evening set	15064 May 13 17:58	16° \mathbb{I} 33'25	
evening set	15063 May 30 15:09	2° \mathbb{E} 15'59		min. Earth dist.	15064 May 18 04:07	11° \mathbb{I} 34'47	0.68283 AU
	15063 Jun 01 19:55	30° \mathbb{R} \mathbb{I}		inferior conj	15064 May 19 08:00	10° \mathbb{I} 02'45	2°18'45
min. Earth dist.	15063 Jun 04 09:27	26° \mathbb{I} 40'38	0.68912 AU	minimum elong	15064 May 19 05:52	10° \mathbb{I} 09'49	2°17'19
inferior conj	15063 Jun 05 00:29	25° \mathbb{I} 49'05	2°46'15	morning rise	15064 May 24 18:05	4° \mathbb{I} 06'45	
minimum elong	15063 Jun 04 22:45	25° \mathbb{I} 55'02	2°44'59	direct	15064 May 28 10:57	2° \mathbb{I} 48'05	
morning rise	15063 Jun 10 06:20	19° \mathbb{I} 43'51		morning max el	15064 Jun 04 15:28	6° \mathbb{I} 45'29	19°29'13
direct	15063 Jun 14 10:58	18° \mathbb{I} 05'00		desc. node	15064 Jun 12 17:07	16° \mathbb{I} 38'22	
morning max el	15063 Jun 22 13:15	22° \mathbb{I} 40'56	20°35'31	greatest brilliancy	15064 Jun 17 06:41	23° \mathbb{I} 10'59	-0.7m
desc. node	15063 Jun 26 20:02	27° \mathbb{I} 28'20			15064 Jun 21 20:28	0° \mathbb{E}	
	15063 Jun 28 20:10	0° \mathbb{E}		morning set	15064 Jun 29 22:02	12° \mathbb{E} 17'11	
	15063 Jul 19 12:57	0° \mathbb{Q}			15064 Jul 11 07:56	0° \mathbb{Q}	
morning set	15063 Jul 21 19:00	3° \mathbb{Q} 28'05		max. Earth dist.	15064 Jul 12 01:51	1° \mathbb{Q} 10'29	1.45160 AU
max. Earth dist.	15063 Jul 30 10:59	17° \mathbb{Q} 07'21	1.43765 AU				
				superior conj	15064 Jul 16 03:13	7° \mathbb{Q} 36'02	-2°09'32
superior conj	15063 Aug 05 22:56	27° \mathbb{Q} 44'23	-1°48'27	minimum elong	15064 Jul 16 08:01	7° \mathbb{Q} 55'10	2°10'10
minimum elong	15063 Aug 06 06:33	28° \mathbb{Q} 16'04	1°48'21		15064 Jul 29 20:46	0° \mathbb{M}	
	15063 Aug 07 07:27	0° \mathbb{M}		evening rise	15064 Jul 30 06:27	0° \mathbb{M} 40'16	
evening rise	15063 Aug 18 07:41	18° \mathbb{M} 55'56		asc. node	15064 Aug 06 21:28	13° \mathbb{M} 17'57	
asc. node	15063 Aug 21 00:51	23° \mathbb{M} 41'08		evening max el	15064 Aug 17 15:59	28° \mathbb{M} 20'32	18°10'53
	15063 Aug 24 16:36	0° \mathbb{A}			15064 Aug 19 13:57	0° \mathbb{A}	
evening max el	15063 Sep 04 01:19	14° \mathbb{A} 51'10	18°01'50	retrograde	15064 Aug 24 00:37	1° \mathbb{A} 41'51	
retrograde	15063 Sep 10 14:37	18° \mathbb{A} 14'43		evening set	15064 Aug 26 20:52	0° \mathbb{A} 58'36	

	15064 Aug 28 10:23	30° \mathbb{R} \mathbb{M}		asc. node	15065 Jul 24 18:10	2° \mathbb{M} 34'10	
inferior conj	15064 Sep 01 22:26	25° \mathbb{M} 35'38	1°53'03	evening max el	15065 Aug 01 04:55	12° \mathbb{M} 03'21	18°37'38
minimum elong	15064 Sep 02 00:48	25° \mathbb{M} 28'59	1°52'10	retrograde	15065 Aug 07 17:49	15° \mathbb{M} 35'25	
min. Earth dist.	15064 Sep 04 11:13	22° \mathbb{M} 45'58	0.63763 AU	evening set	15065 Aug 10 23:07	14° \mathbb{M} 36'26	
morning rise	15064 Sep 08 02:54	19° \mathbb{M} 18'43		inferior conj	15065 Aug 16 15:01	8° \mathbb{M} 58'31	2°33'15
desc. node	15064 Sep 08 14:21	18° \mathbb{M} 57'20		minimum elong	15065 Aug 16 17:11	8° \mathbb{M} 51'52	2°32'20
direct	15064 Sep 14 17:41	16° \mathbb{M} 46'04		min. Earth dist.	15065 Aug 18 14:05	6° \mathbb{M} 34'27	0.65690 AU
morning max el	15064 Sep 28 14:17	24° \mathbb{M} 46'05	27°41'19	morning rise	15065 Aug 22 10:09	2° \mathbb{M} 34'03	
	15064 Oct 03 08:39	0° \mathbb{L}		desc. node	15065 Aug 26 11:52	0° \mathbb{M} 15'15	
	15064 Oct 23 17:09	0° \mathbb{M}			15065 Aug 27 16:19	30° \mathbb{R} \mathbb{L}	
morning set	15064 Nov 02 11:49	18° \mathbb{M} 14'36		direct	15065 Aug 28 19:09	29° \mathbb{L} 55'25	
asc. node	15064 Nov 02 23:22	19° \mathbb{M} 12'28			15065 Aug 29 22:33	0° \mathbb{M}	
max. Earth dist.	15064 Nov 07 07:44	28° \mathbb{M} 11'10	1.32381 AU	morning max el	15065 Sep 11 01:32	7° \mathbb{M} 45'27	26°51'55
	15064 Nov 08 04:14	0° \mathbb{Z}			15065 Sep 28 08:54	0° \mathbb{L}	
					15065 Oct 16 01:53	0° \mathbb{M}	
superior conj	15064 Nov 10 09:12	4° \mathbb{Z} 44'55	1°04'29	morning set	15065 Oct 16 18:46	1° \mathbb{M} 20'22	
minimum elong	15064 Nov 10 06:53	4° \mathbb{Z} 32'19	1°04'58	asc. node	15065 Oct 20 20:04	9° \mathbb{M} 17'31	
evening rise	15064 Nov 17 06:26	19° \mathbb{Z} 44'17		max. Earth dist.	15065 Oct 20 21:47	9° \mathbb{M} 26'09	1.33857 AU
	15064 Nov 22 04:48	0° \mathbb{Z}					
desc. node	15064 Dec 05 11:28	21° \mathbb{Z} 55'46		superior conj	15065 Oct 25 10:22	18° \mathbb{M} 44'30	0°41'37
evening max el	15064 Dec 10 07:28	27° \mathbb{Z} 20'38	23°15'23	minimum elong	15065 Oct 25 08:23	18° \mathbb{M} 34'08	0°41'56
	15064 Dec 13 09:21	0° \mathbb{Z}			15065 Oct 30 17:33	0° \mathbb{Z}	
retrograde	15064 Dec 23 14:10	3° \mathbb{Z} 55'49		evening rise	15065 Nov 01 16:31	4° \mathbb{Z} 09'21	
evening set	15064 Dec 27 21:52	3° \mathbb{Z} 15'17			15065 Nov 15 18:12	0° \mathbb{Z}	
min. Earth dist.	15065 Jan 03 17:40	0° \mathbb{Z} 03'16	0.54976 AU	evening max el	15065 Nov 21 20:47	7° \mathbb{Z} 23'48	21°35'15
	15065 Jan 03 19:56	30° \mathbb{R} \mathbb{Z}		desc. node	15065 Nov 22 08:35	7° \mathbb{Z} 52'15	
inferior conj	15065 Jan 05 03:10	29° \mathbb{Z} 14'51	-5°55'24	retrograde	15065 Dec 04 01:41	13° \mathbb{Z} 26'11	
minimum elong	15065 Jan 05 06:46	29° \mathbb{Z} 09'39	5°54'15	evening set	15065 Dec 07 01:42	13° \mathbb{Z} 05'43	
morning rise	15065 Jan 13 17:09	25° \mathbb{Z} 23'52		inferior conj	15065 Dec 15 19:17	9° \mathbb{Z} 14'14	-5°49'39
direct	15065 Jan 16 12:30	25° \mathbb{Z} 05'06		minimum elong	15065 Dec 15 13:42	9° \mathbb{Z} 22'03	5°48'04
	15065 Jan 27 05:13	0° \mathbb{Z}		min. Earth dist.	15065 Dec 15 23:26	9° \mathbb{Z} 08'25	0.54437 AU
morning max el	15065 Jan 27 17:10	0° \mathbb{Z} 28'06	20°40'15	morning rise	15065 Dec 24 02:20	5° \mathbb{Z} 25'42	
asc. node	15065 Jan 29 22:24	2° \mathbb{Z} 48'11		direct	15065 Dec 27 20:54	4° \mathbb{Z} 54'39	
	15065 Feb 15 01:37	0° \mathbb{X}		morning max el	15066 Jan 09 11:56	11° \mathbb{Z} 00'42	22°18'04
morning set	15065 Feb 15 15:32	1° \mathbb{X} 11'41		asc. node	15066 Jan 16 19:43	19° \mathbb{Z} 47'50	
					15066 Jan 23 01:51	0° \mathbb{Z}	
superior conj	15065 Feb 23 03:06	16° \mathbb{X} 41'04	1°05'53	morning set	15066 Jan 31 02:16	15° \mathbb{Z} 55'49	
minimum elong	15065 Feb 23 05:43	16° \mathbb{X} 54'22	1°05'51		15066 Feb 06 16:17	0° \mathbb{X}	
max. Earth dist.	15065 Feb 28 09:31	27° \mathbb{X} 09'10	1.35965 AU				
	15065 Mar 01 21:12	0° \mathbb{Y}		superior conj	15066 Feb 07 03:23	0° \mathbb{X} 58'54	1°22'56
desc. node	15065 Mar 03 12:27	3° \mathbb{Y} 04'19		minimum elong	15066 Feb 07 05:33	1° \mathbb{X} 10'21	1°23'16
evening rise	15065 Mar 04 06:28	4° \mathbb{Y} 27'41		max. Earth dist.	15066 Feb 10 23:25	8° \mathbb{X} 58'30	1.34067 AU
	15065 Mar 19 12:31	0° \mathbb{X}		evening rise	15066 Feb 15 09:03	17° \mathbb{X} 44'21	
evening max el	15065 Apr 08 16:47	25° \mathbb{X} 53'37	26°06'53	desc. node	15066 Feb 18 09:01	23° \mathbb{X} 25'22	
	15065 Apr 13 11:24	0° \mathbb{I}			15066 Feb 22 00:21	0° \mathbb{Y}	
retrograde	15065 Apr 21 10:58	3° \mathbb{I} 12'00			15066 Mar 13 18:57	0° \mathbb{X}	
evening set	15065 Apr 27 15:11	0° \mathbb{I} 40'53		evening max el	15066 Mar 22 06:37	9° \mathbb{X} 34'22	27°01'00
asc. node	15065 Apr 27 19:01	0° \mathbb{I} 32'51		retrograde	15066 Apr 04 15:49	17° \mathbb{X} 03'20	
	15065 Apr 28 09:47	30° \mathbb{R} \mathbb{X}		evening set	15066 Apr 11 04:54	14° \mathbb{X} 31'36	
min. Earth dist.	15065 May 01 18:48	26° \mathbb{X} 17'44	0.67197 AU	asc. node	15066 Apr 14 16:24	11° \mathbb{X} 12'32	
inferior conj	15065 May 03 11:29	24° \mathbb{X} 11'21	1°40'10	min. Earth dist.	15066 Apr 15 03:27	10° \mathbb{X} 41'56	0.65697 AU
minimum elong	15065 May 03 09:26	24° \mathbb{X} 17'43	1°38'46	inferior conj	15066 Apr 17 08:37	8° \mathbb{X} 09'34	0°49'37
morning rise	15065 May 09 04:29	18° \mathbb{X} 25'46		minimum elong	15066 Apr 17 07:21	8° \mathbb{X} 13'13	0°48'37
direct	15065 May 12 10:27	17° \mathbb{X} 25'49		morning rise	15066 Apr 23 11:17	2° \mathbb{X} 36'12	
morning max el	15065 May 19 00:44	20° \mathbb{X} 57'25	18°38'33	direct	15066 Apr 26 07:27	1° \mathbb{X} 52'27	
	15065 May 26 07:42	0° \mathbb{I}		morning max el	15066 May 02 15:21	5° \mathbb{X} 10'39	18°04'39
desc. node	15065 May 30 14:05	6° \mathbb{I} 17'54		desc. node	15066 May 17 10:57	26° \mathbb{X} 18'56	
morning set	15065 Jun 09 13:02	21° \mathbb{I} 44'16			15066 May 19 17:32	0° \mathbb{I}	
	15065 Jun 14 19:52	0° \mathbb{X}		morning set	15066 May 21 05:58	2° \mathbb{I} 27'46	
max. Earth dist.	15065 Jun 24 20:28	15° \mathbb{X} 38'16	1.45866 AU				
				superior conj	15066 Jun 05 01:03	26° \mathbb{I} 06'49	-1°56'06
superior conj	15065 Jun 25 14:51	16° \mathbb{X} 49'59	-2°12'47	minimum elong	15066 Jun 04 16:43	25° \mathbb{I} 34'05	1°56'27
minimum elong	15065 Jun 25 12:13	16° \mathbb{X} 39'44	2°13'43	max. Earth dist.	15066 Jun 07 16:43	0° \mathbb{X} 16'15	1.45827 AU
	15065 Jul 04 00:27	0° \mathbb{L}			15066 Jun 07 12:34	0° \mathbb{X}	
evening rise	15065 Jul 11 04:38	11° \mathbb{L} 21'56		evening rise	15066 Jun 21 03:51	21° \mathbb{X} 09'03	
greatest brilliancy	15065 Jul 18 09:40	22° \mathbb{L} 49'17	-0.9m		15066 Jun 26 21:54	0° \mathbb{L}	
	15065 Jul 23 00:47	0° \mathbb{M}		greatest brilliancy	15066 Jul 03 16:45	10° \mathbb{L} 16'42	-0.7m

asc. node	15066 Jul 11 14:57	21°♎22'44		minimum elong	15067 May 15 17:54	5°♊34'32	1°24'17
evening max el	15066 Jul 15 13:42	25°♎53'35	19°21'08	max. Earth dist.	15067 May 21 12:14	14°♊48'31	1.45053 AU
retrograde	15066 Jul 22 15:05	29°♎49'01			15067 May 31 06:33	0°♊	
evening set	15066 Jul 26 06:02	28°♎32'52		evening rise	15067 May 31 15:01	0°♊32'25	
inferior conj	15066 Jul 31 15:38	22°♎41'23	2°57'40		15067 Jun 20 15:37	0°♎	
minimum elong	15066 Jul 31 17:04	22°♎36'43	2°56'49	asc. node	15067 Jun 28 11:49	9°♎33'09	
min. Earth dist.	15066 Aug 02 00:25	20°♎54'04	0.67232 AU	evening max el	15067 Jun 28 16:42	9°♎45'27	20°19'51
morning rise	15066 Aug 06 03:31	16°♎15'44		retrograde	15067 Jul 06 13:59	14°♎15'43	
direct	15066 Aug 12 03:16	13°♎40'12		evening set	15067 Jul 10 15:11	12°♎41'59	
desc. node	15066 Aug 13 09:20	13°♎46'14		inferior conj	15067 Jul 15 21:31	6°♎38'10	3°08'49
morning max el	15066 Aug 24 12:35	21°♎04'26	25°39'39	minimum elong	15067 Jul 15 21:59	6°♎36'34	3°07'58
	15066 Sep 01 06:11	0°♎		min. Earth dist.	15067 Jul 16 16:17	5°♎33'57	0.68319 AU
	15066 Sep 21 13:26	0°♎		morning rise	15067 Jul 21 04:28	0°♎15'25	
morning set	15066 Sep 29 11:27	13°♎46'50			15067 Jul 21 11:34	30°♎	
max. Earth dist.	15066 Oct 03 02:19	20°♎30'14	1.35826 AU	direct	15067 Jul 26 16:50	27°♎50'27	
asc. node	15066 Oct 07 16:44	29°♎26'21		desc. node	15067 Jul 31 06:44	29°♎11'06	
	15066 Oct 07 23:29	0°♎			15067 Aug 01 14:47	0°♎	
				morning max el	15067 Aug 06 23:13	4°♎34'46	24°14'10
superior conj	15066 Oct 09 03:10	2°♎18'34	0°13'11		15067 Aug 26 13:09	0°♎	
minimum elong	15066 Oct 09 02:23	2°♎14'35	0°13'28	morning set	15067 Sep 11 09:40	25°♎24'07	
behind sun begin	15066 Oct 08 22:56	1°♎57'15			15067 Sep 14 00:49	0°♎	
behind sun end	15066 Oct 09 05:50	2°♎31'56		max. Earth dist.	15067 Sep 15 01:25	1°♎49'22	1.38122 AU
evening rise	15066 Oct 16 23:42	18°♎25'24					
	15066 Oct 22 19:19	0°♎		superior conj	15067 Sep 22 08:13	15°♎18'43	-0°19'59
evening max el	15066 Nov 03 22:09	18°♎02'07	20°10'22	minimum elong	15067 Sep 22 09:35	15°♎25'15	0°19'34
desc. node	15066 Nov 09 05:48	22°♎01'23		asc. node	15067 Sep 24 13:20	19°♎35'07	
retrograde	15066 Nov 14 13:24	23°♎19'51			15067 Sep 29 20:03	0°♎	
evening set	15066 Nov 16 16:37	23°♎08'04		evening rise	15067 Oct 01 01:31	2°♎26'08	
inferior conj	15066 Nov 25 13:09	19°♎11'04	-4°45'02	evening max el	15067 Oct 17 13:49	29°♎29'41	19°07'00
minimum elong	15066 Nov 25 03:05	19°♎26'04	4°41'24		15067 Oct 18 02:15	0°♎	
min. Earth dist.	15066 Nov 27 06:00	18°♎10'13	0.54839 AU	retrograde	15067 Oct 26 14:32	4°♎02'01	
morning rise	15066 Dec 03 12:43	15°♎06'14		desc. node	15067 Oct 27 03:05	4°♎01'09	
direct	15066 Dec 08 07:34	14°♎16'36		evening set	15067 Oct 28 11:29	3°♎51'07	
morning max el	15066 Dec 21 21:39	20°♎58'26	24°07'25		15067 Nov 05 08:56	30°♎	
	15066 Dec 29 14:37	0°♎		inferior conj	15067 Nov 05 22:05	29°♎37'39	-3°05'00
asc. node	15067 Jan 03 16:57	7°♎45'02		minimum elong	15067 Nov 05 14:24	29°♎50'45	3°01'21
	15067 Jan 15 06:49	0°♎		min. Earth dist.	15067 Nov 08 16:36	27°♎44'47	0.56102 AU
morning set	15067 Jan 15 14:12	0°♎39'32		morning rise	15067 Nov 13 14:42	25°♎00'00	
				direct	15067 Nov 19 05:33	23°♎46'52	
superior conj	15067 Jan 22 09:36	15°♎30'51	1°33'30		15067 Dec 02 07:02	0°♎	
minimum elong	15067 Jan 22 10:53	15°♎37'51	1°34'10	morning max el	15067 Dec 03 07:57	0°♎57'44	25°50'51
max. Earth dist.	15067 Jan 24 21:14	20°♎53'27	1.32588 AU	asc. node	15067 Dec 21 14:05	26°♎25'32	
	15067 Jan 29 05:38	0°♎			15067 Dec 23 12:36	0°♎	
evening rise	15067 Jan 29 23:02	1°♎28'15		morning set	15067 Dec 31 01:35	15°♎18'04	
desc. node	15067 Feb 05 05:36	13°♎33'30					
	15067 Feb 14 22:49	0°♎		superior conj	15068 Jan 06 19:27	0°♎10'26	1°37'51
evening max el	15067 Mar 04 19:28	22°♎53'24	27°31'13	minimum elong	15068 Jan 06 19:41	0°♎11'42	1°38'44
	15067 Mar 15 18:12	0°♎			15068 Jan 06 17:34	0°♎	
retrograde	15067 Mar 18 13:45	0°♎22'42		max. Earth dist.	15068 Jan 08 01:32	2°♎57'13	1.31590 AU
	15067 Mar 21 06:49	30°♎		evening rise	15068 Jan 13 21:33	15°♎32'22	
evening set	15067 Mar 25 08:47	27°♎56'54			15068 Jan 21 05:36	0°♎	
min. Earth dist.	15067 Mar 29 03:55	24°♎37'29	0.63845 AU	desc. node	15068 Jan 23 02:15	3°♎23'03	
inferior conj	15067 Mar 31 20:38	21°♎50'00	-0°13'44		15068 Feb 09 22:51	0°♎	
minimum elong	15067 Mar 31 21:03	21°♎48'53	0°13'50	evening max el	15068 Feb 15 05:03	5°♎37'36	27°31'08
transit middle	15067 Mar 31 21:03	21°♎48'53	0°13'50	retrograde	15068 Feb 29 03:47	13°♎01'03	
transit begin	15067 Mar 31 19:29	21°♎52'58		evening set	15068 Mar 07 00:10	10°♎48'26	
transit end	15067 Mar 31 22:38	21°♎44'48		min. Earth dist.	15068 Mar 10 18:35	7°♎53'31	0.61734 AU
asc. node	15067 Apr 01 13:50	21°♎05'37		inferior conj	15068 Mar 13 20:17	5°♎04'33	-1°29'39
morning rise	15067 Apr 07 11:38	16°♎31'19		minimum elong	15068 Mar 13 23:27	4°♎57'16	1°28'21
direct	15067 Apr 09 23:15	16°♎00'34		asc. node	15068 Mar 18 11:15	1°♎19'01	
morning max el	15067 Apr 16 08:46	19°♎17'07	17°47'57	morning rise	15068 Mar 21 01:47	0°♎03'33	
	15067 Apr 24 09:24	0°♎			15068 Mar 21 06:28	30°♎	
morning set	15067 May 03 01:57	14°♎28'35		direct	15068 Mar 23 06:26	29°♎42'24	
desc. node	15067 May 04 07:41	16°♎34'44			15068 Mar 25 05:45	0°♎	
	15067 May 12 08:03	0°♎		morning max el	15068 Mar 30 01:56	3°♎08'27	17°49'03
				morning set	15068 Apr 14 19:57	27°♎31'03	
superior conj	15067 May 16 01:53	6°♎06'51	-1°24'23		15068 Apr 16 05:21	0°♎	

desc. node	15068 Apr 20 04:21	7°♄00'43		minimum elong	15069 Apr 08 00:04	29°♄16'17	0°08'23
				behind sun begin	15069 Apr 07 17:31	28°♄46'55	
superior conj	15068 Apr 26 01:48	17°♄11'38	-0°46'04	behind sun end	15069 Apr 08 06:38	29°♄45'35	
minimum elong	15068 Apr 25 21:30	16°♄53'23	0°46'04		15069 Apr 08 09:51	0°♄	
max. Earth dist.	15068 May 03 04:20	28°♄58'23	1.43625 AU	max. Earth dist.	15069 Apr 15 15:22	12°♄31'18	1.41692 AU
	15068 May 03 19:34	0°♄		evening rise	15069 Apr 20 14:59	20°♄43'47	
evening rise	15068 May 10 06:36	10°♄14'15			15069 Apr 26 11:50	0°♄	
	15068 May 23 09:42	0°♄			15069 May 17 15:57	0°♄	
evening max el	15068 Jun 10 13:43	23°♄36'56	21°31'00	evening max el	15069 May 24 06:07	7°♄29'01	22°50'13
asc. node	15068 Jun 14 08:45	26°♄52'50		asc. node	15069 Jun 01 05:48	13°♄06'18	
retrograde	15068 Jun 19 12:39	28°♄50'04		retrograde	15069 Jun 03 09:29	13°♄26'47	
evening set	15068 Jun 24 00:41	26°♄59'24		evening set	15069 Jun 08 08:50	11°♄20'50	
inferior conj	15068 Jun 29 06:23	20°♄44'42	3°08'24	inferior conj	15069 Jun 13 16:14	4°♄57'27	2°57'22
minimum elong	15068 Jun 29 05:52	20°♄46'28	3°07'26	minimum elong	15069 Jun 13 14:53	5°♄02'09	2°56'12
min. Earth dist.	15068 Jun 29 11:42	20°♄26'07	0.68926 AU	min. Earth dist.	15069 Jun 13 08:36	5°♄24'01	0.69047 AU
morning rise	15068 Jul 04 10:52	14°♄27'25			15069 Jun 17 13:55	30°♄	
direct	15068 Jul 09 10:53	12°♄18'14		morning rise	15069 Jun 18 20:49	28°♄47'16	
desc. node	15068 Jul 17 04:04	16°♄04'38		direct	15069 Jun 23 08:23	26°♄56'56	
morning max el	15068 Jul 19 10:55	18°♄13'16	22°44'47		15069 Jun 29 21:53	0°♄	
	15068 Jul 29 07:04	0°♄		morning max el	15069 Jul 02 02:22	2°♄00'39	21°19'49
	15068 Aug 18 15:26	0°♄		desc. node	15069 Jul 04 01:18	4°♄04'28	
morning set	15068 Aug 22 09:15	6°♄02'37			15069 Jul 23 03:13	0°♄	
max. Earth dist.	15068 Aug 27 00:59	13°♄48'36	1.40500 AU	morning set	15069 Aug 02 08:38	15°♄39'19	
				max. Earth dist.	15069 Aug 09 05:34	26°♄39'47	1.42684 AU
superior conj	15068 Sep 03 21:22	27°♄35'06	-0°55'53		15069 Aug 11 06:17	0°♄	
minimum elong	15068 Sep 04 01:42	27°♄54'41	0°55'20				
	15068 Sep 05 05:13	0°♄		superior conj	15069 Aug 16 14:16	8°♄58'30	-1°30'54
asc. node	15068 Sep 10 09:53	9°♄40'03		minimum elong	15069 Aug 16 21:19	9°♄28'42	1°30'29
evening rise	15068 Sep 13 18:48	16°♄03'15		evening rise	15069 Aug 27 23:32	29°♄06'30	
	15068 Sep 21 08:59	0°♄		asc. node	15069 Aug 28 06:27	29°♄37'42	
evening max el	15068 Sep 29 17:12	11°♄43'44	18°25'41		15069 Aug 28 11:23	0°♄	
retrograde	15068 Oct 07 10:42	15°♄39'00		evening max el	15069 Sep 13 04:10	24°♄35'26	18°05'03
evening set	15068 Oct 09 10:41	15°♄23'59		retrograde	15069 Sep 20 00:44	28°♄06'27	
desc. node	15068 Oct 13 00:28	13°♄50'30		evening set	15069 Sep 22 07:46	27°♄43'06	
inferior conj	15068 Oct 17 04:24	10°♄49'53	-1°19'58	inferior conj	15069 Sep 29 07:48	22°♄48'31	0°11'00
minimum elong	15068 Oct 17 01:18	10°♄56'05	1°18'08	minimum elong	15069 Sep 29 08:10	22°♄47'40	0°11'09
min. Earth dist.	15068 Oct 20 10:11	8°♄15'49	0.58005 AU	transit middle	15069 Sep 29 08:10	22°♄47'40	0°11'09
morning rise	15068 Oct 24 12:25	5°♄34'42		transit begin	15069 Sep 29 05:46	22°♄53'14	
direct	15068 Oct 30 18:00	3°♄54'35		transit end	15069 Sep 29 10:35	22°♄42'05	
morning max el	15068 Nov 14 01:06	11°♄29'06	27°09'44	desc. node	15069 Sep 29 21:56	22°♄15'43	
	15068 Nov 28 11:11	0°♄		min. Earth dist.	15069 Oct 02 12:38	19°♄52'08	0.60245 AU
asc. node	15068 Dec 07 11:06	15°♄37'20		morning rise	15069 Oct 06 05:23	17°♄01'50	
morning set	15068 Dec 14 10:34	29°♄45'32		direct	15069 Oct 12 19:35	14°♄56'01	
	15068 Dec 14 13:17	0°♄		morning max el	15069 Oct 27 02:06	22°♄47'10	27°52'17
					15069 Nov 02 12:19	0°♄	
superior conj	15068 Dec 21 06:52	14°♄50'53	1°36'10		15069 Nov 21 15:08	0°♄	
minimum elong	15068 Dec 21 06:03	14°♄46'20	1°37'05	asc. node	15069 Nov 24 08:02	5°♄12'04	
max. Earth dist.	15068 Dec 21 09:05	15°♄03'20	1.31108 AU	morning set	15069 Nov 28 15:20	13°♄57'35	
evening rise	15068 Dec 28 02:05	29°♄49'36		max. Earth dist.	15069 Dec 04 16:25	27°♄04'39	1.31170 AU
	15068 Dec 28 04:02	0°♄					
desc. node	15069 Jan 08 22:58	22°♄45'43		superior conj	15069 Dec 05 18:01	29°♄27'14	1°28'33
	15069 Jan 13 09:45	0°♄		minimum elong	15069 Dec 05 16:20	29°♄17'50	1°29'22
evening max el	15069 Jan 27 08:43	17°♄34'33	26°56'41		15069 Dec 05 23:54	0°♄	
retrograde	15069 Feb 10 08:50	24°♄48'42		evening rise	15069 Dec 12 10:37	14°♄15'29	
evening set	15069 Feb 16 23:48	22°♄56'53			15069 Dec 20 04:39	0°♄	
min. Earth dist.	15069 Feb 20 22:51	20°♄16'57	0.59505 AU	desc. node	15069 Dec 26 19:48	11°♄31'37	
inferior conj	15069 Feb 24 03:54	17°♄42'46	-2°55'22	evening max el	15070 Jan 09 04:33	28°♄39'13	25°48'26
minimum elong	15069 Feb 24 10:27	17°♄29'37	2°52'37		15070 Jan 10 16:11	0°♄	
morning rise	15069 Mar 04 00:32	13°♄02'11		retrograde	15070 Jan 23 02:54	5°♄41'11	
asc. node	15069 Mar 05 08:42	12°♄48'47		evening set	15070 Jan 29 03:52	4°♄16'23	
direct	15069 Mar 06 00:45	12°♄47'05		min. Earth dist.	15070 Feb 02 17:31	1°♄37'51	0.57392 AU
morning max el	15069 Mar 13 15:19	16°♄33'53	18°09'04		15070 Feb 05 02:02	30°♄	
	15069 Mar 23 01:47	0°♄		inferior conj	15070 Feb 05 16:04	29°♄35'27	-4°22'16
morning set	15069 Mar 29 05:59	11°♄17'02		minimum elong	15070 Feb 06 01:07	29°♄19'42	4°19'01
desc. node	15069 Apr 07 00:56	27°♄32'20		morning rise	15070 Feb 14 01:19	25°♄16'21	
				direct	15070 Feb 16 01:58	25°♄03'31	
superior conj	15069 Apr 08 00:45	29°♄19'18	-0°08'06	asc. node	15070 Feb 20 06:08	26°♄01'14	

morning max el	15070 Feb 24 20:51	29°  21'45	18°49'47	morning max el	15071 Feb 07 14:23	11°  20'33	19°53'12
	15070 Feb 25 12:00	0° 			15071 Feb 20 04:59	0° 	
morning set	15070 Mar 13 03:10	25°  32'07		morning set	15071 Feb 25 07:49	10°  05'36	
	15070 Mar 15 09:54	0° 					
superior conj	15070 Mar 21 18:54	12°  18'36	0°25'33	superior conj	15071 Mar 05 03:50	25°  57'31	0°53'03
minimum elong	15070 Mar 21 20:31	12°  26'14	0°25'10	minimum elong	15071 Mar 05 06:23	26°  10'10	0°52'50
desc. node	15070 Mar 24 21:29	18°  05'59			15071 Mar 07 05:07	0° 	
max. Earth dist.	15070 Mar 28 22:29	25°  22'28	1.39473 AU	max. Earth dist.	15071 Mar 11 05:09	7°  38'17	1.37205 AU
	15070 Mar 31 14:17	0° 		desc. node	15071 Mar 11 18:02	8°  38'13	
evening rise	15070 Apr 01 20:38	2°  09'24		evening rise	15071 Mar 14 22:25	14°  26'03	
	15070 Apr 19 17:49	0° 			15071 Mar 24 02:53	0° 	
evening max el	15070 May 06 20:11	21°  22'58	24°11'32	evening max el	15071 Apr 14 12:05	0° 	
retrograde	15070 May 18 03:06	27°  22'59'47			15071 Apr 19 09:49	5°  21'32	25°27'57
asc. node	15070 May 19 02:57	27°  22'55'30		retrograde	15071 May 01 16:24	12°  22'32'24	
evening set	15070 May 23 14:02	25°  22'41'09		asc. node	15071 May 06 00:12	11°  22'05'55	
min. Earth dist.	15070 May 28 04:44	20°  22'11'14	0.68695 AU	evening set	15071 May 07 14:41	9°  22'55'34	
inferior conj	15070 May 29 01:10	19°  22'12'06	2°35'56	min. Earth dist.	15071 May 11 22:01	5°  22'12'08	0.67879 AU
minimum elong	15070 May 28 23:13	19°  22'18'42	2°34'34	inferior conj	15071 May 13 07:15	3°  22'24'57	2°03'49
morning rise	15070 Jun 03 08:27	13°  22'10'23		minimum elong	15071 May 13 05:05	3°  22'31'58	2°02'22
direct	15070 Jun 07 08:00	11°  22'40'06			15071 May 16 02:28	30°  22'30'04	
morning max el	15070 Jun 15 00:10	15°  22'58'28	20°05'28	morning rise	15071 May 18 19:55	27°  22'33'04	
desc. node	15070 Jun 20 22:27	22°  22'52'42		direct	15071 May 22 08:08	26°  22'22'24	
	15070 Jun 26 03:31	0° 		morning max el	15071 May 29 05:27	0°  22'06'57	19°05'38
morning set	15070 Jul 12 14:10	24°  22'31'33			15071 May 29 02:35	0° 	
	15070 Jul 16 03:09	0° 		desc. node	15071 Jun 07 19:28	12°  22'16'44	
max. Earth dist.	15070 Jul 22 16:55	10°  22'02'00	1.44432 AU	greatest brilliancy	15071 Jun 11 05:44	17°  22'19'57	-0.7m
					15071 Jun 19 13:15	0° 	
superior conj	15070 Jul 28 07:42	19°  22'22'22	-1°59'11	morning set	15071 Jun 21 19:54	3°  22'30'33	
minimum elong	15070 Jul 28 14:49	19°  22'02'21	1°59'23	max. Earth dist.	15071 Jul 05 10:04	24°  22'37'12	1.45558 AU
	15070 Aug 03 17:57	0° 					
evening rise	15070 Aug 10 10:40	11°  22'22'33		superior conj	15071 Jul 08 03:32	28°  22'54'19	-2°13'22
asc. node	15070 Aug 15 03:03	19°  22'23'17		minimum elong	15071 Jul 08 05:30	29°  22'02'02	2°14'15
	15070 Aug 21 15:23	0° 			15071 Jul 08 20:12	0° 	
evening max el	15070 Aug 27 18:33	7°  22'53'38	18°03'34	evening rise	15071 Jul 22 23:14	22°  22'02'40'36	
retrograde	15070 Sep 03 04:36	11°  22'14'16			15071 Jul 27 10:58	0° 	
evening set	15070 Sep 05 19:58	10°  22'38'59		asc. node	15071 Aug 01 23:42	8°  22'52'04	
inferior conj	15070 Sep 12 04:45	5°  22'25'45	1°21'37	evening max el	15071 Aug 11 08:51	21°  22'29'33	18°20'09
minimum elong	15070 Sep 12 06:48	5°  22'20'20	1°20'55	retrograde	15071 Aug 17 18:04	24°  22'53'36	
min. Earth dist.	15070 Sep 15 00:37	2°  22'28'18	0.62528 AU	evening set	15071 Aug 20 18:13	24°  22'50'42	
desc. node	15070 Sep 16 19:26	0°  22'46'12		inferior conj	15071 Aug 26 15:13	18°  22'33'59	2°12'12
	15070 Sep 17 17:07	30°  22'30'00		minimum elong	15071 Aug 26 17:36	18°  22'27'02	2°11'16
morning rise	15070 Sep 18 15:18	29°  22'17'20		min. Earth dist.	15071 Aug 28 22:13	15°  22'53'53	0.64629 AU
direct	15070 Sep 25 07:40	26°  22'52'06		morning rise	15071 Sep 01 15:31	12°  22'13'11	
	15070 Oct 03 16:31	0° 		desc. node	15071 Sep 03 16:57	10°  22'49'23	
morning max el	15070 Oct 09 09:03	4°  22'51'12	27°55'47	direct	15071 Sep 08 04:22	9°  22'37'06	
	15070 Oct 28 07:24	0° 		morning max el	15071 Sep 21 19:29	17°  22'33'41	27°23'44
asc. node	15070 Nov 11 04:51	25°  22'02'38			15071 Oct 02 05:33	0° 	
morning set	15070 Nov 12 13:44	27°  22'02'48'43			15071 Oct 21 04:31	0° 	
	15070 Nov 13 15:17	0° 		morning set	15071 Oct 27 03:11	11°  22'12'56	
max. Earth dist.	15070 Nov 17 19:45	8°  22'52'24	1.31781 AU	asc. node	15071 Oct 29 01:37	15°  22'03'42	
				max. Earth dist.	15071 Oct 31 15:36	20°  22'02'25	1.32946 AU
superior conj	15070 Nov 20 03:00	13°  22'53'54	1°15'00				
minimum elong	15070 Nov 20 00:46	13°  22'41'38	1°15'37	superior conj	15071 Nov 04 07:41	28°  22'05'00	0°55'31
evening rise	15070 Nov 26 21:14	28°  22'45'01		minimum elong	15071 Nov 04 05:25	27°  22'52'52	0°55'54
	15070 Nov 27 11:10	0° 			15071 Nov 05 05:07	0° 	
desc. node	15070 Dec 13 16:47	29°  22'32'71'4		evening rise	15071 Nov 11 08:05	13°  22'43'17	
	15070 Dec 14 02:08	0° 			15071 Nov 19 17:12	0° 	
evening max el	15070 Dec 21 16:46	8°  22'58'03	24°14'44	desc. node	15071 Nov 30 13:51	16°  22'13'52	
retrograde	15071 Jan 04 07:39	15°  22'44'25		evening max el	15071 Dec 03 02:44	18°  22'55'22	22°31'38
evening set	15071 Jan 09 09:04	14°  22'48'36		retrograde	15071 Dec 15 23:49	25°  22'18'12	
min. Earth dist.	15071 Jan 15 04:26	11°  22'54'30	0.55675 AU	evening set	15071 Dec 19 17:56	24°  22'47'19	
inferior conj	15071 Jan 17 07:16	10°  22'37'07	-5°32'29	min. Earth dist.	15071 Dec 27 10:36	21°  22'18'25	0.54637 AU
minimum elong	15071 Jan 17 14:42	10°  22'25'45	5°30'26	inferior conj	15071 Dec 28 04:53	20°  22'52'41	-6°00'35
morning rise	15071 Jan 25 22:12	6°  22'37'41		minimum elong	15071 Dec 28 04:35	20°  22'53'05	5°59'38
direct	15071 Jan 28 07:57	6°  22'22'36		morning rise	15072 Jan 05 16:27	17°  22'05'10	
asc. node	15071 Feb 07 03:32	10°  22'54'51		direct	15072 Jan 08 21:14	16°  22'41'58	
				morning max el	15072 Jan 20 17:09	22°  22'32'09	21°19'39

asc. node	15072 Jan 25 00:55	27° ♁ 13'49		direct	15072 Dec 19 04:29	26° ♁ 16'04	
	15072 Jan 27 01:58	0° ♁			15072 Dec 29 04:11	0° ♁	
morning set	15072 Feb 09 16:59	24° ♁ 48'06		morning max el	15073 Jan 01 07:12	2° ♁ 38'12	23°04'08
	15072 Feb 12 04:21	0° ♁		asc. node	15073 Jan 10 22:11	14° ♁ 40'05	
					15073 Jan 19 13:30	0° ♁	
superior conj	15072 Feb 16 23:28	10° ♁ 04'02	1°13'55	morning set	15073 Jan 24 04:29	9° ♁ 33'16	
minimum elong	15072 Feb 17 01:57	10° ♁ 16'57	1°14'02				
max. Earth dist.	15072 Feb 21 15:30	19° ♁ 32'39	1.35116 AU	superior conj	15073 Jan 31 02:36	24° ♁ 29'25	1°28'11
evening rise	15072 Feb 25 16:55	27° ♁ 23'14		minimum elong	15073 Jan 31 04:26	24° ♁ 39'13	1°28'40
desc. node	15072 Feb 26 14:34	29° ♁ 04'32			15073 Feb 02 16:47	0° ♁	
	15072 Feb 27 02:32	0° ♁		max. Earth dist.	15073 Feb 03 08:43	1° ♁ 23'28	1.33379 AU
	15072 Mar 16 10:50	0° ♁		evening rise	15073 Feb 08 00:43	10° ♁ 52'38	
evening max el	15072 Mar 31 23:33	19° ♁ 05'27	26°32'15	desc. node	15073 Feb 12 11:09	19° ♁ 21'00	
retrograde	15072 Apr 14 00:31	26° ♁ 29'06			15073 Feb 18 11:50	0° ♁	
evening set	15072 Apr 20 08:57	23° ♁ 56'51			15073 Mar 11 23:01	0° ♁	
asc. node	15072 Apr 21 21:33	22° ♁ 34'29		evening max el	15073 Mar 14 12:55	2° ♁ 37'49	27°16'59
min. Earth dist.	15072 Apr 24 10:13	19° ♁ 48'30	0.66617 AU	retrograde	15073 Mar 28 02:36	10° ♁ 08'29	
inferior conj	15072 Apr 26 08:19	17° ♁ 29'54	1°20'14	evening set	15073 Apr 03 18:46	7° ♁ 38'01	
minimum elong	15072 Apr 26 06:30	17° ♁ 35'23	1°18'58	min. Earth dist.	15073 Apr 07 15:30	4° ♁ 01'59	0.64955 AU
morning rise	15072 May 02 05:07	11° ♁ 49'28		asc. node	15073 Apr 08 18:57	2° ♁ 47'11	
direct	15072 May 05 06:52	10° ♁ 56'41		inferior conj	15073 Apr 10 01:54	1° ♁ 21'23	0°24'18
morning max el	15072 May 11 17:18	14° ♁ 20'39	18°22'03	minimum elong	15073 Apr 10 01:14	1° ♁ 23'14	0°23'38
	15072 May 23 07:55	0° ♁			15073 Apr 11 07:53	30° ♁	
desc. node	15072 May 24 16:22	2° ♁ 06'11		morning rise	15073 Apr 16 09:34	25° ♁ 54'14	
morning set	15072 May 31 21:02	13° ♁ 28'11		direct	15073 Apr 19 01:52	25° ♁ 16'32	
	15072 Jun 11 08:36	0° ♁		morning max el	15073 Apr 25 09:31	28° ♁ 32'33	17°55'23
					15073 Apr 26 18:54	0° ♁	
superior conj	15072 Jun 16 12:18	8° ♁ 03'25	-2°08'00	desc. node	15073 May 11 13:08	22° ♁ 14'04	
minimum elong	15072 Jun 16 06:36	7° ♁ 41'10	2°08'44	morning set	15073 May 13 01:46	24° ♁ 45'30	
max. Earth dist.	15072 Jun 17 06:09	9° ♁ 13'00	1.45947 AU		15073 May 16 06:03	0° ♁	
	15072 Jun 30 13:43	0° ♁					
evening rise	15072 Jul 02 10:57	2° ♁ 57'07		superior conj	15073 May 27 03:05	17° ♁ 34'48	-1°43'59
greatest brilliancy	15072 Jul 12 03:43	18° ♁ 04'10	-0.8m	minimum elong	15073 May 26 18:14	16° ♁ 59'39	1°44'04
asc. node	15072 Jul 18 20:26	27° ♁ 57'36		max. Earth dist.	15073 May 31 02:05	23° ♁ 49'31	1.45583 AU
	15072 Jul 20 08:34	0° ♁			15073 Jun 04 00:59	0° ♁	
evening max el	15072 Jul 24 20:11	5° ♁ 15'52	18°54'07	evening rise	15073 Jun 12 03:06	12° ♁ 28'48	
retrograde	15072 Jul 31 13:26	8° ♁ 56'34			15073 Jun 23 16:44	0° ♁	
evening set	15072 Aug 03 22:46	7° ♁ 50'18		greatest brilliancy	15073 Jun 26 09:04	3° ♁ 56'48	-0.6m
inferior conj	15072 Aug 09 11:34	2° ♁ 06'10	2°45'22	asc. node	15073 Jul 05 17:15	16° ♁ 31'22	
minimum elong	15072 Aug 09 13:28	2° ♁ 00'09	2°44'29	evening max el	15073 Jul 08 02:29	19° ♁ 06'48	19°44'24
min. Earth dist.	15072 Aug 11 04:27	29° ♁ 56'53	0.66395 AU	retrograde	15073 Jul 15 11:44	23° ♁ 16'20	
	15072 Aug 11 03:27	30° ♁		evening set	15073 Jul 19 06:52	21° ♁ 52'49	
morning rise	15072 Aug 15 03:20	25° ♁ 40'27		inferior conj	15073 Jul 24 14:43	15° ♁ 55'49	3°03'54
desc. node	15072 Aug 20 14:26	23° ♁ 04'37		minimum elong	15073 Jul 24 15:45	15° ♁ 52'21	3°03'04
direct	15072 Aug 21 08:34	23° ♁ 02'27		min. Earth dist.	15073 Jul 25 17:29	14° ♁ 26'10	0.67746 AU
	15072 Sep 02 13:33	0° ♁		morning rise	15073 Jul 30 00:10	9° ♁ 30'43	
morning max el	15072 Sep 03 07:01	0° ♁ 43'27	26°23'31	direct	15073 Aug 04 19:10	6° ♁ 58'51	
	15072 Sep 25 05:25	0° ♁		desc. node	15073 Aug 07 11:51	7° ♁ 26'52	
morning set	15072 Oct 09 04:33	24° ♁ 03'16		morning max el	15073 Aug 16 17:57	14° ♁ 08'35	25°04'19
	15072 Oct 12 07:17	0° ♁			15073 Aug 29 16:25	0° ♁	
max. Earth dist.	15072 Oct 13 01:44	1° ♁ 30'10	1.34638 AU		15073 Sep 18 01:03	0° ♁	
asc. node	15072 Oct 14 22:18	5° ♁ 10'57		morning set	15073 Sep 21 13:53	6° ♁ 10'15	
				max. Earth dist.	15073 Sep 25 03:00	12° ♁ 36'00	1.36768 AU
superior conj	15072 Oct 18 05:39	11° ♁ 54'34	0°30'13				
minimum elong	15072 Oct 18 04:03	11° ♁ 46'22	0°30'29	superior conj	15073 Oct 01 17:50	25° ♁ 14'57	-0°00'24
evening rise	15072 Oct 25 17:13	27° ♁ 35'29		minimum elong	15073 Oct 01 17:51	25° ♁ 14'58	0°00'06
	15072 Oct 26 20:59	0° ♁		behind sun begin	15073 Oct 01 11:27	24° ♁ 43'28	
evening max el	15072 Nov 13 20:16	29° ♁ 09'53	20°56'44	behind sun end	15073 Oct 02 00:15	25° ♁ 46'34	
	15072 Nov 14 17:16	0° ♁		asc. node	15073 Oct 01 18:54	25° ♁ 20'10	
desc. node	15072 Nov 16 11:01	1° ♁ 28'14			15073 Oct 04 03:08	0° ♁	
retrograde	15072 Nov 25 10:16	4° ♁ 55'00		evening rise	15073 Oct 09 22:24	11° ♁ 45'35	
evening set	15072 Nov 27 23:30	4° ♁ 39'28			15073 Oct 19 14:21	0° ♁	
inferior conj	15072 Dec 06 19:53	0° ♁ 46'53	-5°28'36	evening max el	15073 Oct 27 03:46	10° ♁ 08'31	19°40'44
minimum elong	15072 Dec 06 11:27	0° ♁ 58'54	5°26'06	desc. node	15073 Nov 03 08:17	14° ♁ 44'12	
min. Earth dist.	15072 Dec 07 16:12	0° ♁ 17'56	0.54485 AU	retrograde	15073 Nov 06 02:26	15° ♁ 06'31	
	15072 Dec 08 04:52	30° ♁		evening set	15073 Nov 08 01:10	14° ♁ 55'57	
morning rise	15072 Dec 14 23:36	26° ♁ 54'00		inferior conj	15073 Nov 16 18:51	10° ♁ 53'13	-4°05'03

minimum elong	15073 Nov 16 09:11	11° ♊ 08'23	4°01'03	min. Earth dist.	15074 Oct 31 13:44	19° ♍ 25'27	0.56858 AU
min. Earth dist.	15073 Nov 19 00:28	9° ♊ 29'10	0.55274 AU	morning rise	15074 Nov 05 01:44	16° ♍ 44'17	
morning rise	15073 Nov 24 15:27	6° ♊ 35'25		direct	15074 Nov 10 23:53	15° ♍ 19'27	
direct	15073 Nov 29 19:18	5° ♊ 36'14		morning max el	15074 Nov 25 04:37	22° ♍ 41'02	26°28'15
morning max el	15073 Dec 13 16:07	12° ♊ 32'10	24°53'20		15074 Dec 01 17:10	0° ♊	
	15073 Dec 27 01:18	0° ♊		asc. node	15074 Dec 15 16:25	21° ♊ 51'36	
asc. node	15073 Dec 28 19:21	2° ♊ 56'53			15074 Dec 19 21:28	0° ♊	
morning set	15074 Jan 08 16:22	24° ♊ 15'03		morning set	15074 Dec 24 02:54	8° ♊ 48'48	
	15074 Jan 11 07:44	0° ♊					
				superior conj	15074 Dec 30 21:21	23° ♊ 45'38	1°37'51
superior conj	15074 Jan 15 10:37	9° ♋ 05'22	1°36'05	minimum elong	15074 Dec 30 21:07	23° ♊ 44'23	1°38'47
minimum elong	15074 Jan 15 11:28	9° ♋ 10'01	1°36'52	max. Earth dist.	15074 Dec 31 15:14	25° ♋ 25'23	1.31319 AU
max. Earth dist.	15074 Jan 17 09:14	13° ♋ 20'35	1.32095 AU		15075 Jan 02 16:45	0° ♋	
evening rise	15074 Jan 22 18:37	24° ♋ 45'49		evening rise	15075 Jan 06 19:58	8° ♋ 56'04	
	15074 Jan 25 09:07	0° ♋		desc. node	15075 Jan 17 04:29	29° ♋ 01'11	
desc. node	15074 Jan 30 07:47	9° ♋ 22'06			15075 Jan 17 17:55	0° ♋	
	15074 Feb 12 00:44	0° ♋		evening max el	15075 Feb 07 08:13	28° ♋ 09'40	27°20'59
evening max el	15074 Feb 25 00:35	15° ♋ 43'35	27°35'14		15075 Feb 09 09:19	0° ♋	
retrograde	15074 Mar 10 21:40	23° ♋ 11'53		retrograde	15075 Feb 21 08:05	5° ♋ 29'10	
evening set	15074 Mar 17 17:46	20° ♋ 50'46		evening set	15075 Feb 28 02:52	3° ♋ 24'55	
min. Earth dist.	15074 Mar 21 12:05	17° ♋ 42'31	0.62967 AU	min. Earth dist.	15075 Mar 03 22:34	0° ♋ 37'29	0.60781 AU
inferior conj	15074 Mar 24 09:06	14° ♋ 52'19	-0°44'28		15075 Mar 04 16:17	30° ♋	
minimum elong	15074 Mar 24 10:34	14° ♋ 48'41	0°44'01	inferior conj	15075 Mar 07 02:25	27° ♋ 52'58	-2°05'08
asc. node	15074 Mar 26 16:21	12° ♋ 41'01		minimum elong	15075 Mar 07 06:59	27° ♋ 43'01	2°03'12
morning rise	15074 Mar 31 06:06	9° ♋ 40'50		asc. node	15075 Mar 13 13:48	23° ♋ 21'24	
direct	15074 Apr 02 14:22	9° ♋ 14'45		morning rise	15075 Mar 14 14:22	23° ♋ 00'00	
morning max el	15074 Apr 09 03:16	12° ♋ 34'19	17°46'08	direct	15075 Mar 16 16:40	22° ♋ 41'52	
	15074 Apr 21 03:03	0° ♋		morning max el	15075 Mar 23 19:14	26° ♋ 15'44	17°55'09
morning set	15074 Apr 25 07:57	7° ♋ 15'25			15075 Mar 27 00:35	0° ♋	
desc. node	15074 Apr 28 09:51	12° ♋ 35'06		morning set	15075 Apr 08 09:31	20° ♋ 39'03	
					15075 Apr 13 13:17	0° ♋	
superior conj	15074 May 07 13:23	28° ♋ 02'18	-1°08'28	desc. node	15075 Apr 15 06:29	3° ♋ 04'10	
minimum elong	15074 May 07 06:48	27° ♋ 35'08	1°08'21				
	15074 May 08 18:01	0° ♋		superior conj	15075 Apr 18 23:26	9° ♋ 34'55	-0°29'39
max. Earth dist.	15074 May 13 19:53	8° ♋ 12'45	1.44517 AU	minimum elong	15075 Apr 18 20:47	9° ♋ 23'28	0°29'45
evening rise	15074 May 22 14:12	21° ♋ 55'46		max. Earth dist.	15075 Apr 26 10:08	22° ♋ 09'27	1.42857 AU
	15074 May 27 21:30	0° ♋			15075 May 01 06:34	0° ♋	
	15074 Jun 18 08:45	0° ♋		evening rise	15075 May 02 12:01	1° ♋ 56'37	
evening max el	15074 Jun 21 02:56	2° ♋ 59'25	20°48'52		15075 May 21 08:22	0° ♋	
asc. node	15074 Jun 22 14:09	4° ♋ 22'37		evening max el	15075 Jun 03 21:56	16° ♋ 52'02	22°04'02
retrograde	15074 Jun 29 10:44	7° ♋ 47'21		asc. node	15075 Jun 09 11:08	21° ♋ 16'44	
evening set	15074 Jul 03 16:23	6° ♋ 06'32		retrograde	15075 Jun 13 08:39	22° ♋ 23'42	
inferior conj	15074 Jul 08 22:09	29° ♋ 58'02	3°09'59	evening set	15075 Jun 18 01:30	20° ♋ 26'21	
minimum elong	15074 Jul 08 22:12	29° ♋ 57'52	3°09'05	inferior conj	15075 Jun 23 07:41	14° ♋ 07'56	3°04'59
	15074 Jul 08 21:35	30° ♋		minimum elong	15075 Jun 23 06:48	14° ♋ 11'01	3°03'56
min. Earth dist.	15074 Jul 09 11:14	29° ♋ 12'46	0.68637 AU	min. Earth dist.	15075 Jun 23 07:30	14° ♋ 08'34	0.69046 AU
morning rise	15074 Jul 14 03:44	23° ♋ 37'12		morning rise	15075 Jun 28 11:55	7° ♋ 53'35	
direct	15074 Jul 19 10:59	21° ♋ 18'10		direct	15075 Jul 03 06:44	5° ♋ 51'59	
desc. node	15074 Jul 25 09:12	23° ♋ 32'54		desc. node	15075 Jul 12 06:29	10° ♋ 57'15	
morning max el	15074 Jul 30 04:37	27° ♋ 42'32	23°35'58	morning max el	15075 Jul 12 17:25	11° ♋ 24'17	22°07'36
	15074 Aug 01 08:28	0° ♋			15075 Jul 27 10:50	0° ♋	
	15074 Aug 23 07:38	0° ♋		morning set	15075 Aug 14 15:58	27° ♋ 35'11	
morning set	15074 Sep 03 02:52	17° ♋ 23'47			15075 Aug 16 03:51	0° ♋	
max. Earth dist.	15074 Sep 07 01:05	24° ♋ 08'00	1.39142 AU	max. Earth dist.	15075 Aug 20 02:39	6° ♋ 30'01	1.41479 AU
	15074 Sep 10 08:28	0° ♋					
				superior conj	15075 Aug 27 21:44	19° ♋ 53'23	-1°11'09
superior conj	15074 Sep 14 16:39	7° ♌ 58'05	-0°35'03	minimum elong	15075 Aug 28 03:20	20° ♋ 18'13	1°10'35
minimum elong	15074 Sep 14 19:13	8° ♌ 10'02	0°34'34		15075 Sep 02 12:23	0° ♌	
asc. node	15074 Sep 18 15:29	15° ♌ 28'03		asc. node	15075 Sep 05 12:04	5° ♌ 30'40	
evening rise	15074 Sep 23 20:59	25° ♌ 37'17		evening rise	15075 Sep 07 09:27	9° ♌ 01'23	
	15074 Sep 26 03:15	0° ♌			15075 Sep 19 14:51	0° ♌	
evening max el	15074 Oct 10 00:59	21° ♌ 57'13	18°46'49	evening max el	15075 Sep 23 08:08	4° ♌ 28'44	18°14'27
retrograde	15074 Oct 18 11:01	26° ♌ 11'50		retrograde	15075 Sep 30 15:12	8° ♌ 11'49	
evening set	15074 Oct 20 08:38	25° ♌ 59'39		evening set	15075 Oct 02 18:05	7° ♌ 53'36	
desc. node	15074 Oct 21 05:36	25° ♌ 46'16		desc. node	15075 Oct 08 03:00	4° ♌ 51'18	
inferior conj	15074 Oct 28 12:30	21° ♌ 37'53	-2°19'32	inferior conj	15075 Oct 10 04:04	3° ♌ 10'19	-0°39'00
minimum elong	15074 Oct 28 06:45	21° ♌ 48'19	2°16'34	minimum elong	15075 Oct 10 02:40	3° ♌ 13'19	0°37'59

































































































































min. Earth dist.	15075 Oct 13 10:36	0° \mathbb{M} 24'31	0.58940 AU	inferior conj	15076 Sep 21 15:27	15° \mathbb{A} 26'37	0°43'33
	15075 Oct 13 22:53	30° \mathbb{R} \mathbb{A}		minimum elong	15076 Sep 21 16:44	15° \mathbb{A} 23'27	0°43'14
morning rise	15075 Oct 17 07:51	27° \mathbb{A} 40'57		desc. node	15076 Sep 24 00:29	13° \mathbb{A} 06'38	
direct	15075 Oct 23 17:59	25° \mathbb{A} 49'40		min. Earth dist.	15076 Sep 24 17:02	12° \mathbb{A} 27'24	0.61224 AU
	15075 Nov 03 00:06	0° \mathbb{M}		morning rise	15076 Sep 28 08:18	9° \mathbb{A} 29'14	
morning max el	15075 Nov 07 01:06	3° \mathbb{M} 31'12	27°32'43	direct	15076 Oct 04 23:58	7° \mathbb{A} 14'31	
	15075 Nov 26 09:40	0° \mathbb{A}		morning max el	15076 Oct 19 05:09	15° \mathbb{A} 10'11	27°58'36
asc. node	15075 Dec 02 13:25	11° \mathbb{A} 14'29			15076 Oct 31 07:20	0° \mathbb{M}	
morning set	15075 Dec 08 10:21	23° \mathbb{A} 10'35			15076 Nov 17 22:48	0° \mathbb{A}	
	15075 Dec 11 14:02	0° \mathbb{B}		asc. node	15076 Nov 18 10:18	0° \mathbb{A} 56'55	
				morning set	15076 Nov 21 12:40	7° \mathbb{A} 14'31	
superior conj	15075 Dec 15 08:53	8° \mathbb{B} 25'12	1°33'39	max. Earth dist.	15076 Nov 27 05:37	19° \mathbb{A} 29'21	1.31360 AU
minimum elong	15075 Dec 15 07:40	8° \mathbb{B} 18'24	1°34'34				
max. Earth dist.	15075 Dec 14 23:22	7° \mathbb{B} 31'55	1.31069 AU	superior conj	15076 Nov 28 19:19	22° \mathbb{A} 57'51	1°23'31
evening rise	15075 Dec 22 02:29	23° \mathbb{B} 18'10		minimum elong	15076 Nov 28 17:21	22° \mathbb{A} 46'55	1°24'16
	15075 Dec 25 07:01	0° \mathbb{A}			15076 Dec 01 23:15	0° \mathbb{B}	
desc. node	15076 Jan 04 01:16	18° \mathbb{A} 10'08		evening rise	15076 Dec 05 12:07	7° \mathbb{B} 46'00	
	15076 Jan 11 21:46	0° \mathbb{H}			15076 Dec 16 20:16	0° \mathbb{A}	
evening max el	15076 Jan 20 08:56	9° \mathbb{H} 45'27	26°31'35	desc. node	15076 Dec 20 22:10	6° \mathbb{A} 36'44	
retrograde	15076 Feb 03 08:19	16° \mathbb{H} 53'52		evening max el	15077 Jan 01 00:59	20° \mathbb{A} 27'47	25°10'50
evening set	15076 Feb 09 18:39	15° \mathbb{H} 13'03		retrograde	15077 Jan 14 20:53	27° \mathbb{A} 24'11	
min. Earth dist.	15076 Feb 13 22:30	12° \mathbb{H} 35'46	0.58577 AU	evening set	15077 Jan 20 13:15	26° \mathbb{A} 11'24	
inferior conj	15076 Feb 17 02:10	10° \mathbb{H} 13'25	-3°32'51	min. Earth dist.	15077 Jan 25 13:11	23° \mathbb{A} 28'46	0.56594 AU
minimum elong	15076 Feb 17 10:03	9° \mathbb{H} 58'33	3°29'43	inferior conj	15077 Jan 28 05:19	21° \mathbb{A} 44'00	-4°55'32
morning rise	15076 Feb 25 04:41	5° \mathbb{H} 41'49		minimum elong	15077 Jan 28 14:25	21° \mathbb{A} 29'06	4°52'36
direct	15076 Feb 27 04:30	5° \mathbb{H} 28'02		morning rise	15077 Feb 05 18:09	17° \mathbb{A} 34'13	
asc. node	15076 Feb 28 11:13	5° \mathbb{H} 33'57		direct	15077 Feb 07 21:29	17° \mathbb{A} 21'04	
morning max el	15076 Mar 06 05:46	9° \mathbb{H} 26'42	18°23'47	asc. node	15077 Feb 14 08:40	19° \mathbb{A} 30'29	
	15076 Mar 19 13:52	0° \mathbb{Y}		morning max el	15077 Feb 17 06:42	21° \mathbb{A} 54'56	19°14'00
morning set	15076 Mar 22 00:53	4° \mathbb{Y} 39'38			15077 Feb 23 15:12	0° \mathbb{H}	
				morning set	15077 Mar 06 01:35	19° \mathbb{H} 03'18	
superior conj	15076 Mar 31 07:10	22° \mathbb{Y} 06'34	0°06'50		15077 Mar 11 13:42	0° \mathbb{Y}	
minimum elong	15076 Mar 31 07:38	22° \mathbb{Y} 08'45	0°06'29				
behind sun begin	15076 Mar 31 00:58	21° \mathbb{Y} 38'09		superior conj	15077 Mar 14 08:07	5° \mathbb{Y} 24'08	0°38'00
behind sun end	15076 Mar 31 14:19	22° \mathbb{Y} 39'18		minimum elong	15077 Mar 14 10:17	5° \mathbb{Y} 34'32	0°37'39
desc. node	15076 Apr 01 03:05	23° \mathbb{Y} 37'31		desc. node	15077 Mar 18 23:39	14° \mathbb{Y} 10'57	
	15076 Apr 04 16:31	0° \mathbb{B}		max. Earth dist.	15077 Mar 21 02:09	18° \mathbb{Y} 01'24	1.38495 AU
max. Earth dist.	15076 Apr 07 19:53	5° \mathbb{B} 27'21	1.40774 AU	evening rise	15077 Mar 24 19:49	24° \mathbb{Y} 37'59	
evening rise	15076 Apr 12 05:24	12° \mathbb{B} 50'26			15077 Mar 27 23:23	0° \mathbb{B}	
	15076 Apr 23 03:06	0° \mathbb{II}			15077 Apr 16 19:43	0° \mathbb{II}	
	15076 May 15 19:15	0° \mathbb{E}		evening max el	15077 Apr 29 02:38	14° \mathbb{II} 39'10	24°44'59
evening max el	15076 May 16 13:07	0° \mathbb{E} 45'17	23°24'48	retrograde	15077 May 10 20:15	21° \mathbb{II} 30'18	
asc. node	15076 May 26 08:13	6° \mathbb{E} 57'05		asc. node	15077 May 13 05:25	21° \mathbb{II} 06'01	
retrograde	15076 May 27 04:12	7° \mathbb{E} 00'08		evening set	15077 May 16 12:09	19° \mathbb{II} 06'58	
evening set	15076 Jun 01 08:37	4° \mathbb{E} 48'12		min. Earth dist.	15077 May 20 23:24	14° \mathbb{II} 02'51	0.68402 AU
	15076 Jun 05 12:50	30° \mathbb{R} \mathbb{II}		inferior conj	15077 May 22 01:22	12° \mathbb{II} 36'30	2°23'40
min. Earth dist.	15076 Jun 06 04:15	29° \mathbb{II} 07'21	0.68966 AU	minimum elong	15077 May 21 23:16	12° \mathbb{II} 43'29	2°22'15
inferior conj	15076 Jun 06 17:24	28° \mathbb{II} 22'04	2°49'33	morning rise	15077 May 27 10:38	6° \mathbb{II} 38'58	
minimum elong	15076 Jun 06 15:45	28° \mathbb{II} 27'44	2°48'17	direct	15077 May 31 05:10	5° \mathbb{II} 17'23	
morning rise	15076 Jun 11 22:51	22° \mathbb{II} 15'35		morning max el	15077 Jun 07 12:33	9° \mathbb{II} 20'01	19°38'08
direct	15076 Jun 16 05:15	20° \mathbb{II} 33'50		desc. node	15077 Jun 15 00:48	18° \mathbb{II} 24'43	
morning max el	15076 Jun 24 11:26	25° \mathbb{II} 16'37	20°46'36	greatest brilliancy	15077 Jun 20 06:05	25° \mathbb{II} 49'36	-0.6m
desc. node	15076 Jun 28 03:42	29° \mathbb{II} 19'43			15077 Jun 23 01:55	0° \mathbb{E}	
	15076 Jun 28 17:03	0° \mathbb{E}		morning set	15077 Jul 03 09:29	15° \mathbb{E} 38'09	
	15076 Jul 19 19:52	0° \mathbb{Q}			15077 Jul 12 15:50	0° \mathbb{Q}	
morning set	15076 Jul 24 06:22	6° \mathbb{Q} 49'22		max. Earth dist.	15077 Jul 15 00:40	3° \mathbb{Q} 43'24	1.44992 AU
max. Earth dist.	15076 Aug 01 10:40	19° \mathbb{Q} 45'27	1.43503 AU				
	15076 Aug 07 16:29	0° \mathbb{P}		superior conj	15077 Jul 19 12:29	10° \mathbb{Q} 51'55	-2°07'20
superior conj	15076 Aug 08 04:50	0° \mathbb{P} 51'38	-1°44'09	minimum elong	15077 Jul 19 18:05	11° \mathbb{Q} 14'20	2°07'53
minimum elong	15076 Aug 08 12:26	1° \mathbb{P} 23'27	1°43'56		15077 Jul 31 04:59	0° \mathbb{P}	
evening rise	15076 Aug 20 07:23	21° \mathbb{P} 46'34		evening rise	15077 Aug 02 09:35	3° \mathbb{P} 40'08	
asc. node	15076 Aug 22 08:39	25° \mathbb{P} 23'58		asc. node	15077 Aug 09 05:17	15° \mathbb{P} 03'42	
	15076 Aug 24 23:39	0° \mathbb{A}			15077 Aug 19 12:46	0° \mathbb{A}	
evening max el	15076 Sep 05 20:57	17° \mathbb{A} 32'31	18°02'05	evening max el	15077 Aug 20 11:41	0° \mathbb{A} 59'42	18°08'24
retrograde	15076 Sep 12 11:54	20° \mathbb{A} 57'45		retrograde	15077 Aug 26 20:26	4° \mathbb{A} 20'27	
evening set	15076 Sep 14 22:20	20° \mathbb{A} 29'44		evening set	15077 Aug 29 15:22	3° \mathbb{A} 39'24	
					15077 Sep 03 05:12	30° \mathbb{R} \mathbb{P}	

































































































































inferior conj	15077 Sep 04 18:42	28° \mathbb{M} 18'59	1°45'20	evening max el	15078 Aug 04 01:05	14° \mathbb{M} 41'18	18°32'32
minimum elong	15077 Sep 04 21:01	28° \mathbb{M} 12'34	1°44'29	retrograde	15078 Aug 10 12:43	18° \mathbb{M} 10'44	
min. Earth dist.	15077 Sep 07 09:27	25° \mathbb{M} 26'38	0.63451 AU	evening set	15078 Aug 13 16:40	17° \mathbb{M} 14'10	
desc. node	15077 Sep 10 22:00	22° \mathbb{M} 09'07		inferior conj	15078 Aug 19 09:48	11° \mathbb{M} 38'25	2°28'09
morning rise	15077 Sep 11 00:42	22° \mathbb{M} 03'55		minimum elong	15078 Aug 19 12:02	11° \mathbb{M} 31'36	2°27'14
direct	15077 Sep 17 16:04	19° \mathbb{M} 32'48		min. Earth dist.	15078 Aug 21 10:57	9° \mathbb{M} 09'47	0.65431 AU
morning max el	15077 Oct 01 14:09	27° \mathbb{M} 33'14	27°46'05	morning rise	15078 Aug 25 06:14	5° \mathbb{M} 14'45	
	15077 Oct 03 22:03	0° \mathbb{L}		desc. node	15078 Aug 28 19:29	3° \mathbb{M} 07'01	
	15077 Oct 25 00:54	0° \mathbb{M}		direct	15078 Aug 31 16:24	2° \mathbb{M} 36'25	
morning set	15077 Nov 05 07:38	20° \mathbb{M} 55'29		morning max el	15078 Sep 14 01:08	10° \mathbb{M} 28'27	27°00'53
asc. node	15077 Nov 05 07:07	20° \mathbb{M} 52'57			15078 Sep 29 12:14	0° \mathbb{L}	
	15077 Nov 09 17:05	0° \mathbb{X}			15078 Oct 17 12:30	0° \mathbb{M}	
max. Earth dist.	15077 Nov 10 06:05	1° \mathbb{X} 09'00	1.32206 AU	morning set	15078 Oct 19 16:21	4° \mathbb{M} 06'16	
				asc. node	15078 Oct 23 03:51	10° \mathbb{M} 57'14	
superior conj	15077 Nov 13 02:44	7° \mathbb{X} 18'47	1°07'28	max. Earth dist.	15078 Oct 23 21:34	12° \mathbb{M} 26'41	1.33607 AU
minimum elong	15077 Nov 13 00:25	7° \mathbb{X} 06'10	1°07'58				
evening rise	15077 Nov 19 23:02	22° \mathbb{X} 15'28		superior conj	15078 Oct 28 04:54	21° \mathbb{M} 21'41	0°45'29
	15077 Nov 23 15:20	0° \mathbb{Z}		minimum elong	15078 Oct 28 02:49	21° \mathbb{M} 10'44	0°45'48
desc. node	15077 Dec 07 19:09	24° \mathbb{Z} 05'35			15078 Nov 01 06:09	0° \mathbb{X}	
	15077 Dec 12 21:43	0° \mathbb{M}		evening rise	15078 Nov 04 09:22	6° \mathbb{X} 41'35	
evening max el	15077 Dec 13 11:02	0° \mathbb{M} 32'38	23°30'53		15078 Nov 16 17:00	0° \mathbb{Z}	
retrograde	15077 Dec 26 20:24	7° \mathbb{M} 11'10		desc. node	15078 Nov 24 16:15	10° \mathbb{Z} 16'05	
evening set	15077 Dec 31 08:47	6° \mathbb{M} 26'54		evening max el	15078 Nov 24 23:12	10° \mathbb{Z} 33'18	21°49'27
min. Earth dist.	15078 Jan 06 21:49	3° \mathbb{M} 20'04	0.55131 AU	retrograde	15078 Dec 07 08:38	16° \mathbb{Z} 41'13	
inferior conj	15078 Jan 08 12:08	2° \mathbb{M} 24'01	-5°51'04	evening set	15078 Dec 10 13:09	16° \mathbb{Z} 18'26	
minimum elong	15078 Jan 08 16:56	2° \mathbb{M} 17'00	5°49'44	inferior conj	15078 Dec 19 05:14	12° \mathbb{Z} 26'48	-5°54'33
	15078 Jan 12 21:51	30° \mathbb{K} \mathbb{Z}		minimum elong	15078 Dec 19 00:57	12° \mathbb{Z} 32'48	5°53'14
morning rise	15078 Jan 17 02:39	28° \mathbb{Z} 31'04		min. Earth dist.	15078 Dec 19 03:36	12° \mathbb{Z} 29'06	0.54457 AU
direct	15078 Jan 19 19:05	28° \mathbb{Z} 13'30		morning rise	15078 Dec 27 13:30	8° \mathbb{Z} 39'07	
	15078 Jan 26 04:08	0° \mathbb{M}		direct	15078 Dec 31 04:30	8° \mathbb{Z} 10'16	
morning max el	15078 Jan 30 18:10	3° \mathbb{M} 30'11	20°27'19	morning max el	15079 Jan 12 14:49	14° \mathbb{Z} 10'08	22°02'27
asc. node	15078 Feb 01 06:03	5° \mathbb{M} 02'17		asc. node	15079 Jan 19 03:22	21° \mathbb{Z} 51'59	
	15078 Feb 16 13:06	0° \mathbb{X}			15079 Jan 24 07:58	0° \mathbb{M}	
morning set	15078 Feb 18 08:23	3° \mathbb{X} 40'47		morning set	15079 Feb 02 18:47	18° \mathbb{M} 25'04	
					15079 Feb 08 05:17	0° \mathbb{X}	
superior conj	15078 Feb 25 21:59	19° \mathbb{X} 15'35	1°02'44				
minimum elong	15078 Feb 26 00:36	19° \mathbb{X} 28'52	1°02'37	superior conj	15079 Feb 09 21:08	3° \mathbb{X} 31'03	1°20'46
	15078 Mar 03 08:38	0° \mathbb{Y}		minimum elong	15079 Feb 09 23:24	3° \mathbb{X} 42'59	1°21'02
max. Earth dist.	15078 Mar 03 09:18	0° \mathbb{Y} 03'14	1.36277 AU	max. Earth dist.	15079 Feb 13 22:17	11° \mathbb{X} 54'05	1.34326 AU
desc. node	15078 Mar 05 20:11	4° \mathbb{Y} 41'00		evening rise	15079 Feb 18 05:42	20° \mathbb{X} 24'59	
evening rise	15078 Mar 07 05:05	7° \mathbb{Y} 12'37		desc. node	15079 Feb 20 16:44	25° \mathbb{X} 03'54	
	15078 Mar 20 18:16	0° \mathbb{X}			15079 Feb 23 09:43	0° \mathbb{Y}	
evening max el	15078 Apr 11 16:10	28° \mathbb{X} 31'09	25°57'20		15079 Mar 14 16:52	0° \mathbb{X}	
	15078 Apr 13 05:49	0° \mathbb{I}		evening max el	15079 Mar 25 06:04	12° \mathbb{X} 14'42	26°54'17
retrograde	15078 Apr 24 07:39	5° \mathbb{I} 46'51		retrograde	15079 Apr 07 13:17	19° \mathbb{X} 42'22	
evening set	15078 Apr 30 10:18	3° \mathbb{I} 16'30		evening set	15079 Apr 14 01:14	17° \mathbb{X} 10'24	
asc. node	15078 Apr 30 02:43	3° \mathbb{I} 31'55		asc. node	15079 Apr 17 00:03	14° \mathbb{X} 23'31	
	15078 May 03 15:06	30° \mathbb{K} \mathbb{X}		min. Earth dist.	15079 Apr 18 00:29	13° \mathbb{X} 15'56	0.65948 AU
min. Earth dist.	15078 May 04 14:52	28° \mathbb{X} 48'02	0.67384 AU	inferior conj	15079 Apr 20 03:48	10° \mathbb{X} 46'55	0°58'06
inferior conj	15078 May 06 05:35	26° \mathbb{X} 46'25	1°46'47	minimum elong	15079 Apr 20 02:22	10° \mathbb{X} 51'07	0°57'02
minimum elong	15078 May 06 03:29	26° \mathbb{X} 53'02	1°45'23	morning rise	15079 Apr 26 04:51	5° \mathbb{X} 11'33	
morning rise	15078 May 11 21:21	20° \mathbb{X} 59'05		direct	15079 Apr 29 02:28	4° \mathbb{X} 25'28	
direct	15078 May 15 04:54	19° \mathbb{X} 56'25		morning max el	15079 May 05 10:43	7° \mathbb{X} 44'43	18°08'36
morning max el	15078 May 21 20:47	23° \mathbb{X} 31'05	18°45'02	desc. node	15079 May 19 18:36	27° \mathbb{X} 58'42	
	15078 May 27 07:55	0° \mathbb{I}			15079 May 21 00:48	0° \mathbb{I}	
desc. node	15078 Jun 01 21:45	8° \mathbb{I} 00'26		morning set	15079 May 24 10:12	5° \mathbb{I} 27'54	
greatest brilliancy	15078 Jun 05 01:29	12° \mathbb{I} 47'51	-0.8m				
morning set	15078 Jun 12 21:29	24° \mathbb{I} 56'25		superior conj	15079 Jun 08 11:02	29° \mathbb{I} 22'50	-1°59'46
	15078 Jun 16 03:25	0° \mathbb{O}		minimum elong	15079 Jun 08 03:11	28° \mathbb{I} 52'05	2°00'14
max. Earth dist.	15078 Jun 27 18:49	18° \mathbb{O} 08'30	1.45810 AU		15079 Jun 08 20:31	0° \mathbb{O}	
				max. Earth dist.	15079 Jun 10 15:13	2° \mathbb{O} 46'54	1.45886 AU
superior conj	15078 Jun 29 01:49	20° \mathbb{O} 09'38	-2°13'37	evening rise	15079 Jun 24 13:40	24° \mathbb{O} 25'10	
minimum elong	15078 Jun 29 00:24	20° \mathbb{O} 04'06	2°14'33		15079 Jun 28 04:18	0° \mathbb{O}	
	15078 Jul 05 08:16	0° \mathbb{O}		greatest brilliancy	15079 Jul 06 09:50	12° \mathbb{O} 34'27	-0.7m
evening rise	15078 Jul 14 11:31	14° \mathbb{O} 31'18		asc. node	15079 Jul 13 22:44	23° \mathbb{O} 16'56	
	15078 Jul 24 04:55	0° \mathbb{M}		evening max el	15079 Jul 18 10:34	28° \mathbb{O} 30'41	19°13'35
asc. node	15078 Jul 27 01:58	4° \mathbb{M} 23'42			15079 Jul 20 01:49	0° \mathbb{M}	

retrograde	15079 Jul 25 09:31	2° \mathbb{M} 21'45		evening rise	15080 Jun 03 01:32	3° \mathbb{G} 49'08	
evening set	15079 Jul 28 23:02	1° \mathbb{M} 08'06			15080 Jun 20 16:46	0° \mathcal{Q}	
	15079 Jul 30 08:37	30° \mathbb{R} \mathcal{Q}		asc. node	15080 Jun 29 19:34	11° \mathcal{Q} 33'51	
inferior conj	15079 Aug 03 09:22	25° \mathcal{Q} 18'29	2°54'50	evening max el	15080 Jun 30 14:25	12° \mathcal{Q} 22'17	20°10'14
minimum elong	15079 Aug 03 10:56	25° \mathcal{Q} 13'25	2°53'58	retrograde	15080 Jul 08 08:23	16° \mathcal{Q} 46'57	
min. Earth dist.	15079 Aug 04 20:13	23° \mathcal{Q} 25'20	0.67033 AU	evening set	15080 Jul 12 07:59	15° \mathcal{Q} 15'47	
morning rise	15079 Aug 08 22:12	18° \mathcal{Q} 52'45		inferior conj	15080 Jul 17 14:37	9° \mathcal{Q} 13'35	3°07'55
direct	15079 Aug 14 23:26	16° \mathcal{Q} 16'25		minimum elong	15080 Jul 17 15:14	9° \mathcal{Q} 11'29	3°07'03
desc. node	15079 Aug 15 16:56	16° \mathcal{Q} 18'27		min. Earth dist.	15080 Jul 18 11:24	8° \mathcal{Q} 02'47	0.68184 AU
morning max el	15079 Aug 27 12:17	23° \mathcal{Q} 45'08	25°51'29	morning rise	15080 Jul 22 22:08	2° \mathcal{Q} 50'09	
	15079 Sep 02 02:15	0° \mathbb{M}		direct	15080 Jul 28 12:13	0° \mathcal{Q} 23'21	
	15079 Sep 22 21:09	0° \mathcal{Q}		desc. node	15080 Aug 01 14:19	1° \mathcal{Q} 27'40	
morning set	15079 Oct 02 11:23	16° \mathcal{Q} 39'05		morning max el	15080 Aug 08 23:04	7° \mathcal{Q} 14'40	24°27'24
max. Earth dist.	15079 Oct 06 03:34	23° \mathcal{Q} 32'04	1.35509 AU		15080 Aug 26 17:36	0° \mathbb{M}	
	15079 Oct 09 11:15	0° \mathbb{M}		morning set	15080 Sep 13 12:39	28° \mathbb{M} 24'50	
asc. node	15079 Oct 10 00:30	1° \mathbb{M} 05'46			15080 Sep 14 10:27	0° \mathcal{Q}	
				max. Earth dist.	15080 Sep 17 03:12	4° \mathcal{Q} 47'54	1.37765 AU
superior conj	15079 Oct 11 23:08	5° \mathbb{M} 00'03	0°17'50	superior conj	15080 Sep 24 06:11	18° \mathcal{Q} 06'03	-0°14'43
minimum elong	15079 Oct 11 22:06	4° \mathbb{M} 54'49	0°18'06	minimum elong	15080 Sep 24 07:09	18° \mathcal{Q} 10'46	0°14'20
evening rise	15079 Oct 19 17:08	20° \mathbb{M} 59'30		behind sun begin	15080 Sep 24 04:00	17° \mathcal{Q} 55'31	
	15079 Oct 24 04:11	0° \mathcal{Q}		behind sun end	15080 Sep 24 10:19	18° \mathcal{Q} 26'02	
evening max el	15079 Nov 06 22:22	21° \mathcal{Q} 04'40	20°21'40	asc. node	15080 Sep 25 21:06	21° \mathcal{Q} 15'02	
desc. node	15079 Nov 11 13:27	24° \mathcal{Q} 43'09			15080 Sep 30 07:11	0° \mathbb{M}	
retrograde	15079 Nov 17 19:32	26° \mathcal{Q} 29'38		evening rise	15080 Oct 02 19:57	5° \mathbb{M} 03'25	
evening set	15079 Nov 20 00:55	26° \mathcal{Q} 17'07			15080 Oct 17 07:50	0° \mathcal{Q}	
inferior conj	15079 Nov 28 21:50	22° \mathcal{Q} 21'36	-4°57'53	evening max el	15080 Oct 19 12:00	2° \mathcal{Q} 25'05	19°15'00
minimum elong	15079 Nov 28 11:56	22° \mathcal{Q} 36'08	4°54'28	desc. node	15080 Oct 28 10:44	7° \mathcal{Q} 03'43	
min. Earth dist.	15079 Nov 30 09:38	21° \mathcal{Q} 29'01	0.54717 AU	retrograde	15080 Oct 28 18:18	7° \mathcal{Q} 04'01	
morning rise	15079 Dec 06 22:26	18° \mathcal{Q} 20'37		evening set	15080 Oct 30 15:18	6° \mathcal{Q} 53'24	
direct	15079 Dec 11 13:50	17° \mathcal{Q} 34'14		inferior conj	15080 Nov 08 04:01	2° \mathcal{Q} 42'48	-3°21'07
morning max el	15079 Dec 25 01:18	24° \mathcal{Q} 11'01	23°51'08	minimum elong	15080 Nov 07 19:42	2° \mathcal{Q} 56'39	3°17'18
	15079 Dec 30 07:34	0° \mathcal{Q}		min. Earth dist.	15080 Nov 10 19:35	0° \mathcal{Q} 57'10	0.55865 AU
asc. node	15080 Jan 06 00:36	9° \mathcal{Q} 41'30			15080 Nov 12 08:08	30° \mathbb{R} \mathbb{M}	
	15080 Jan 16 18:59	0° \approx		morning rise	15080 Nov 15 21:41	28° \mathbb{M} 10'28	
morning set	15080 Jan 18 06:40	3° \approx 09'25		direct	15080 Nov 21 09:46	27° \mathbb{M} 01'07	
					15080 Nov 30 07:38	0° \mathcal{Q}	
superior conj	15080 Jan 25 02:37	18° \approx 01'26	1°32'17	morning max el	15080 Dec 05 11:06	4° \mathcal{Q} 08'22	25°36'36
minimum elong	15080 Jan 25 04:03	18° \approx 09'14	1°32'55	asc. node	15080 Dec 22 21:44	28° \mathcal{Q} 16'07	
max. Earth dist.	15080 Jan 27 19:02	23° \approx 48'17	1.32776 AU		15080 Dec 23 20:45	0° \mathcal{Q}	
	15080 Jan 30 17:55	0° \mathcal{H}		morning set	15081 Jan 01 18:14	17° \mathcal{Q} 48'58	
evening rise	15080 Feb 01 18:09	4° \mathcal{H} 05'17			15081 Jan 07 07:11	0° \approx	
desc. node	15080 Feb 07 13:18	15° \mathcal{H} 14'25					
	15080 Feb 16 03:50	0° \mathcal{Y}		superior conj	15081 Jan 08 12:04	2° \approx 40'16	1°37'34
evening max el	15080 Mar 06 19:06	25° \mathcal{Y} 37'33	27°28'27	minimum elong	15081 Jan 08 12:28	2° \approx 42'27	1°38'26
	15080 Mar 12 01:37	0° \mathcal{B}		max. Earth dist.	15081 Jan 09 22:25	5° \approx 50'08	1.31704 AU
retrograde	15080 Mar 20 12:13	3° \mathcal{B} 07'15		evening rise	15081 Jan 15 15:33	18° \approx 06'34	
evening set	15080 Mar 27 06:42	0° \mathcal{B} 39'58			15081 Jan 21 15:18	0° \mathcal{H}	
	15080 Mar 28 03:30	30° \mathbb{R} \mathcal{Y}		desc. node	15081 Jan 24 09:59	5° \mathcal{H} 07'10	
min. Earth dist.	15080 Mar 31 02:10	27° \mathcal{Y} 16'29	0.64145 AU		15081 Feb 09 15:26	0° \mathcal{Y}	
inferior conj	15080 Apr 02 17:20	24° \mathcal{Y} 30'24	-0°03'16	evening max el	15081 Feb 17 05:11	8° \mathcal{Y} 27'06	27°33'13
minimum elong	15080 Apr 02 17:27	24° \mathcal{Y} 30'07	0°03'32	retrograde	15081 Mar 03 03:36	15° \mathcal{Y} 52'11	
transit middle	15080 Apr 02 17:27	24° \mathcal{Y} 30'07	0°03'32	evening set	15081 Mar 10 00:08	13° \mathcal{Y} 37'00	
transit begin	15080 Apr 02 14:25	24° \mathcal{Y} 38'08		min. Earth dist.	15081 Mar 13 18:20	10° \mathcal{Y} 38'59	0.62058 AU
transit end	15080 Apr 02 20:28	24° \mathcal{Y} 22'07		inferior conj	15081 Mar 16 19:02	7° \mathcal{Y} 49'03	-1°17'24
asc. node	15080 Apr 02 21:27	24° \mathcal{Y} 19'32		minimum elong	15081 Mar 16 21:43	7° \mathcal{Y} 42'45	1°16'20
morning rise	15080 Apr 09 06:22	19° \mathcal{Y} 09'27		asc. node	15081 Mar 20 18:52	4° \mathcal{Y} 25'12	
direct	15080 Apr 11 19:12	18° \mathcal{Y} 36'58		morning rise	15081 Mar 23 22:19	2° \mathcal{Y} 45'23	
morning max el	15080 Apr 18 03:54	21° \mathcal{Y} 52'51	17°49'20	direct	15081 Mar 26 03:49	2° \mathcal{Y} 23'06	
	15080 Apr 24 12:43	0° \mathcal{B}		morning max el	15081 Apr 01 21:20	5° \mathcal{Y} 47'03	17°47'43
morning set	15080 May 05 02:22	17° \mathcal{B} 17'51		morning set	15081 Apr 17 17:27	0° \mathcal{B} 12'04	
desc. node	15080 May 05 15:20	18° \mathcal{B} 12'32			15081 Apr 17 14:43	0° \mathcal{B}	
	15080 May 12 16:47	0° \mathbb{I}		desc. node	15081 Apr 22 12:01	8° \mathcal{B} 37'08	
superior conj	15080 May 18 08:53	9° \mathbb{I} 14'26	-1°29'48	superior conj	15081 Apr 29 05:13	20° \mathcal{B} 09'21	-0°52'00
minimum elong	15080 May 18 00:32	8° \mathbb{I} 40'49	1°29'44	minimum elong	15081 Apr 29 00:18	19° \mathcal{B} 48'40	0°51'56
max. Earth dist.	15080 May 23 11:02	17° \mathbb{I} 21'14	1.45214 AU		15081 May 05 04:10	0° \mathbb{I}	
	15080 May 31 13:49	0° \mathcal{G}					

max. Earth dist.	15081 May 06 03:28	1° Π 34'17	1.43871 AU	behind sun end	15082 Apr 11 03:43	2° \mathcal{B} 20'37	
evening rise	15081 May 13 15:26	13° Π 25'34		max. Earth dist.	15082 Apr 18 15:17	15° \mathcal{B} 13'30	1.42003 AU
	15081 May 24 14:44	0° \mathcal{E}		evening rise	15082 Apr 23 20:59	23° \mathcal{B} 47'48	
evening max el	15081 Jun 13 12:14	26° \mathcal{E} 13'42	21°19'50		15082 Apr 27 19:07	0° Π	
asc. node	15081 Jun 16 16:30	29° \mathcal{E} 02'10			15082 May 18 14:04	0° \mathcal{E}	
	15081 Jun 18 02:41	0° Ω		evening max el	15082 May 27 05:17	10° \mathcal{E} 06'14	22°38'08
retrograde	15081 Jun 22 07:12	1° Ω 20'27		asc. node	15082 Jun 03 13:31	15° \mathcal{E} 27'03	
	15081 Jun 26 03:07	30° \mathcal{R} \mathcal{E}		retrograde	15082 Jun 06 04:24	15° \mathcal{E} 57'22	
evening set	15081 Jun 26 17:33	29° \mathcal{E} 32'18		evening set	15082 Jun 11 02:01	13° \mathcal{E} 53'40	
inferior conj	15081 Jul 01 23:11	23° \mathcal{E} 19'06	3°09'12	inferior conj	15082 Jun 16 09:02	7° \mathcal{E} 31'29	2°59'43
minimum elong	15081 Jul 01 22:49	23° \mathcal{E} 20'21	3°08'15	minimum elong	15082 Jun 16 07:48	7° \mathcal{E} 35'47	2°58'35
min. Earth dist.	15081 Jul 02 06:31	22° \mathcal{E} 53'33	0.68862 AU	min. Earth dist.	15082 Jun 16 03:21	7° \mathcal{E} 51'17	0.69062 AU
morning rise	15081 Jul 07 03:52	17° \mathcal{E} 00'43		morning rise	15082 Jun 21 13:27	1° \mathcal{E} 20'05	
direct	15081 Jul 12 05:43	14° \mathcal{E} 48'54			15082 Jun 23 14:57	30° \mathcal{R} Π	
desc. node	15081 Jul 19 11:39	18° \mathcal{E} 09'15		direct	15082 Jun 26 02:54	29° Π 26'42	
morning max el	15081 Jul 22 10:26	20° \mathcal{E} 51'55	22°57'59		15082 Jun 28 18:33	0° \mathcal{E}	
	15081 Jul 30 06:25	0° Ω		morning max el	15082 Jul 05 01:06	4° \mathcal{E} 37'46	21°31'52
	15081 Aug 19 22:51	0° \mathcal{M}		desc. node	15082 Jul 06 08:54	6° \mathcal{E} 00'20	
morning set	15081 Aug 25 15:48	9° \mathcal{M} 12'35			15082 Jul 24 08:35	0° Ω	
max. Earth dist.	15081 Aug 30 02:05	16° \mathcal{M} 38'52	1.40149 AU	morning set	15082 Aug 05 18:38	18° Ω 57'44	
				max. Earth dist.	15082 Aug 12 05:41	29° Ω 21'51	1.42386 AU
superior conj	15081 Sep 06 21:58	0° \mathcal{A} 29'29	-0°50'24		15082 Aug 12 14:58	0° \mathcal{M}	
minimum elong	15081 Sep 07 01:49	0° \mathcal{A} 47'04	0°49'51				
	15081 Sep 06 15:30	0° \mathcal{A}		superior conj	15082 Aug 19 18:09	12° \mathcal{M} 01'17	-1°25'52
asc. node	15081 Sep 12 17:41	11° \mathcal{A} 20'50		minimum elong	15082 Aug 20 00:53	12° \mathcal{M} 30'22	1°25'24
evening rise	15081 Sep 16 14:44	18° \mathcal{A} 44'29			15082 Aug 29 20:43	0° \mathcal{A}	
	15081 Sep 22 15:14	0° \mathcal{M}		evening rise	15082 Aug 30 21:37	1° \mathcal{A} 53'10	
evening max el	15081 Oct 02 13:57	14° \mathcal{M} 32'56	18°30'32	asc. node	15082 Aug 30 14:17	1° \mathcal{A} 19'49	
retrograde	15081 Oct 10 11:28	18° \mathcal{M} 32'52		evening max el	15082 Sep 16 00:05	27° \mathcal{A} 19'32	18°06'54
evening set	15081 Oct 12 10:39	18° \mathcal{M} 18'45			15082 Sep 19 12:29	0° \mathcal{M}	
desc. node	15081 Oct 15 08:07	17° \mathcal{M} 11'16		retrograde	15082 Sep 22 22:58	0° \mathcal{M} 53'06	
inferior conj	15081 Oct 20 07:05	13° \mathcal{M} 47'59	-1°35'14	evening set	15082 Sep 25 04:55	0° \mathcal{M} 31'09	
minimum elong	15081 Oct 20 03:18	13° \mathcal{M} 55'19	1°33'08		15082 Sep 26 11:47	30° \mathcal{R} \mathcal{A}	
min. Earth dist.	15081 Oct 23 12:08	11° \mathcal{M} 18'53	0.57694 AU	inferior conj	15082 Oct 02 07:29	25° \mathcal{A} 39'30	-0°01'31
morning rise	15081 Oct 27 16:29	8° \mathcal{M} 38'11		minimum elong	15082 Oct 02 07:26	25° \mathcal{A} 39'36	0°01'10
direct	15081 Nov 02 20:20	7° \mathcal{M} 01'55		transit middle	15082 Oct 02 07:26	25° \mathcal{A} 39'36	0°01'10
morning max el	15081 Nov 17 03:02	14° \mathcal{M} 33'32	27°00'01	transit begin	15082 Oct 02 04:06	25° \mathcal{A} 47'10	
	15081 Nov 29 12:35	0° \mathcal{X}		transit end	15082 Oct 02 10:47	25° \mathcal{A} 32'01	
asc. node	15081 Dec 09 18:47	17° \mathcal{X} 23'40		desc. node	15082 Oct 02 05:33	25° \mathcal{A} 43'52	
	15081 Dec 16 01:42	0° \mathcal{Z}		min. Earth dist.	15082 Oct 05 13:04	22° \mathcal{A} 45'11	0.59906 AU
morning set	15081 Dec 17 03:42	2° \mathcal{Z} 18'12		morning rise	15082 Oct 09 06:41	19° \mathcal{A} 57'07	
				direct	15082 Oct 15 20:10	17° \mathcal{A} 54'48	
superior conj	15081 Dec 23 23:24	17° \mathcal{Z} 20'56	1°36'48	morning max el	15082 Oct 30 02:49	25° \mathcal{A} 43'36	27°48'27
minimum elong	15081 Dec 23 22:44	17° \mathcal{Z} 17'14	1°37'44		15082 Nov 03 02:30	0° \mathcal{M}	
max. Earth dist.	15081 Dec 24 05:38	17° \mathcal{Z} 55'46	1.31147 AU		15082 Nov 23 00:16	0° \mathcal{X}	
	15081 Dec 29 16:50	0° \approx		asc. node	15082 Nov 26 15:45	6° \mathcal{X} 55'22	
evening rise	15081 Dec 30 19:22	2° \approx 22'12		morning set	15082 Dec 01 09:14	16° \mathcal{X} 32'40	
desc. node	15082 Jan 11 06:45	24° \approx 34'26		max. Earth dist.	15082 Dec 07 13:15	29° \mathcal{X} 58'24	1.31126 AU
	15082 Jan 14 12:57	0° \mathcal{H}			15082 Dec 07 13:32	0° \mathcal{Z}	
evening max el	15082 Jan 30 09:59	20° \mathcal{H} 31'52	27°04'05				
retrograde	15082 Feb 13 10:18	27° \mathcal{H} 47'43		superior conj	15082 Dec 08 10:44	1° \mathcal{Z} 58'10	1°30'06
evening set	15082 Feb 20 02:24	25° \mathcal{H} 52'31		minimum elong	15082 Dec 08 09:09	1° \mathcal{Z} 49'23	1°30'56
min. Earth dist.	15082 Feb 24 00:19	23° \mathcal{H} 10'57	0.59831 AU	evening rise	15082 Dec 15 03:27	16° \mathcal{Z} 47'09	
inferior conj	15082 Feb 27 05:19	20° \mathcal{H} 33'30	-2°42'02		15082 Dec 21 13:54	0° \approx	
minimum elong	15082 Feb 27 11:21	20° \mathcal{H} 21'06	2°39'29	desc. node	15082 Dec 29 03:35	13° \approx 26'38	
morning rise	15082 Mar 06 23:45	15° \mathcal{H} 49'40			15083 Jan 10 13:05	0° \mathcal{H}	
asc. node	15082 Mar 07 16:18	15° \mathcal{H} 40'50		evening max el	15083 Jan 12 07:13	1° \mathcal{H} 44'47	26°00'35
direct	15082 Mar 09 00:18	15° \mathcal{H} 33'56		retrograde	15083 Jan 26 05:59	8° \mathcal{H} 48'18	
morning max el	15082 Mar 16 11:34	19° \mathcal{H} 17'13	18°04'50	evening set	15083 Feb 01 09:38	7° \mathcal{H} 19'22	
	15082 Mar 24 07:48	0° \mathcal{Y}		min. Earth dist.	15083 Feb 05 20:24	4° \mathcal{H} 41'34	0.57687 AU
morning set	15082 Apr 01 01:31	13° \mathcal{Y} 53'00		inferior conj	15083 Feb 08 20:35	2° \mathcal{H} 33'41	-4°09'41
desc. node	15082 Apr 09 08:40	29° \mathcal{Y} 08'26		minimum elong	15083 Feb 09 05:27	2° \mathcal{H} 17'57	4°06'24
	15082 Apr 09 20:10	0° \mathcal{B}			15083 Feb 12 17:42	30° \mathcal{R} \approx	
superior conj	15082 Apr 11 01:00	2° \mathcal{B} 08'37	-0°13'40	morning rise	15083 Feb 17 04:16	28° \approx 11'13	
minimum elong	15082 Apr 10 23:51	2° \mathcal{B} 03'30	0°13'54	direct	15083 Feb 19 04:28	27° \approx 58'16	
behind sun begin	15082 Apr 10 20:00	1° \mathcal{B} 46'22		asc. node	15083 Feb 22 13:45	28° \approx 37'12	
					15083 Feb 25 03:31	0° \mathcal{H}	

morning max el	15083 Feb 27 18:31	2° Υ 11'16	18°42'20	asc. node	15084 Feb 09 11:11	13° \approx 16'21	
morning set	15083 Mar 15 21:20	28° Υ 04'42		morning max el	15084 Feb 10 14:06	14° \approx 18'05	19°42'14
	15083 Mar 16 21:04	0° Υ			15084 Feb 21 13:10	0° Υ	
				morning set	15084 Feb 28 01:03	12° Υ 35'56	
superior conj	15083 Mar 24 16:36	15° Υ 00'59	0°20'48	superior conj	15084 Mar 06 23:35	28° Υ 34'33	0°49'18
minimum elong	15083 Mar 24 17:58	15° Υ 07'21	0°20'25	minimum elong	15084 Mar 07 02:03	28° Υ 46'47	0°49'01
desc. node	15083 Mar 27 05:15	19° Υ 42'02			15084 Mar 07 16:58	0° Υ	
max. Earth dist.	15083 Mar 31 23:04	28° Υ 11'42	1.39813 AU	max. Earth dist.	15084 Mar 13 05:37	10° Υ 32'12	1.37539 AU
	15083 Apr 01 23:57	0° Υ		desc. node	15084 Mar 13 01:49	10° Υ 14'37	
evening rise	15083 Apr 04 23:30	5° Υ 05'22		evening rise	15084 Mar 16 22:25	17° Υ 14'28	
	15083 Apr 20 21:59	0° Υ			15084 Mar 24 10:37	0° Υ	
evening max el	15083 May 09 19:40	24° Υ 00'16	23°59'30		15084 Apr 14 07:12	0° Υ	
	15083 May 18 03:14	0° Υ		evening max el	15084 Apr 21 09:13	7° Υ 54'24	25°17'05
retrograde	15083 May 20 22:30	0° Υ 31'27		retrograde	15084 May 03 12:30	14° Υ 56'36	
asc. node	15083 May 21 10:39	0° Υ 30'20		asc. node	15084 May 07 07:52	13° Υ 55'59	
	15083 May 23 13:35	30° Υ		evening set	15084 May 09 09:12	12° Υ 29'43	
evening set	15083 May 26 07:46	28° Υ 14'29		min. Earth dist.	15084 May 13 17:29	7° Υ 41'03	0.68033 AU
min. Earth dist.	15083 May 30 23:44	22° Υ 49'10	0.68783 AU	inferior conj	15084 May 15 00:51	5° Υ 59'02	2°09'24
inferior conj	15083 May 31 18:15	21° Υ 46'11	2°39'51	minimum elong	15084 May 14 22:42	6° Υ 06'05	2°07'57
minimum elong	15083 May 31 16:22	21° Υ 52'35	2°38'32	morning rise	15084 May 20 12:34	0° Υ 05'45	
morning rise	15083 Jun 06 00:58	15° Υ 43'10			15084 May 20 15:59	30° Υ	
direct	15083 Jun 10 02:19	14° Υ 09'50		direct	15084 May 24 02:25	28° Υ 52'17	
morning max el	15083 Jun 17 21:50	18° Υ 34'02	20°15'41		15084 May 27 17:25	0° Υ	
desc. node	15083 Jun 23 06:04	24° Υ 42'06		morning max el	15084 May 31 02:02	2° Υ 40'57	19°13'31
	15083 Jun 27 05:33	0° Υ		desc. node	15084 Jun 09 03:06	14° Υ 01'02	
morning set	15083 Jul 16 02:00	27° Υ 54'16		greatest brilliancy	15084 Jun 12 21:12	19° Υ 29'49	-0.7m
	15083 Jul 17 10:35	0° Υ			15084 Jun 19 19:53	0° Υ	
max. Earth dist.	15083 Jul 25 16:17	12° Υ 56'16	1.44215 AU	morning set	15084 Jun 24 06:18	6° Υ 48'23	
				max. Earth dist.	15084 Jul 07 08:52	27° Υ 09'25	1.45436 AU
superior conj	15083 Jul 31 15:09	22° Υ 34'01	-1°55'38		15084 Jul 09 04:15	0° Υ	
minimum elong	15083 Jul 31 22:34	23° Υ 04'24	1°55'43	superior conj	15084 Jul 10 13:43	2° Υ 12'02	-2°12'25
	15083 Aug 05 02:44	0° Υ		minimum elong	15084 Jul 10 16:47	2° Υ 24'08	2°13'13
evening rise	15083 Aug 13 11:42	14° Υ 17'02		evening rise	15084 Jul 25 03:55	25° Υ 44'22	
asc. node	15083 Aug 17 10:53	21° Υ 07'28			15084 Jul 27 18:08	0° Υ	
	15083 Aug 22 18:19	0° Υ		asc. node	15084 Aug 03 07:31	10° Υ 39'04	
evening max el	15083 Aug 30 14:10	10° Υ 34'06	18°02'36	evening max el	15084 Aug 13 04:37	24° Υ 07'35	18°16'30
retrograde	15083 Sep 06 01:07	13° Υ 55'25		retrograde	15084 Aug 19 13:26	27° Υ 30'26	
evening set	15083 Sep 08 15:13	13° Υ 22'04		evening set	15084 Aug 22 12:12	26° Υ 42'53	
inferior conj	15083 Sep 15 02:02	8° Υ 11'16	1°12'13	inferior conj	15084 Aug 28 10:44	21° Υ 15'24	2°05'40
minimum elong	15083 Sep 15 03:56	8° Υ 06'21	1°11'36	minimum elong	15084 Aug 28 13:07	21° Υ 08'30	2°04'46
min. Earth dist.	15083 Sep 17 23:30	5° Υ 12'52	0.62195 AU	min. Earth dist.	15084 Aug 30 19:45	18° Υ 31'41	0.64332 AU
desc. node	15083 Sep 19 03:01	4° Υ 07'05		morning rise	15084 Sep 03 12:27	14° Υ 55'45	
morning rise	15083 Sep 21 14:13	2° Υ 05'30		desc. node	15084 Sep 05 00:30	13° Υ 52'16	
	15083 Sep 25 22:18	30° Υ		direct	15084 Sep 10 02:02	12° Υ 20'46	
direct	15083 Sep 28 06:36	29° Υ 42'49		morning max el	15084 Sep 23 19:15	20° Υ 18'47	27°30'32
	15083 Sep 30 16:42	0° Υ			15084 Oct 02 03:29	0° Υ	
morning max el	15083 Oct 12 09:03	7° Υ 41'01	27°57'46		15084 Oct 21 13:44	0° Υ	
	15083 Oct 29 11:55	0° Υ		morning set	15084 Oct 28 23:40	13° Υ 55'37	
asc. node	15083 Nov 13 12:38	26° Υ 44'08		asc. node	15084 Oct 30 09:24	16° Υ 43'46	
morning set	15083 Nov 15 08:44	0° Υ 27'20		max. Earth dist.	15084 Nov 02 14:43	23° Υ 20'17	1.32734 AU
	15083 Nov 15 03:24	0° Υ			15084 Nov 05 18:09	0° Υ	
max. Earth dist.	15083 Nov 20 17:32	11° Υ 49'20	1.31651 AU	superior conj	15084 Nov 06 01:34	0° Υ 39'52	0°58'52
				minimum elong	15084 Nov 05 23:16	0° Υ 27'29	0°59'16
superior conj	15083 Nov 22 20:09	16° Υ 26'37	1°17'28	evening rise	15084 Nov 13 00:44	15° Υ 44'47	
minimum elong	15083 Nov 22 17:58	16° Υ 14'37	1°18'06		15084 Nov 20 00:49	0° Υ	
	15083 Nov 28 23:44	0° Υ		desc. node	15084 Dec 01 21:31	18° Υ 28'59	
evening rise	15083 Nov 29 13:52	1° Υ 16'34		evening max el	15084 Dec 05 05:55	22° Υ 06'41	22°46'53
	15083 Dec 14 23:46	0° Υ		retrograde	15084 Dec 18 06:40	28° Υ 34'17	
desc. node	15083 Dec 16 00:30	1° Υ 30'58		evening set	15084 Dec 22 05:35	28° Υ 00'10	
evening max el	15083 Dec 24 20:22	12° Υ 09'26	24°29'47	min. Earth dist.	15084 Dec 29 14:41	24° Υ 37'36	0.54735 AU
retrograde	15084 Jan 07 12:40	18° Υ 58'25		inferior conj	15084 Dec 30 14:32	24° Υ 03'47	-6°00'00
evening set	15084 Jan 12 18:23	17° Υ 58'13		minimum elong	15084 Dec 30 15:41	24° Υ 02'09	5°59'03
min. Earth dist.	15084 Jan 18 08:07	15° Υ 07'50	0.55895 AU	morning rise	15085 Jan 08 03:06	20° Υ 15'29	
inferior conj	15084 Jan 20 14:53	13° Υ 43'04	-5°23'55	direct	15085 Jan 11 04:24	19° Υ 54'01	
minimum elong	15084 Jan 20 22:59	13° Υ 30'30	5°21'37				
morning rise	15084 Jan 29 05:37	9° Υ 41'09					
direct	15084 Jan 31 13:25	9° Υ 26'43					

morning max el	15085 Jan 22 19:07	25°  28'47	21°05'26		15085 Dec 18 21:20	30° 	
asc. node	15085 Jan 26 08:33	29°  23'08		direct	15085 Dec 22 11:34	29° 	32'00
	15085 Jan 26 20:19	0° 			15085 Dec 25 23:50	0° 	
morning set	15085 Feb 11 09:39	27°  17'06		morning max el	15086 Jan 04 10:36	5° 	48'51 22°47'55
	15085 Feb 12 16:52	0° 		asc. node	15086 Jan 13 05:50	16° 	39'46
					15086 Jan 20 23:21	0° 	
superior conj	15085 Feb 18 17:48	12°  37'20	1°11'10	morning set	15086 Jan 26 20:54	12° 	01'36
minimum elong	15085 Feb 18 20:21	12°  50'28	1°11'13				
max. Earth dist.	15085 Feb 23 14:59	22°  27'40	1.35407 AU	superior conj	15086 Feb 02 19:59	26° 	59'54 1°26'25
evening rise	15085 Feb 27 14:36	0°  05'47		minimum elong	15086 Feb 02 21:56	27° 	10'20 1°26'51
desc. node	15085 Feb 27 22:21	0°  41'52			15086 Feb 04 05:51	0° 	
	15085 Feb 27 13:22	0° 		max. Earth dist.	15086 Feb 06 06:52	4° 	16'47 1.33607 AU
	15085 Mar 17 14:18	0° 		evening rise	15086 Feb 10 20:37	13° 	30'33
evening max el	15085 Apr 03 22:48	21°  43'06	26°23'43	desc. node	15086 Feb 14 18:55	20° 	59'47
retrograde	15085 Apr 16 21:29	29°  05'16			15086 Feb 19 20:02	0° 	
evening set	15085 Apr 23 04:32	26°  33'10			15086 Mar 12 12:53	0° 	
asc. node	15085 Apr 24 05:11	25°  38'56		evening max el	15086 Mar 17 12:17	5° 	18'24 27°11'57
min. Earth dist.	15085 Apr 27 06:34	22°  19'46	0.66830 AU	retrograde	15086 Mar 31 00:38	12° 	48'55
inferior conj	15085 Apr 29 02:48	20°  05'11	1°27'38	evening set	15086 Apr 06 15:45	10° 	17'51
minimum elong	15085 Apr 29 00:53	20°  11'01	1°26'19	min. Earth dist.	15086 Apr 10 13:03	6° 	37'07 0.65220 AU
morning rise	15085 May 04 22:13	14°  22'58		asc. node	15086 Apr 11 02:33	6° 	00'04
direct	15085 May 08 01:23	13°  27'47		inferior conj	15086 Apr 12 21:40	3° 	59'03 0°33'40
morning max el	15085 May 14 13:02	16°  54'08	18°27'27	minimum elong	15086 Apr 12 20:46	4° 	01'35 0°32'51
	15085 May 24 12:41	0° 			15086 Apr 16 20:34	30° 	
desc. node	15085 May 27 00:01	3°  47'00		morning rise	15086 Apr 19 03:32	28° 	29'42
morning set	15085 Jun 04 03:39	16°  34'41		direct	15086 Apr 21 21:08	27° 	49'58
	15085 Jun 12 16:30	0° 			15086 Apr 26 22:57	0° 	
				morning max el	15086 Apr 28 04:45	1° 	06'35 17°58'14
superior conj	15085 Jun 19 23:08	11°  21'58	-2°10'07	desc. node	15086 May 13 20:51	23° 	52'28
minimum elong	15085 Jun 19 18:27	11°  03'41	2°10'56	morning set	15086 May 16 04:17	27° 	34'02
max. Earth dist.	15085 Jun 20 04:28	11°  42'44	1.45933 AU		15086 May 17 14:24	0° 	
	15085 Jul 01 21:14	0° 					
evening rise	15085 Jul 05 19:15	6°  09'38		superior conj	15086 May 30 11:59	20° 	47'15 -1°48'34
greatest brilliancy	15085 Jul 14 16:50	20°  07'22	-0.8m	minimum elong	15086 May 30 03:11	20° 	12'28 1°48'45
asc. node	15085 Jul 21 04:12	29°  04'48		max. Earth dist.	15086 Jun 03 00:21	26° 	19'06 1.45683 AU
	15085 Jul 21 07:24	0° 			15086 Jun 05 08:54	0° 	
evening max el	15085 Jul 27 16:33	7°  25'55	18°47'58	evening rise	15086 Jun 15 13:32	15° 	45'26
retrograde	15085 Aug 03 08:08	11°  23'02			15086 Jun 24 21:51	0° 	
evening set	15085 Aug 06 16:01	10°  26'47		greatest brilliancy	15086 Jun 29 06:46	6° 	30'25 -0.7m
inferior conj	15085 Aug 12 05:50	4°  24'46	2°41'18	asc. node	15086 Jul 08 00:59	18° 	27'43
minimum elong	15085 Aug 12 07:50	4°  38'29	2°40'23	evening max el	15086 Jul 10 23:44	21° 	43'25 19°35'57
min. Earth dist.	15085 Aug 14 00:53	2°  30'05	0.66157 AU	retrograde	15086 Jul 18 06:07	25° 	47'49
	15085 Aug 16 04:50	30° 		evening set	15086 Jul 21 23:44	24° 	26'56
morning rise	15085 Aug 17 22:44	28°  19'16		inferior conj	15086 Jul 27 08:10	18° 	31'54 3°01'55
desc. node	15085 Aug 22 21:57	25°  04'72		minimum elong	15086 Jul 27 09:20	18° 	27'59 3°01'04
direct	15085 Aug 24 05:18	25°  40'53		min. Earth dist.	15086 Jul 28 13:03	16° 	55'52 0.67577 AU
	15085 Sep 02 13:29	0° 		morning rise	15086 Aug 01 18:25	12° 	06'29
morning max el	15085 Sep 06 06:45	3°  25'31	26°33'51	direct	15086 Aug 07 15:06	9° 	33'09
	15085 Sep 26 11:08	0° 		desc. node	15086 Aug 09 19:24	9° 	51'27
morning set	15085 Oct 12 03:01	26°  51'26		morning max el	15086 Aug 19 17:41	16° 	48'20 25°16'51
	15085 Oct 13 18:35	0° 			15086 Aug 30 17:24	0° 	
max. Earth dist.	15085 Oct 16 02:09	4°  31'15	1.34357 AU		15086 Sep 19 09:53	0° 	
asc. node	15085 Oct 17 06:05	6°  50'18		morning set	15086 Sep 24 15:01	9° 	05'21
				max. Earth dist.	15086 Sep 28 04:22	15° 	35'28 1.36434 AU
superior conj	15085 Oct 21 00:41	14°  32'51	0°34'24	asc. node	15086 Oct 04 02:42	26° 	59'21
minimum elong	15085 Oct 20 22:56	14°  23'48	0°34'42				
evening rise	15085 Oct 28 10:15	0° 		superior conj	15086 Oct 04 14:34	27° 	58'10 0°04'33
	15085 Oct 28 08:45	0° 		minimum elong	15086 Oct 04 14:16	27° 	56'39 0°04'52
	15085 Nov 14 19:00	0° 		behind sun begin	15086 Oct 04 08:08	27° 	52'17
evening max el	15085 Nov 16 21:42	2°  15'55	21°09'48	behind sun end	15086 Oct 04 20:23	28° 	52'05
desc. node	15085 Nov 18 18:38	3°  58'22			15086 Oct 05 15:00	0° 	
retrograde	15085 Nov 28 17:13	8°  30'72		evening rise	15086 Oct 12 16:11	14° 	20'00
evening set	15085 Dec 01 09:52	7°  50'21			15086 Oct 20 18:53	0° 	
inferior conj	15085 Dec 10 05:30	3°  58'24	-5°37'18	evening max el	15086 Oct 30 03:05	13° 	47'17 19°50'37
minimum elong	15085 Dec 09 21:55	4°  09'07	5°35'07	desc. node	15086 Nov 05 15:52	17° 	33'39
min. Earth dist.	15085 Dec 10 20:17	3°  37'29	0.54447 AU	retrograde	15086 Nov 09 07:28	18° 	47'12'00
morning rise	15085 Dec 18 10:20	0° 		evening set	15086 Nov 11 07:29	18° 	47'01'09

inferior conj	15086 Nov 20 02:25	14°  00'44	-4°19'49	minimum elong	15087 Oct 31 10:32	24°  50'16	2°32'24
minimum elong	15086 Nov 19 16:29	14°  16'01	4°15'53	min. Earth dist.	15087 Nov 03 16:10	22°  32'59	0.56582 AU
min. Earth dist.	15086 Nov 22 03:56	12°  44'35	0.55105 AU	morning rise	15087 Nov 08 07:26	19°  50'55	
morning rise	15086 Nov 28 00:01	9°  47'43		direct	15087 Nov 14 03:15	18°  30'12	
direct	15086 Dec 03 00:55	8°  51'53		morning max el	15087 Nov 28 07:10	25°  47'57	26°15'49
morning max el	15086 Dec 16 19:34	15°  43'11	24°37'34		15087 Dec 02 06:14	0° 	
	15086 Dec 28 03:46	0° 		asc. node	15087 Dec 18 00:09	23°  39'45	
asc. node	15086 Dec 31 03:02	4°  34'49			15087 Dec 21 08:07	0° 	
morning set	15087 Jan 11 08:51	26°  34'06		morning set	15087 Dec 26 19:43	11°  31'28	
	15087 Jan 12 21:03	0° 					
				superior conj	15088 Jan 02 13:53	26°  34'33	1°37'58
superior conj	15087 Jan 18 03:26	11°  34'37	1°35'16	minimum elong	15088 Jan 02 13:49	26°  34'12	1°38'54
minimum elong	15087 Jan 18 04:26	11°  40'08	1°36'02	max. Earth dist.	15088 Jan 03 12:00	28°  17'42	1.31402 AU
max. Earth dist.	15087 Jan 20 06:29	16°  13'06	1.32253 AU		15088 Jan 04 06:26	0° 	
evening rise	15087 Jan 25 13:14	27°  20'46		evening rise	15088 Jan 09 13:38	11°  28'51	
	15087 Jan 26 20:46	0° 			15088 Jan 19 01:47	0° 	
desc. node	15087 Feb 01 15:32	11°  03'32		desc. node	15088 Jan 19 12:13	0°  46'22	
	15087 Feb 13 02:40	0° 			15088 Feb 09 07:31	0° 	
evening max el	15087 Feb 28 00:30	18°  09'27	27°34'33	evening max el	15088 Feb 10 08:55	1°  02'01	27°25'18
retrograde	15087 Mar 13 20:46	25°  08'15		retrograde	15088 Feb 24 08:24	8°  09'49	
evening set	15087 Mar 20 16:32	23°  03'25		evening set	15088 Mar 02 03:54	6°  09'15	
min. Earth dist.	15087 Mar 24 11:06	20°  09'23	0.63277 AU	min. Earth dist.	15088 Mar 05 23:04	3°  09'25	0.61114 AU
inferior conj	15087 Mar 27 06:39	17°  09'33	-0°33'10	inferior conj	15088 Mar 09 02:17	0°  09'39	-1°52'17
minimum elong	15087 Mar 27 07:43	17°  09'31	0°32'56	minimum elong	15088 Mar 09 06:20	0°  09'30	1°50'34
asc. node	15087 Mar 28 23:57	15°  09'52			15088 Mar 09 20:07	30°  09'48	
morning rise	15087 Apr 03 01:30	12°  09'19		asc. node	15088 Mar 14 21:25	26°  09'21	42'14
direct	15087 Apr 05 10:54	11°  09'52		morning rise	15088 Mar 16 11:57	25°  09'43	29'19
morning max el	15087 Apr 11 22:28	15°  09'10	17°46'24	direct	15088 Mar 18 15:04	25°  09'43	19'19
	15087 Apr 22 10:19	0° 		morning max el	15088 Mar 25 14:55	28°  09'55	11'17
morning set	15087 Apr 28 07:05	10°  09'00			15088 Mar 26 15:51	0° 	
desc. node	15087 Apr 30 17:36	14°  09'11		morning set	15088 Apr 10 06:09	23°  09'17	05'05
	15087 May 10 03:03	0° 		desc. node	15088 Apr 13 23:30	0° 	
					15088 Apr 16 14:16	4°  09'39	51'16
superior conj	15087 May 10 18:55	1°  09'05	-1°14'15				
minimum elong	15087 May 10 11:48	0°  09'35	1°14'07	superior conj	15088 Apr 21 01:28	12°  09'28	-0°35'29
max. Earth dist.	15087 May 16 18:52	10°  09'46	1.44721 AU	minimum elong	15088 Apr 20 22:15	12°  09'14	12'33
evening rise	15087 May 26 00:20	25°  09'10		max. Earth dist.	15088 Apr 28 09:56	24°  09'48	06'13
	15087 May 29 04:17	0° 			15088 May 01 15:02	0° 	
	15087 Jun 19 03:20	0° 		evening rise	15088 May 04 19:47	5°  09'44	15'15
evening max el	15087 Jun 24 01:07	5°  09'35	20°38'29		15088 May 21 11:48	0° 	
asc. node	15087 Jun 24 21:51	6°  09'25		evening max el	15088 Jun 05 20:49	19°  09'28	14'21
retrograde	15087 Jul 02 05:05	10°  09'17		asc. node	15088 Jun 10 18:50	23°  09'29	46'17
evening set	15087 Jul 06 09:11	8°  09'38		retrograde	15088 Jun 15 03:19	24°  09'53	17'17
inferior conj	15087 Jul 11 15:06	2°  09'32	3°09'47	evening set	15088 Jun 19 18:30	22°  09'58	09'17
minimum elong	15087 Jul 11 15:18	2°  09'31	3°08'54	inferior conj	15088 Jun 25 00:28	16°  09'41	01'03
min. Earth dist.	15087 Jul 12 06:11	1°  09'40	0.68541 AU	minimum elong	15088 Jun 24 23:44	16°  09'43	38'05
	15087 Jul 13 11:49	30°  09'40		min. Earth dist.	15088 Jun 25 02:12	16°  09'34	58'17
morning rise	15087 Jul 16 21:08	26°  09'10		morning rise	15088 Jun 30 04:46	10°  09'25	40'10
direct	15087 Jul 22 06:13	23°  09'49		direct	15088 Jul 05 01:24	8°  09'21	24'12
desc. node	15087 Jul 27 16:48	25°  09'43		desc. node	15088 Jul 13 14:07	12°  09'57	01'01
	15087 Aug 01 20:02	0° 		morning max el	15088 Jul 14 16:41	14°  09'01	28'22
morning max el	15087 Aug 02 04:17	0°  09'20	23°49'17		15088 Jul 27 13:55	0° 	
	15087 Aug 24 13:54	0° 			15088 Aug 16 12:11	0° 	
morning set	15087 Sep 06 07:17	20°  09'27		morning set	15088 Aug 17 00:08	0° 	
max. Earth dist.	15087 Sep 10 02:39	27°  09'02	1.38787 AU	max. Earth dist.	15088 Aug 22 03:38	9°  09'16	51'14
	15087 Sep 11 18:45	0° 					
				superior conj	15088 Aug 29 23:41	22°  09'50	24'05
superior conj	15087 Sep 17 15:39	10°  09'47	-0°29'38	minimum elong	15088 Aug 30 04:51	23°  09'13	27'05
minimum elong	15087 Sep 17 17:46	10°  09'57	1°02'10		15088 Sep 02 22:42	0° 	
asc. node	15087 Sep 20 23:17	17°  09'07		asc. node	15088 Sep 06 19:53	7°  09'11	12'11
evening rise	15087 Sep 26 15:57	28°  09'14		evening rise	15088 Sep 09 06:15	11°  09'44	04'04
	15087 Sep 27 13:28	0° 			15088 Sep 19 14:01	0° 	
evening max el	15087 Oct 12 22:29	24°  09'48	18°53'26	evening max el	15088 Sep 25 04:26	7°  09'14	37'18
retrograde	15087 Oct 21 13:23	29°  09'10		retrograde	15088 Oct 02 14:58	11°  09'01	49'11
evening set	15087 Oct 23 10:41	28°  09'15		evening set	15088 Oct 04 16:45	10°  09'14	49'10
desc. node	15087 Oct 23 13:12	28°  09'16		desc. node	15088 Oct 09 10:37	8°  09'16	34'16
inferior conj	15087 Oct 31 17:00	24°  09'38	-2°35'37	inferior conj	15088 Oct 12 05:26	6°  09'04	36'53

minimum elong	15088 Oct 12 03:27	6° \mathbb{M} 08'44	0°51'59	evening set	15089 Sep 17 18:35	23° \mathbb{A} 14'51	
min. Earth dist.	15088 Oct 15 11:52	3° \mathbb{M} 22'35	0.58607 AU	inferior conj	15089 Sep 24 14:04	18° \mathbb{A} 14'42	0°32'20
morning rise	15088 Oct 19 10:42	0° \mathbb{M} 40'04		minimum elong	15089 Sep 24 15:04	18° \mathbb{A} 12'18	0°32'10
	15088 Oct 20 18:48	30° \mathbb{R} \mathbb{A}		desc. node	15089 Sep 26 08:04	16° \mathbb{A} 33'14	
direct	15088 Oct 25 19:20	28° \mathbb{A} 52'41		min. Earth dist.	15089 Sep 27 16:55	15° \mathbb{A} 15'59	0.60882 AU
	15088 Oct 30 23:37	0° \mathbb{M}		morning rise	15089 Oct 01 08:33	12° \mathbb{A} 20'45	
morning max el	15088 Nov 09 02:34	6° \mathbb{M} 31'47	27°25'29	direct	15089 Oct 07 23:49	10° \mathbb{A} 09'00	
	15088 Nov 26 15:29	0° \mathbb{A}		morning max el	15089 Oct 22 05:39	18° \mathbb{A} 03'30	27°57'13
asc. node	15088 Dec 03 21:10	12° \mathbb{A} 59'03			15089 Nov 01 06:20	0° \mathbb{M}	
morning set	15088 Dec 10 03:46	25° \mathbb{A} 43'29			15089 Nov 19 09:38	0° \mathbb{A}	
	15088 Dec 12 03:23	0° \mathbb{Z}		asc. node	15089 Nov 20 18:05	2° \mathbb{A} 38'48	
				morning set	15089 Nov 24 07:00	9° \mathbb{A} 50'17	
superior conj	15088 Dec 17 01:26	10° \mathbb{Z} 54'33	1°34'41	max. Earth dist.	15089 Nov 30 02:46	22° \mathbb{A} 23'22	1.31280 AU
minimum elong	15088 Dec 17 00:22	10° \mathbb{Z} 48'32	1°35'36				
max. Earth dist.	15088 Dec 16 20:05	10° \mathbb{Z} 24'37	1.31074 AU	superior conj	15089 Dec 01 12:09	25° \mathbb{A} 28'29	1°25'28
evening rise	15088 Dec 23 19:32	25° \mathbb{Z} 49'23		minimum elong	15089 Dec 01 10:17	25° \mathbb{A} 18'04	1°26'13
	15088 Dec 25 18:56	0° \mathbb{A}			15089 Dec 03 12:54	0° \mathbb{Z}	
desc. node	15089 Jan 05 09:00	20° \mathbb{A} 00'23		evening rise	15089 Dec 08 04:48	10° \mathbb{Z} 16'24	
	15089 Jan 11 19:09	0° \mathbb{H}			15089 Dec 18 02:38	0° \mathbb{A}	
evening max el	15089 Jan 22 10:42	12° \mathbb{H} 44'59	26°41'01	desc. node	15089 Dec 23 05:51	8° \mathbb{A} 34'01	
retrograde	15089 Feb 05 10:18	19° \mathbb{H} 55'24		evening max el	15090 Jan 04 03:59	23° \mathbb{A} 34'41	25°24'27
evening set	15089 Feb 11 22:29	18° \mathbb{H} 10'33			15090 Jan 14 06:05	0° \mathbb{H}	
min. Earth dist.	15089 Feb 16 00:24	15° \mathbb{H} 32'42	0.58899 AU	retrograde	15090 Jan 18 00:55	0° \mathbb{H} 33'18	
inferior conj	15089 Feb 19 04:50	13° \mathbb{H} 05'51	-3°19'34		15090 Jan 21 19:54	30° \mathbb{R} \mathbb{A}	
minimum elong	15089 Feb 19 12:16	12° \mathbb{H} 51'31	3°16'32	evening set	15090 Jan 23 20:28	29° \mathbb{A} 16'16	
morning rise	15089 Feb 27 05:22	8° \mathbb{H} 31'09		min. Earth dist.	15090 Jan 28 16:27	26° \mathbb{A} 35'25	0.56861 AU
direct	15089 Mar 01 05:13	8° \mathbb{H} 16'58		inferior conj	15090 Jan 31 11:08	24° \mathbb{A} 44'12	-4°44'10
asc. node	15089 Mar 01 18:52	8° \mathbb{H} 18'10		minimum elong	15090 Jan 31 20:19	24° \mathbb{A} 28'50	4°41'06
morning max el	15089 Mar 09 02:31	12° \mathbb{H} 11'10	18°18'14	morning rise	15090 Feb 08 22:54	20° \mathbb{A} 31'17	
	15089 Mar 20 23:22	0° \mathbb{Y}		direct	15090 Feb 11 01:02	20° \mathbb{A} 18'23	
morning set	15089 Mar 24 19:42	7° \mathbb{Y} 12'28		asc. node	15090 Feb 16 16:18	21° \mathbb{A} 59'02	
				morning max el	15090 Feb 20 05:10	24° \mathbb{A} 46'40	19°05'05
superior conj	15089 Apr 03 06:12	24° \mathbb{Y} 51'19	0°01'37		15090 Feb 24 14:30	0° \mathbb{H}	
minimum elong	15089 Apr 03 06:18	24° \mathbb{Y} 51'45	0°01'16	morning set	15090 Mar 08 19:14	21° \mathbb{H} 33'21	
behind sun begin	15089 Apr 02 22:56	24° \mathbb{Y} 18'16			15090 Mar 13 01:38	0° \mathbb{Y}	
behind sun end	15089 Apr 03 13:39	25° \mathbb{Y} 25'09					
desc. node	15089 Apr 03 10:52	25° \mathbb{Y} 12'31		superior conj	15090 Mar 17 04:52	8° \mathbb{Y} 02'52	0°33'41
	15089 Apr 06 02:59	0° \mathbb{B}		minimum elong	15090 Mar 17 06:51	8° \mathbb{Y} 12'24	0°33'18
max. Earth dist.	15089 Apr 10 20:07	8° \mathbb{B} 11'13	1.41098 AU	desc. node	15090 Mar 21 07:26	15° \mathbb{Y} 46'16	
evening rise	15089 Apr 15 09:57	15° \mathbb{B} 49'09		max. Earth dist.	15090 Mar 24 02:29	20° \mathbb{Y} 50'48	1.38833 AU
	15089 Apr 24 09:43	0° \mathbb{H}		evening rise	15090 Mar 27 21:20	27° \mathbb{Y} 29'19	
	15089 May 16 09:07	0° \mathbb{E}			15090 Mar 29 08:39	0° \mathbb{B}	
evening max el	15089 May 19 12:22	3° \mathbb{E} 20'54	23°12'41		15090 Apr 17 21:39	0° \mathbb{H}	
asc. node	15089 May 28 15:55	9° \mathbb{E} 22'25		evening max el	15090 May 02 02:00	17° \mathbb{H} 14'58	24°33'25
retrograde	15089 May 29 23:22	9° \mathbb{E} 29'59		retrograde	15090 May 13 16:02	24° \mathbb{H} 01'33	
evening set	15089 Jun 04 02:02	7° \mathbb{E} 20'01		asc. node	15090 May 15 13:05	23° \mathbb{H} 46'23	
inferior conj	15089 Jun 09 10:16	0° \mathbb{E} 54'44	2°52'33	evening set	15090 May 19 06:11	21° \mathbb{H} 39'45	
minimum elong	15089 Jun 09 08:44	1° \mathbb{E} 00'03	2°51'20	min. Earth dist.	15090 May 23 18:35	16° \mathbb{H} 30'04	0.68512 AU
min. Earth dist.	15089 Jun 08 23:01	1° \mathbb{E} 33'37	0.69004 AU	inferior conj	15090 May 24 18:37	15° \mathbb{H} 09'38	2°28'18
	15089 Jun 10 02:09	30° \mathbb{R} \mathbb{H}		minimum elong	15090 May 24 16:34	15° \mathbb{H} 16'31	2°26'54
morning rise	15089 Jun 14 15:22	24° \mathbb{H} 46'56		morning rise	15090 May 30 03:07	9° \mathbb{H} 10'33	
direct	15089 Jun 18 23:32	23° \mathbb{H} 02'15		direct	15090 Jun 02 23:22	7° \mathbb{H} 45'57	
morning max el	15089 Jun 27 09:48	27° \mathbb{H} 52'13	20°57'59	morning max el	15090 Jun 10 09:45	11° \mathbb{H} 54'00	19°47'25
	15089 Jun 29 10:11	0° \mathbb{E}		desc. node	15090 Jun 17 08:27	20° \mathbb{H} 11'11	
desc. node	15089 Jun 30 11:21	1° \mathbb{E} 11'43			15090 Jun 24 06:51	0° \mathbb{E}	
	15089 Jul 21 02:35	0° \mathbb{O}		morning set	15090 Jul 06 21:07	18° \mathbb{E} 59'10	
morning set	15089 Jul 27 17:32	10° \mathbb{O} 09'53			15090 Jul 13 23:49	0° \mathbb{O}	
max. Earth dist.	15089 Aug 04 10:30	22° \mathbb{O} 24'10	1.43227 AU	max. Earth dist.	15090 Jul 17 23:28	6° \mathbb{O} 15'58	1.44811 AU
	15089 Aug 09 01:35	0° \mathbb{H}					
superior conj	15089 Aug 11 10:16	3° \mathbb{H} 57'28	-1°39'36	superior conj	15090 Jul 22 21:20	14° \mathbb{O} 06'12	-2°04'47
minimum elong	15089 Aug 11 17:45	4° \mathbb{H} 29'01	1°39'18	minimum elong	15090 Jul 23 03:35	14° \mathbb{O} 31'25	2°05'11
evening rise	15089 Aug 23 06:41	24° \mathbb{H} 35'51			15090 Aug 01 13:35	0° \mathbb{H}	
asc. node	15089 Aug 24 16:28	27° \mathbb{H} 06'05		evening rise	15090 Aug 05 12:09	6° \mathbb{H} 37'50	
	15089 Aug 26 07:40	0° \mathbb{A}		asc. node	15090 Aug 11 13:04	16° \mathbb{H} 48'12	
evening max el	15089 Sep 08 16:39	20° \mathbb{A} 14'05	18°02'42		15090 Aug 20 03:44	0° \mathbb{A}	
retrograde	15089 Sep 15 09:23	23° \mathbb{A} 41'08		evening max el	15090 Aug 23 07:20	3° \mathbb{A} 38'26	18°06'17
				retrograde	15090 Aug 29 16:21	6° \mathbb{A} 58'49	

evening set	15090 Sep 01 09:59	6° Ω 19'53		evening max el	15091 Aug 06 21:07	17° \mathbb{M} 18'30	18°27'50
inferior conj	15090 Sep 07 15:11	1° Ω 01'59	1°37'12	retrograde	15091 Aug 13 07:40	20° \mathbb{M} 45'39	
minimum elong	15090 Sep 07 17:26	0° Ω 55'52	1°36'24	evening set	15091 Aug 16 10:18	19° \mathbb{M} 51'25	
	15090 Sep 08 13:54	30° \mathbb{R} \mathbb{M}		inferior conj	15091 Aug 22 04:44	14° \mathbb{M} 17'47	2°22'44
min. Earth dist.	15090 Sep 10 07:49	28° \mathbb{M} 07'26	0.63137 AU	minimum elong	15091 Aug 22 07:02	14° \mathbb{M} 10'53	2°21'49
desc. node	15090 Sep 13 05:32	25° \mathbb{M} 22'52		min. Earth dist.	15091 Aug 24 07:58	11° \mathbb{M} 44'54	0.65160 AU
morning rise	15090 Sep 13 22:45	24° \mathbb{M} 49'03		morning rise	15091 Aug 28 02:29	7° \mathbb{M} 55'02	
direct	15090 Sep 20 14:38	22° \mathbb{M} 19'41		desc. node	15091 Aug 31 03:01	6° \mathbb{M} 00'58	
	15090 Oct 04 05:53	0° Ω		direct	15091 Sep 03 13:42	5° \mathbb{M} 17'19	
morning max el	15090 Oct 04 13:56	0° Ω 19'58	27°50'08	morning max el	15091 Sep 17 00:44	13° \mathbb{M} 11'02	27°09'24
	15090 Oct 26 08:05	0° \mathbb{M}			15091 Sep 30 14:35	0° Ω	
asc. node	15090 Nov 07 14:54	22° \mathbb{M} 33'00			15091 Oct 18 22:55	0° \mathbb{M}	
morning set	15090 Nov 08 03:11	23° \mathbb{M} 34'48		morning set	15091 Oct 22 13:38	6° \mathbb{M} 50'43	
	15090 Nov 11 05:56	0° \mathbb{M}		asc. node	15091 Oct 25 11:38	12° \mathbb{M} 36'32	
max. Earth dist.	15090 Nov 13 04:11	4° \mathbb{M} 05'17	1.32044 AU	max. Earth dist.	15091 Oct 26 21:16	15° \mathbb{M} 26'58	1.33364 AU
superior conj	15090 Nov 15 20:09	9° \mathbb{M} 51'28	1°10'18	superior conj	15091 Oct 30 23:15	23° \mathbb{M} 57'47	0°49'12
minimum elong	15090 Nov 15 17:51	9° \mathbb{M} 38'54	1°10'50	minimum elong	15091 Oct 30 21:06	23° \mathbb{M} 46'19	0°49'33
evening rise	15090 Nov 22 15:37	24° \mathbb{M} 45'49			15091 Nov 02 19:02	0° \mathbb{M}	
	15090 Nov 25 02:45	0° \mathbb{M}		evening rise	15091 Nov 07 02:11	9° \mathbb{M} 13'10	
desc. node	15090 Dec 10 02:48	26° \mathbb{M} 12'42			15091 Nov 17 19:23	0° \mathbb{M}	
	15090 Dec 13 02:50	0° \mathbb{M}		desc. node	15091 Nov 26 23:51	12° \mathbb{M} 36'51	
evening max el	15090 Dec 16 14:38	3° \mathbb{M} 43'50	23°46'22	evening max el	15091 Nov 28 01:54	13° \mathbb{M} 43'05	22°04'00
retrograde	15090 Dec 30 02:17	10° \mathbb{M} 25'21		retrograde	15091 Dec 10 15:37	19° \mathbb{M} 56'22	
evening set	15091 Jan 03 19:18	9° \mathbb{M} 37'14		evening set	15091 Dec 14 00:50	19° \mathbb{M} 30'59	
min. Earth dist.	15091 Jan 10 01:53	6° \mathbb{M} 35'13	0.55303 AU	inferior conj	15091 Dec 22 15:14	15° \mathbb{M} 38'43	-5°58'03
inferior conj	15091 Jan 11 20:46	5° \mathbb{M} 31'41	-5°45'30	minimum elong	15091 Dec 22 12:19	15° \mathbb{M} 42'47	5°56'55
minimum elong	15091 Jan 12 02:39	5° \mathbb{M} 22'58	5°43'57	min. Earth dist.	15091 Dec 22 07:42	15° \mathbb{M} 49'14	0.54501 AU
morning rise	15091 Jan 20 11:38	1° \mathbb{M} 36'36		morning rise	15091 Dec 31 00:43	11° \mathbb{M} 51'30	
direct	15091 Jan 23 01:28	1° \mathbb{M} 20'03		direct	15092 Jan 03 12:07	11° \mathbb{M} 24'45	
morning max el	15091 Feb 02 18:48	6° \mathbb{M} 30'19	20°14'53	morning max el	15092 Jan 15 17:31	17° \mathbb{M} 18'10	21°47'05
asc. node	15091 Feb 03 13:42	7° \mathbb{M} 17'35		asc. node	15092 Jan 21 11:02	23° \mathbb{M} 56'55	
	15091 Feb 18 00:03	0° \mathbb{M}			15092 Jan 25 12:11	0° \mathbb{M}	
morning set	15091 Feb 21 01:18	6° \mathbb{M} 09'31		morning set	15092 Feb 05 11:20	20° \mathbb{M} 53'35	
					15092 Feb 09 18:22	0° \mathbb{M}	
superior conj	15091 Feb 28 17:02	21° \mathbb{M} 50'01	0°59'23	superior conj	15092 Feb 12 15:02	6° \mathbb{M} 02'44	1°18'26
minimum elong	15091 Feb 28 19:38	22° \mathbb{M} 03'09	0°59'14	minimum elong	15092 Feb 12 17:23	6° \mathbb{M} 15'05	1°18'39
	15091 Mar 04 20:21	0° \mathbb{M}		max. Earth dist.	15092 Feb 16 21:25	14° \mathbb{M} 49'16	1.34597 AU
max. Earth dist.	15091 Mar 06 09:17	2° \mathbb{M} 56'48	1.36595 AU	evening rise	15092 Feb 21 02:36	23° \mathbb{M} 05'20	
desc. node	15091 Mar 08 03:56	6° \mathbb{M} 17'06		desc. node	15092 Feb 23 00:29	26° \mathbb{M} 41'25	
evening rise	15091 Mar 10 04:01	9° \mathbb{M} 57'49			15092 Feb 24 19:44	0° \mathbb{M}	
	15091 Mar 22 00:49	0° \mathbb{M}			15092 Mar 14 17:01	0° \mathbb{M}	
	15091 Apr 13 12:30	0° \mathbb{M}		evening max el	15092 Mar 27 05:28	14° \mathbb{M} 53'22	26°46'59
evening max el	15091 Apr 14 15:33	1° \mathbb{M} 07'57	25°47'23	retrograde	15092 Apr 09 10:32	22° \mathbb{M} 19'36	
retrograde	15091 Apr 27 04:05	8° \mathbb{M} 20'28		evening set	15092 Apr 15 21:19	19° \mathbb{M} 47'25	
asc. node	15091 May 02 10:20	6° \mathbb{M} 28'00		asc. node	15092 Apr 18 07:40	17° \mathbb{M} 31'57	
evening set	15091 May 03 05:13	5° \mathbb{M} 50'59		min. Earth dist.	15092 Apr 19 21:17	15° \mathbb{M} 48'09	0.66195 AU
min. Earth dist.	15091 May 07 10:44	1° \mathbb{M} 17'14	0.67565 AU	inferior conj	15092 Apr 21 22:46	13° \mathbb{M} 22'39	1°06'21
	15091 May 08 11:08	30° \mathbb{R} \mathbb{M}		minimum elong	15092 Apr 21 21:11	13° \mathbb{M} 27'21	1°05'10
inferior conj	15091 May 08 23:30	29° \mathbb{M} 20'35	1°53'10	morning rise	15092 Apr 27 22:16	7° \mathbb{M} 45'26	
minimum elong	15091 May 08 21:22	29° \mathbb{M} 27'22	1°51'44	direct	15092 Apr 30 21:20	6° \mathbb{M} 57'01	
morning rise	15091 May 14 14:07	23° \mathbb{M} 31'33		morning max el	15092 May 07 06:08	10° \mathbb{M} 17'34	18°12'55
direct	15091 May 17 23:18	22° \mathbb{M} 26'06		desc. node	15092 May 21 02:18	29° \mathbb{M} 38'02	
morning max el	15091 May 24 16:54	26° \mathbb{M} 03'58	18°51'54		15092 May 21 07:50	0° \mathbb{M}	
	15091 May 28 05:11	0° \mathbb{M}		morning set	15092 May 26 14:59	8° \mathbb{M} 28'30	
desc. node	15091 Jun 04 05:25	9° \mathbb{M} 42'49			15092 Jun 09 04:45	0° \mathbb{M}	
greatest brilliancy	15091 Jun 07 06:53	14° \mathbb{M} 18'38	-0.8m	superior conj	15092 Jun 10 21:13	2° \mathbb{M} 38'23	-2°03'03
morning set	15091 Jun 16 06:29	28° \mathbb{M} 09'27		minimum elong	15092 Jun 10 14:00	2° \mathbb{M} 10'10	2°03'37
	15091 Jun 17 10:59	0° \mathbb{M}		max. Earth dist.	15092 Jun 12 13:41	5° \mathbb{M} 16'25	1.45924 AU
max. Earth dist.	15091 Jun 30 17:15	20° \mathbb{M} 38'26	1.45738 AU	evening rise	15092 Jun 26 23:03	27° \mathbb{M} 39'18	
superior conj	15091 Jul 02 12:38	23° \mathbb{M} 28'09	-2°13'58		15092 Jun 28 11:17	0° \mathbb{M}	
minimum elong	15091 Jul 02 12:27	23° \mathbb{M} 27'24	2°14'54	greatest brilliancy	15092 Jul 08 01:47	14° \mathbb{M} 47'18	-0.7m
	15091 Jul 06 16:21	0° \mathbb{M}		asc. node	15092 Jul 15 06:26	25° \mathbb{M} 09'10	
evening rise	15091 Jul 17 17:47	17° \mathbb{M} 38'20			15092 Jul 19 05:36	0° \mathbb{M}	
	15091 Jul 25 10:23	0° \mathbb{M}		evening max el	15092 Jul 20 07:17	1° \mathbb{M} 06'49	19°06'29
asc. node	15091 Jul 29 09:43	6° \mathbb{M} 11'31					












retrograde	15092 Jul 27 04:02	4°♍53'59		evening rise	15093 Jun 06 12:08	7°♊05'23	
evening set	15092 Jul 30 16:06	3°♍42'53		greatest brilliancy	15093 Jun 21 09:12	29°♊22'44	-0.6m
	15092 Aug 03 11:33	30°♍♌			15093 Jun 21 19:32	0°♌	
inferior conj	15092 Aug 05 03:14	27°♌55'06	2°51'42	asc. node	15093 Jul 02 03:15	13°♌32'29	
minimum elong	15092 Aug 05 04:55	27°♌49'40	2°50'50	evening max el	15093 Jul 03 12:00	14°♌58'22	20°00'55
min. Earth dist.	15092 Aug 06 16:09	25°♌56'15	0.66817 AU	retrograde	15093 Jul 11 02:48	19°♌17'38	
morning rise	15092 Aug 10 17:03	21°♌29'20		evening set	15093 Jul 15 00:49	17°♌49'08	
direct	15092 Aug 16 19:43	18°♌52'20		inferior conj	15093 Jul 20 07:49	11°♌48'39	3°06'42
desc. node	15092 Aug 17 00:29	18°♌52'30		minimum elong	15093 Jul 20 08:35	11°♌46'03	3°05'52
morning max el	15092 Aug 29 12:03	26°♌25'32	26°03'04	min. Earth dist.	15093 Jul 21 06:40	10°♌31'13	0.68038 AU
	15092 Sep 01 19:35	0°♍		morning rise	15093 Jul 25 15:58	5°♌24'32	
	15092 Sep 23 04:31	0°♎		direct	15093 Jul 31 07:44	2°♌55'55	
morning set	15092 Oct 04 10:57	19°♎29'51		desc. node	15093 Aug 03 21:56	3°♌45'38	
max. Earth dist.	15092 Oct 08 04:45	26°♎33'58	1.35197 AU	morning max el	15093 Aug 11 22:56	9°♌54'02	24°40'30
	15092 Oct 09 23:03	0°♍			15093 Aug 27 21:30	0°♍	
asc. node	15092 Oct 11 08:17	2°♍44'41			15093 Sep 15 20:02	0°♎	
				morning set	15093 Sep 16 15:10	1°♎23'29	
superior conj	15092 Oct 13 18:52	7°♍40'17	0°22'22	max. Earth dist.	15093 Sep 20 04:54	7°♎46'06	1.37412 AU
minimum elong	15092 Oct 13 17:37	7°♍33'54	0°22'39				
evening rise	15092 Oct 21 10:29	23°♍32'53		superior conj	15093 Sep 27 03:49	20°♎51'38	-0°09'31
	15092 Oct 24 14:12	0°♎		minimum elong	15093 Sep 27 04:25	20°♎54'35	0°09'09
evening max el	15092 Nov 08 22:58	24°♎07'59	20°33'29	behind sun begin	15093 Sep 26 22:52	20°♎27'39	
desc. node	15092 Nov 12 21:03	27°♎21'23		behind sun end	15093 Sep 27 09:58	21°♎21'35	
retrograde	15092 Nov 20 02:06	29°♎40'10		asc. node	15093 Sep 28 04:54	22°♎54'06	
evening set	15092 Nov 22 09:57	29°♎26'44			15093 Oct 01 18:46	0°♍	
inferior conj	15092 Dec 01 06:56	25°♎32'24	-5°09'46	evening rise	15093 Oct 05 14:13	7°♍39'19	
minimum elong	15092 Nov 30 21:22	25°♎46'16	5°06'38		15093 Oct 18 00:54	0°♎	
min. Earth dist.	15092 Dec 02 13:27	24°♎48'09	0.54618 AU	evening max el	15093 Oct 22 10:29	5°♎20'48	19°23'32
morning rise	15092 Dec 09 08:36	21°♎34'45		desc. node	15093 Oct 30 18:20	10°♎02'12	
direct	15092 Dec 13 20:23	20°♎51'28		retrograde	15093 Oct 31 22:28	10°♎06'23	
morning max el	15092 Dec 27 05:02	27°♎23'07	23°34'42	evening set	15093 Nov 02 19:48	9°♎55'55	
	15092 Dec 29 18:09	0°♏		inferior conj	15093 Nov 11 10:26	5°♎48'09	-3°37'01
asc. node	15093 Jan 07 08:18	11°♏38'21		minimum elong	15093 Nov 11 01:34	6°♎02'37	3°33'06
	15093 Jan 17 06:49	0°♏		min. Earth dist.	15093 Nov 13 22:49	4°♎09'52	0.55645 AU
morning set	15093 Jan 19 23:09	5°♏38'25		morning rise	15093 Nov 19 05:07	1°♎20'59	
				direct	15093 Nov 24 14:22	0°♎15'16	
superior conj	15093 Jan 26 19:46	20°♏31'30	1°30'56	morning max el	15093 Dec 08 14:25	7°♎18'46	25°21'51
minimum elong	15093 Jan 26 21:21	20°♏40'03	1°31'31	asc. node	15093 Dec 25 05:29	0°♏06'56	
max. Earth dist.	15093 Jan 29 16:58	26°♏42'11	1.32978 AU		15093 Dec 25 03:54	0°♏	
	15093 Jan 31 06:40	0°♏		morning set	15094 Jan 04 10:53	20°♏18'48	
evening rise	15093 Feb 03 13:30	6°♏41'56			15094 Jan 08 20:55	0°♏	
desc. node	15093 Feb 08 21:04	16°♏54'06					
	15093 Feb 16 10:05	0°♐		superior conj	15094 Jan 11 04:46	5°♏09'28	1°37'10
evening max el	15093 Mar 09 18:37	28°♐19'44	27°24'58	minimum elong	15094 Jan 11 05:20	5°♏12'33	1°38'00
	15093 Mar 11 14:10	0°♑		max. Earth dist.	15094 Jan 12 19:22	8°♏42'05	1.31830 AU
retrograde	15093 Mar 23 10:34	5°♑49'56		evening rise	15094 Jan 18 09:45	20°♏40'24	
evening set	15093 Mar 30 04:23	3°♑21'22			15094 Jan 23 01:49	0°♏	
	15093 Apr 02 21:46	30°♑♒		desc. node	15094 Jan 26 17:43	6°♏49'45	
min. Earth dist.	15093 Apr 03 00:14	29°♐53'39	0.64436 AU		15094 Feb 10 11:39	0°♐	
asc. node	15093 Apr 05 05:04	27°♐32'40		evening max el	15094 Feb 20 05:17	11°♐15'03	27°34'36
inferior conj	15093 Apr 05 13:48	27°♐09'10	0°06'55	retrograde	15094 Mar 06 03:22	18°♐41'37	
minimum elong	15093 Apr 05 13:36	27°♐09'41	0°06'29	evening set	15094 Mar 12 23:50	16°♐24'08	
transit middle	15093 Apr 05 13:36	27°♐09'41	0°06'29	min. Earth dist.	15094 Mar 16 17:57	13°♐22'45	0.62377 AU
transit begin	15093 Apr 05 10:47	27°♐17'16		inferior conj	15094 Mar 19 17:30	10°♐32'19	-1°05'24
transit end	15093 Apr 05 16:26	27°♐02'07		minimum elong	15094 Mar 19 19:44	10°♐26'59	1°04'34
morning rise	15093 Apr 12 00:54	21°♐46'06		asc. node	15094 Mar 23 02:31	7°♐32'32	
direct	15093 Apr 14 14:57	21°♐11'51		morning rise	15094 Mar 26 18:33	5°♐25'57	
morning max el	15093 Apr 20 23:05	24°♐27'26	17°51'06	direct	15094 Mar 29 00:57	5°♐02'25	
	15093 Apr 25 13:37	0°♑		morning max el	15094 Apr 04 16:44	8°♐24'41	17°46'49
desc. node	15093 May 07 23:07	19°♑50'06			15094 Apr 18 23:50	0°♑	
morning set	15093 May 08 03:18	20°♑07'37		morning set	15094 Apr 20 15:25	2°♑53'49	
	15093 May 14 01:40	0°♒		desc. node	15094 Apr 24 19:49	10°♑13'34	
superior conj	15093 May 21 16:25	12°♒22'42	-1°35'03	superior conj	15094 May 02 09:15	23°♑08'14	-0°57'54
minimum elong	15093 May 21 07:48	11°♒48'10	1°35'01	minimum elong	15094 May 02 03:44	22°♑45'10	0°57'50
max. Earth dist.	15093 May 26 09:40	19°♒52'14	1.45357 AU		15094 May 06 13:02	0°♒	
	15093 Jun 01 21:31	0°♓		max. Earth dist.	15094 May 09 02:35	4°♒09'05	1.44107 AU

evening rise	15094 May 17 00:45	16° Π 37'47		max. Earth dist.	15095 Apr 21 15:11	17° \mathcal{B} 54'38	1.42311 AU
	15094 May 25 20:30	0° \mathfrak{D}		evening rise	15095 Apr 27 03:30	26° \mathcal{B} 52'44	
evening max el	15094 Jun 16 10:42	28° \mathfrak{D} 50'08	21°08'47		15095 Apr 29 02:48	0° Π	
	15094 Jun 17 15:52	0° Ω			15095 May 19 14:13	0° \mathfrak{D}	
asc. node	15094 Jun 19 00:10	1° Ω 09'20		evening max el	15095 May 30 04:26	12° \mathfrak{D} 43'01	22°26'04
retrograde	15094 Jun 25 01:45	3° Ω 50'18		asc. node	15095 Jun 05 21:12	17° \mathfrak{D} 45'21	
evening set	15094 Jun 29 10:24	2° Ω 04'44		retrograde	15095 Jun 08 23:12	18° \mathfrak{D} 27'17	
	15094 Jul 01 12:36	30° \mathcal{R} \mathfrak{D}		evening set	15095 Jun 13 19:08	16° \mathfrak{D} 25'50	
inferior conj	15094 Jul 04 16:02	25° \mathfrak{D} 53'08	3°09'41	inferior conj	15095 Jun 19 01:49	10° \mathfrak{D} 04'58	3°01'48
minimum elong	15094 Jul 04 15:49	25° \mathfrak{D} 53'52	3°08'46	minimum elong	15095 Jun 19 00:43	10° \mathfrak{D} 08'50	3°00'42
min. Earth dist.	15094 Jul 05 01:23	25° \mathfrak{D} 20'37	0.68794 AU	min. Earth dist.	15095 Jun 18 22:05	10° \mathfrak{D} 17'59	0.69072 AU
morning rise	15094 Jul 09 20:59	19° \mathfrak{D} 33'46		morning rise	15095 Jun 24 06:08	3° \mathfrak{D} 52'27	
direct	15094 Jul 15 00:43	17° \mathfrak{D} 19'20		direct	15095 Jun 28 21:28	1° \mathfrak{D} 56'06	
desc. node	15094 Jul 21 19:19	20° \mathfrak{D} 14'57		morning max el	15095 Jul 07 23:55	7° \mathfrak{D} 14'27	21°44'06
morning max el	15094 Jul 25 10:01	23° \mathfrak{D} 30'07	23°11'12	desc. node	15095 Jul 08 16:35	7° \mathfrak{D} 57'00	
	15094 Jul 31 03:56	0° Ω			15095 Jul 25 13:33	0° Ω	
	15094 Aug 21 06:09	0° \mathfrak{M}		morning set	15095 Aug 09 04:06	22° Ω 14'09	
morning set	15094 Aug 28 21:48	12° \mathfrak{M} 20'15			15095 Aug 13 23:40	0° \mathfrak{M}	
max. Earth dist.	15094 Sep 02 03:13	19° \mathfrak{M} 29'15	1.39798 AU	max. Earth dist.	15095 Aug 15 05:56	2° \mathfrak{M} 04'21	1.42081 AU
	15094 Sep 08 01:56	0° \mathfrak{L}					
superior conj	15094 Sep 09 22:07	3° \mathfrak{L} 21'55	-0°44'54	superior conj	15095 Aug 22 21:27	15° \mathfrak{M} 01'58	-1°20'43
minimum elong	15094 Sep 10 01:30	3° \mathfrak{L} 37'29	0°44'23	minimum elong	15095 Aug 23 03:49	15° \mathfrak{M} 29'41	1°20'13
asc. node	15094 Sep 15 01:28	13° \mathfrak{L} 00'33			15095 Aug 31 06:30	0° \mathfrak{L}	
evening rise	15094 Sep 19 10:23	21° \mathfrak{L} 24'01		asc. node	15095 Sep 01 22:01	3° \mathfrak{L} 00'43	
	15094 Sep 23 23:08	0° \mathfrak{M}		evening rise	15095 Sep 02 19:16	4° \mathfrak{L} 38'05	
evening max el	15094 Oct 05 10:52	17° \mathfrak{M} 22'09	18°35'51		15095 Sep 18 18:38	0° \mathfrak{M}	
retrograde	15094 Oct 13 12:34	21° \mathfrak{M} 26'56		evening max el	15095 Sep 18 20:01	0° \mathfrak{M} 03'27	18°09'09
evening set	15094 Oct 15 11:06	21° \mathfrak{M} 13'35		retrograde	15095 Sep 25 21:30	3° \mathfrak{M} 39'57	
desc. node	15094 Oct 17 15:43	20° \mathfrak{M} 28'45		evening set	15095 Sep 28 02:22	3° \mathfrak{M} 19'23	
inferior conj	15094 Oct 23 10:11	16° \mathfrak{M} 46'07	-1°50'51		15095 Oct 03 14:02	30° \mathcal{R} \mathfrak{L}	
minimum elong	15094 Oct 23 05:44	16° \mathfrak{M} 54'35	1°48'25	desc. node	15095 Oct 04 13:08	29° \mathfrak{L} 10'54	
min. Earth dist.	15094 Oct 26 14:14	14° \mathfrak{M} 22'26	0.57391 AU	inferior conj	15095 Oct 05 07:29	28° \mathfrak{L} 30'37	-0°14'28
morning rise	15094 Oct 30 20:57	11° \mathfrak{M} 41'54		minimum elong	15095 Oct 05 07:00	28° \mathfrak{L} 31'42	0°13'54
direct	15094 Nov 05 22:59	10° \mathfrak{M} 09'32		transit middle	15095 Oct 05 07:00	28° \mathfrak{L} 31'42	0°13'54
morning max el	15094 Nov 20 05:06	17° \mathfrak{M} 37'58	26°49'37	transit begin	15095 Oct 05 05:16	28° \mathfrak{L} 35'33	
	15094 Nov 30 11:49	0° \mathcal{X}		transit end	15095 Oct 05 08:44	28° \mathfrak{L} 27'52	
asc. node	15094 Dec 12 02:33	19° \mathcal{X} 10'22		min. Earth dist.	15095 Oct 08 13:36	25° \mathfrak{L} 38'52	0.59565 AU
	15094 Dec 17 13:50	0° \mathfrak{Z}		morning rise	15095 Oct 12 08:19	22° \mathfrak{L} 52'43	
morning set	15094 Dec 19 20:47	4° \mathfrak{Z} 50'04		direct	15095 Oct 18 20:50	20° \mathfrak{L} 54'07	
				morning max el	15095 Nov 02 03:37	28° \mathfrak{L} 40'23	27°43'50
superior conj	15094 Dec 26 15:57	19° \mathfrak{Z} 50'30	1°37'19		15095 Nov 03 11:07	0° \mathfrak{M}	
minimum elong	15094 Dec 26 15:27	19° \mathfrak{Z} 47'41	1°38'14		15095 Nov 24 08:40	0° \mathcal{X}	
max. Earth dist.	15094 Dec 27 02:13	20° \mathfrak{Z} 47'54	1.31193 AU	asc. node	15095 Nov 28 23:30	8° \mathcal{X} 38'58	
	15094 Dec 31 05:59	0° \approx		morning set	15095 Dec 04 02:58	19° \mathcal{X} 06'57	
evening rise	15095 Jan 02 12:45	4° \approx 54'40			15095 Dec 09 03:10	0° \mathfrak{Z}	
desc. node	15095 Jan 13 14:26	26° \approx 21'38		max. Earth dist.	15095 Dec 10 10:03	2° \mathfrak{Z} 51'53	1.31092 AU
	15095 Jan 15 17:48	0° \mathcal{X}					
evening max el	15095 Feb 02 11:11	23° \mathcal{X} 28'04	27°10'47	superior conj	15095 Dec 11 03:21	4° \mathfrak{Z} 28'31	1°31'30
	15095 Feb 12 05:20	0° \mathcal{Y}		minimum elong	15095 Dec 11 01:54	4° \mathfrak{Z} 20'25	1°32'22
retrograde	15095 Feb 16 11:30	0° \mathcal{Y} 45'22		evening rise	15095 Dec 17 20:17	19° \mathfrak{Z} 18'38	
	15095 Feb 20 14:55	30° \mathcal{R} \mathcal{X}			15095 Dec 22 24:00	0° \approx	
evening set	15095 Feb 23 04:38	28° \mathcal{X} 46'56		desc. node	15095 Dec 31 11:14	15° \approx 20'01	
min. Earth dist.	15095 Feb 27 01:38	26° \mathcal{X} 03'29	0.60160 AU		15096 Jan 10 20:59	0° \mathcal{X}	
inferior conj	15095 Mar 02 06:23	23° \mathcal{X} 23'10	-2°28'46	evening max el	15096 Jan 15 09:41	4° \mathcal{X} 49'11	26°12'09
minimum elong	15095 Mar 02 11:53	23° \mathcal{X} 11'37	2°26'24	retrograde	15096 Jan 29 08:45	11° \mathcal{X} 54'17	
morning rise	15095 Mar 09 22:33	18° \mathcal{X} 36'05		evening set	15096 Feb 04 14:55	10° \mathcal{X} 21'13	
asc. node	15095 Mar 09 24:00	18° \mathcal{X} 35'08		min. Earth dist.	15096 Feb 08 23:02	7° \mathcal{X} 43'55	0.57992 AU
direct	15095 Mar 11 23:36	18° \mathcal{X} 19'36		inferior conj	15096 Feb 12 00:40	5° \mathcal{X} 30'42	-3°56'45
morning max el	15095 Mar 19 07:40	21° \mathcal{X} 59'27	18°01'01	minimum elong	15096 Feb 12 09:14	5° \mathcal{X} 15'09	3°53'29
	15095 Mar 25 11:44	0° \mathcal{Y}		morning rise	15096 Feb 20 06:38	1° \mathcal{X} 04'56	
morning set	15095 Apr 03 21:20	16° \mathcal{Y} 29'23		direct	15096 Feb 22 06:35	0° \mathcal{X} 51'46	
	15095 Apr 11 06:34	0° \mathcal{B}		asc. node	15096 Feb 24 21:28	1° \mathcal{X} 15'36	
desc. node	15095 Apr 11 16:26	0° \mathcal{B} 44'17		morning max el	15096 Mar 01 15:56	4° \mathcal{X} 59'34	18°35'20
					15096 Mar 17 07:53	0° \mathcal{Y}	
superior conj	15095 Apr 14 01:43	4° \mathcal{B} 58'42	-0°19'19	morning set	15096 Mar 17 15:38	0° \mathcal{Y} 37'22	
minimum elong	15095 Apr 14 00:04	4° \mathcal{B} 51'24	0°19'31				
				superior conj	15096 Mar 26 14:36	17° \mathcal{Y} 43'51	0°15'55

minimum elong	15096 Mar 26 15:41	17° Υ 48'50	0°15'32	superior conj	15097 Mar 09 19:32	1° Υ 11'58	0°45'22
behind sun begin	15096 Mar 26 14:08	17° Υ 41'38		minimum elong	15097 Mar 09 21:55	1° Υ 23'39	0°45'05
behind sun end	15096 Mar 26 17:13	17° Υ 56'02		desc. node	15097 Mar 15 09:31	11° Υ 50'30	
desc. node	15096 Mar 28 12:59	21° Υ 17'41		max. Earth dist.	15097 Mar 16 06:04	13° Υ 25'08	1.37872 AU
	15096 Apr 02 09:53	0° B		evening rise	15097 Mar 19 22:44	20° Υ 03'26	
max. Earth dist.	15096 Apr 02 23:38	0° B 59'50	1.40155 AU		15097 Mar 25 18:50	0° B	
evening rise	15096 Apr 07 02:47	8° B 01'56			15097 Apr 15 04:47	0° Π	
	15096 Apr 21 02:56	0° Π		evening max el	15097 Apr 24 08:32	10° Π 30'52	25°06'03
evening max el	15096 May 11 19:04	26° Π 36'57	23°47'23	retrograde	15097 May 06 08:29	17° Π 29'24	
	15096 May 15 14:39	0° C		asc. node	15097 May 09 15:34	16° Π 43'36	
retrograde	15096 May 22 17:47	3° C 02'23		evening set	15097 May 12 03:34	15° Π 03'34	
asc. node	15096 May 22 18:20	3° C 02'22		min. Earth dist.	15097 May 16 12:49	10° Π 09'36	0.68173 AU
evening set	15096 May 28 01:23	0° C 47'06		inferior conj	15097 May 17 18:20	8° Π 32'52	2°14'45
	15096 May 28 21:38	30° $\text{R}\Pi$		minimum elong	15097 May 17 16:11	8° Π 39'56	2°13'19
inferior conj	15096 Jun 02 11:13	24° Π 19'34	2°43'32	morning rise	15097 May 23 05:08	2° Π 38'09	
minimum elong	15096 Jun 02 09:25	24° Π 25'43	2°42'15	direct	15097 May 26 20:36	1° Π 21'54	
min. Earth dist.	15096 Jun 01 18:36	25° Π 16'24	0.68861 AU	morning max el	15097 Jun 02 22:47	5° Π 15'08	19°21'49
morning rise	15096 Jun 07 17:27	18° Π 15'21		desc. node	15097 Jun 11 10:47	15° Π 46'14	
direct	15096 Jun 11 20:34	16° Π 39'02		greatest brilliancy	15097 Jun 15 14:38	21° Π 46'59	-0.7m
morning max el	15096 Jun 19 19:38	21° Π 09'22	20°26'12		15097 Jun 21 02:07	0° C	
desc. node	15096 Jun 24 13:44	26° Π 32'11		morning set	15097 Jun 27 17:07	10° C 07'36	
	15096 Jun 27 06:07	0° C		max. Earth dist.	15097 Jul 10 07:40	29° C 42'05	1.45295 AU
	15096 Jul 17 17:50	0° Ω			15097 Jul 10 12:13	0° Ω	
morning set	15096 Jul 18 13:41	1° Ω 16'32		superior conj	15097 Jul 13 23:37	5° Ω 29'26	-2°11'00
max. Earth dist.	15096 Jul 27 15:52	15° Ω 33'33	1.43981 AU	minimum elong	15097 Jul 14 03:42	5° Ω 45'36	2°11'43
				evening rise	15097 Jul 28 08:03	28° Ω 47'05	
superior conj	15096 Aug 02 22:04	25° Ω 44'09	-1°51'48		15097 Jul 29 01:41	0° D	
minimum elong	15096 Aug 03 05:38	26° Ω 15'26	1°51'45	asc. node	15097 Aug 05 15:14	12° D 25'38	
	15096 Aug 05 11:37	0° D		evening max el	15097 Aug 16 00:20	26° D 46'13	18°13'15
evening rise	15096 Aug 15 12:15	17° D 10'12			15097 Aug 21 03:31	0° E	
asc. node	15096 Aug 18 18:37	22° D 50'50		retrograde	15097 Aug 22 08:58	0° E 08'08	
	15096 Aug 22 23:15	0° E			15097 Aug 23 14:18	30° RD	
evening max el	15096 Sep 01 09:43	13° E 14'43	18°01'58	evening set	15097 Aug 25 06:21	29° D 22'57	
retrograde	15096 Sep 07 21:50	16° E 37'08		inferior conj	15097 Aug 31 06:29	23° D 57'50	1°58'46
evening set	15096 Sep 10 10:39	16° E 05'41		minimum elong	15097 Aug 31 08:52	23° D 51'03	1°57'51
inferior conj	15096 Sep 16 23:36	10° E 57'26	1°02'24	min. Earth dist.	15097 Sep 02 17:31	21° D 10'49	0.64031 AU
minimum elong	15096 Sep 17 01:19	10° E 53'05	1°01'52	morning rise	15097 Sep 06 09:40	17° D 39'32	
min. Earth dist.	15096 Sep 19 22:35	7° E 58'24	0.61860 AU	desc. node	15097 Sep 07 08:05	16° D 58'41	
desc. node	15096 Sep 20 10:36	7° E 29'40		direct	15097 Sep 12 23:56	15° D 05'46	
morning rise	15096 Sep 23 13:24	4° E 54'25		morning max el	15097 Sep 26 19:03	23° D 05'00	27°36'36
direct	15096 Sep 30 05:38	2° E 34'25			15097 Oct 02 22:49	0° E	
morning max el	15096 Oct 14 09:09	10° E 31'45	27°58'52		15097 Oct 22 22:21	0° D	
	15096 Oct 29 15:15	0° D		morning set	15097 Oct 31 19:52	16° D 37'45	
asc. node	15096 Nov 14 20:21	28° D 25'32		asc. node	15097 Nov 01 17:07	18° D 23'56	
	15096 Nov 15 15:12	0° F		max. Earth dist.	15097 Nov 05 13:30	26° D 19'23	1.32540 AU
morning set	15096 Nov 17 03:29	3° F 04'55			15097 Nov 07 07:07	0° F	
max. Earth dist.	15096 Nov 22 15:07	14° F 45'25	1.31538 AU	superior conj	15097 Nov 08 19:17	3° F 14'22	1°02'04
				minimum elong	15097 Nov 08 16:58	3° F 01'49	1°02'31
superior conj	15096 Nov 24 13:08	18° F 58'25	1°19'45	evening rise	15097 Nov 15 17:22	18° F 16'10	
minimum elong	15096 Nov 24 11:01	18° F 46'45	1°20'26		15097 Nov 21 09:44	0° B	
	15096 Nov 29 12:42	0° B		desc. node	15097 Dec 04 05:08	20° B 41'52	
evening rise	15096 Dec 01 06:26	3° B 47'32		evening max el	15097 Dec 08 09:09	25° B 17'56	23°02'09
	15096 Dec 15 00:39	0° \approx			15097 Dec 14 15:16	0° \approx	
desc. node	15096 Dec 17 08:08	3° \approx 32'33		retrograde	15097 Dec 21 13:14	1° \approx 49'48	
evening max el	15096 Dec 26 23:44	15° \approx 19'20	24°44'29	evening set	15097 Dec 25 16:54	1° \approx 12'18	
retrograde	15097 Jan 09 17:21	22° \approx 10'58			15097 Dec 28 20:26	30° RB	
evening set	15097 Jan 15 03:04	21° \approx 06'19		min. Earth dist.	15098 Jan 01 18:45	27° B 55'34	0.54853 AU
min. Earth dist.	15097 Jan 20 11:34	18° \approx 19'07	0.56127 AU	inferior conj	15098 Jan 02 23:51	27° B 13'54	-5°58'05
inferior conj	15097 Jan 22 21:57	16° \approx 47'10	-5°14'31	minimum elong	15098 Jan 03 02:23	27° B 10'17	5°57'03
minimum elong	15097 Jan 23 06:33	16° \approx 33'36	5°11'59	morning rise	15098 Jan 11 13:17	23° B 24'20	
morning rise	15097 Jan 31 12:14	12° \approx 42'40		direct	15098 Jan 14 11:14	23° B 04'26	
direct	15097 Feb 02 18:17	12° \approx 28'47		morning max el	15098 Jan 25 20:41	28° B 32'57	20°51'46
asc. node	15097 Feb 10 18:52	15° \approx 39'36			15098 Jan 27 06:54	0° \approx	
morning max el	15097 Feb 12 13:24	17° \approx 13'46	19°31'53	asc. node	15098 Jan 28 16:12	1° \approx 34'06	
	15097 Feb 21 19:49	0° H		morning set	15098 Feb 14 02:23	29° \approx 46'10	
morning set	15097 Mar 01 18:20	15° H 06'04					
	15097 Mar 09 04:52	0° Υ					

	15098 Feb 14 05:03	0° H		asc. node	15099 Jan 15 13:30	18° Z 41'27	
					15099 Jan 22 07:59	0° \approx	
superior conj	15098 Feb 21 12:19	15° H 11'12	1°08'16	morning set	15099 Jan 29 13:22	14° \approx 30'32	
minimum elong	15098 Feb 21 14:54	15° H 24'27	1°08'16				
max. Earth dist.	15098 Feb 26 14:29	25° H 22'12	1.35700 AU	superior conj	15099 Feb 05 13:30	29° \approx 31'21	1°24'32
	15098 Mar 01 00:25	0° Y		minimum elong	15099 Feb 05 15:34	29° \approx 42'22	1°24'54
desc. node	15098 Mar 02 06:04	2° Y 19'01			15099 Feb 05 18:53	0° H	
evening rise	15098 Mar 02 12:35	2° Y 49'17		max. Earth dist.	15099 Feb 09 05:15	7° H 11'10	1.33845 AU
	15098 Mar 18 18:39	0° B		evening rise	15099 Feb 13 16:47	16° H 09'51	
evening max el	15098 Apr 06 22:03	24° B 21'06	26°14'52	desc. node	15099 Feb 17 02:38	22° H 38'44	
	15098 Apr 14 02:13	0° II			15099 Feb 21 04:40	0° Y	
retrograde	15098 Apr 19 18:24	1° II 41'31			15099 Mar 13 06:26	0° B	
	15098 Apr 24 21:14	30° R B		evening max el	15099 Mar 20 11:45	7° B 59'34	27°06'20
evening set	15098 Apr 25 23:58	29° B 09'50		retrograde	15099 Apr 02 22:32	15° B 29'28	
asc. node	15098 Apr 26 12:51	28° B 42'12		evening set	15099 Apr 09 12:33	12° B 57'59	
min. Earth dist.	15098 Apr 30 02:49	24° B 51'15	0.67031 AU	asc. node	15099 Apr 13 10:14	9° B 13'12	
inferior conj	15098 May 01 21:09	22° B 40'55	1°34'48	min. Earth dist.	15099 Apr 13 10:29	9° B 12'30	0.65479 AU
minimum elong	15098 May 01 19:09	22° B 47'05	1°33'26	inferior conj	15099 Apr 15 17:16	6° B 37'19	0°42'43
morning rise	15098 May 07 15:14	16° B 56'54		minimum elong	15099 Apr 15 16:09	6° B 40'30	0°41'48
direct	15098 May 10 19:54	15° B 59'12		morning rise	15099 Apr 21 21:23	1° B 05'47	
morning max el	15098 May 17 08:54	19° B 28'15	18°33'16	direct	15099 Apr 24 16:21	0° B 23'54	
	15098 May 25 16:00	0° II		morning max el	15099 May 01 00:04	3° B 41'18	18°01'31
desc. node	15098 May 29 07:44	5° II 29'00		desc. node	15099 May 16 04:34	25° B 32'03	
morning set	15098 Jun 07 10:59	19° II 43'44			15099 May 18 22:18	0° II	
	15098 Jun 14 00:12	0° E		morning set	15099 May 19 07:28	0° II 37'21	
superior conj	15098 Jun 23 10:06	14° E 41'32	-2°11'48	superior conj	15099 Jun 02 21:22	24° II 01'51	-1°52'52
minimum elong	15098 Jun 23 06:31	14° E 27'33	2°12'40	minimum elong	15099 Jun 02 12:47	23° II 28'00	1°53'08
max. Earth dist.	15098 Jun 23 02:41	14° E 12'35	1.45905 AU	max. Earth dist.	15099 Jun 05 22:46	28° II 49'54	1.45770 AU
	15098 Jul 03 04:49	0° O			15099 Jun 06 16:42	0° E	
evening rise	15098 Jul 09 03:04	9° O 21'25		evening rise	15099 Jun 18 23:50	19° E 02'45	
greatest brilliancy	15098 Jul 17 03:59	22° O 03'08	-0.8m		15099 Jun 26 03:25	0° O	
	15098 Jul 22 08:45	0° np		greatest brilliancy	15099 Jul 02 02:19	8° O 57'08	-0.7m
asc. node	15098 Jul 23 11:57	1° np 39'23		asc. node	15099 Jul 10 08:44	20° O 23'47	
evening max el	15098 Jul 30 12:50	10° np 30'34	18°42'13	evening max el	15099 Jul 13 20:54	24° O 20'54	19°27'50
retrograde	15098 Aug 06 02:55	14° np 05'03		retrograde	15099 Jul 21 00:32	28° O 20'18	
evening set	15098 Aug 09 09:23	13° np 03'58		evening set	15099 Jul 24 16:42	27° O 01'59	
inferior conj	15098 Aug 15 00:18	7° np 24'08	2°36'51	inferior conj	15099 Jul 30 01:45	21° O 08'54	2°59'35
minimum elong	15098 Aug 15 02:24	7° np 17'38	2°35'57	minimum elong	15099 Jul 30 03:04	21° O 04'32	2°58'45
min. Earth dist.	15098 Aug 16 21:31	5° np 04'18	0.65912 AU	min. Earth dist.	15099 Jul 31 08:44	19° O 26'41	0.67398 AU
morning rise	15098 Aug 20 18:24	0° np 59'05		morning rise	15099 Aug 04 12:51	14° O 43'17	
	15098 Aug 22 01:27	30° R O		direct	15099 Aug 10 11:13	12° O 08'42	
desc. node	15098 Aug 25 05:35	28° O 33'32		desc. node	15099 Aug 12 03:03	12° O 19'18	
direct	15098 Aug 27 02:16	28° O 20'29		morning max el	15099 Aug 22 17:27	19° O 28'54	25°29'10
	15098 Sep 01 15:51	0° np			15099 Aug 31 16:42	0° np	
morning max el	15098 Sep 09 06:27	6° np 08'10	26°43'41		15099 Sep 20 18:13	0° E	
	15098 Sep 27 15:58	0° E		morning set	15099 Sep 27 15:46	12° E 00'06	
morning set	15098 Oct 15 01:11	29° E 39'08		max. Earth dist.	15099 Oct 01 05:46	18° E 36'31	1.36103 AU
	15098 Oct 15 05:35	0° M		asc. node	15099 Oct 06 10:28	28° E 39'05	
max. Earth dist.	15098 Oct 19 02:20	7° M 32'25	1.34086 AU				
asc. node	15098 Oct 19 13:49	8° M 29'50		superior conj	15099 Oct 07 11:04	0° M 41'31	0°09'24
				minimum elong	15099 Oct 07 10:29	0° M 38'36	0°09'42
superior conj	15098 Oct 23 19:32	17° M 11'05	0°38'29	behind sun begin	15099 Oct 07 05:25	0° M 13'17	
minimum elong	15098 Oct 23 17:39	17° M 01'15	0°38'47	behind sun end	15099 Oct 07 15:33	1° M 03'57	
	15098 Oct 29 20:52	0° X			15099 Oct 07 02:45	0° M	
evening rise	15098 Oct 31 03:13	2° X 40'26		evening rise	15099 Oct 15 09:53	16° M 55'05	
	15098 Nov 15 08:16	0° Z			15099 Oct 22 01:22	0° X	
evening max el	15098 Nov 19 23:31	5° Z 23'35	21°23'16	evening max el	15099 Nov 02 02:49	16° X 08'33	20°01'03
desc. node	15098 Nov 21 02:16	6° Z 26'32		desc. node	15099 Nov 07 23:30	20° X 21'25	
retrograde	15098 Dec 02 00:11	11° Z 21'01		retrograde	15099 Nov 12 13:01	21° X 20'12	
evening set	15098 Dec 04 20:41	11° Z 02'16		evening set	15099 Nov 14 14:39	21° X 08'53	
inferior conj	15098 Dec 13 15:17	7° Z 10'45	-5°44'39	inferior conj	15099 Nov 23 10:33	17° X 10'27	-4°34'01
minimum elong	15098 Dec 13 08:45	7° Z 19'58	5°42'49	minimum elong	15099 Nov 23 00:28	17° X 25'41	4°30'14
min. Earth dist.	15098 Dec 14 00:27	6° Z 57'52	0.54430 AU	min. Earth dist.	15099 Nov 25 07:32	16° X 02'30	0.54953 AU
morning rise	15098 Dec 21 21:18	3° Z 21'14		morning rise	15099 Dec 01 09:10	13° X 02'02	
direct	15098 Dec 25 18:57	2° Z 48'15		direct	15099 Dec 06 06:55	12° X 09'32	
morning max el	15099 Jan 07 13:52	8° Z 59'34	22°31'51	morning max el	15099 Dec 19 23:11	18° X 55'51	24°21'27

	15099 Dec 29 03:15	0°♁	morning max el	15100 Dec 01 09:59	28°♁57'07	26°02'40
asc. node	15100 Jan 02 10:44	6°♁44'52		15100 Dec 02 11:31	0°♁	
morning set	15100 Jan 14 01:22	29°♁14'05	asc. node	15100 Dec 20 07:52	25°♁29'30	
	15100 Jan 14 09:54	0°♁		15100 Dec 22 17:49	0°♁	
			morning set	15100 Dec 29 12:31	13°♁50'55	
superior conj	15100 Jan 20 20:20	14°♁04'55 1°34'20				
minimum elong	15100 Jan 20 21:30	14°♁11'17 1°35'02	superior conj	15101 Jan 05 06:28	28°♁44'24	1°37'57
max. Earth dist.	15100 Jan 23 04:00	19°♁07'12 1.32429 AU	minimum elong	15101 Jan 05 06:34	28°♁44'58	1°38'51
evening rise	15100 Jan 28 08:03	29°♁57'06		15101 Jan 05 20:04	0°♁	
	15100 Jan 28 08:38	0°♁	max. Earth dist.	15101 Jan 06 08:52	1°♁11'03	1.31500 AU
desc. node	15100 Feb 03 23:15	12°♁45'07	evening rise	15101 Jan 12 07:27	14°♁02'45	
	15100 Feb 14 05:54	0°♁		15101 Jan 20 10:21	0°♁	
evening max el	15100 Mar 03 00:22	21°♁15'07 27°33'03	desc. node	15101 Jan 21 19:55	2°♁31'28	
retrograde	15100 Mar 16 19:35	28°♁44'11		15101 Feb 09 15:24	0°♁	
evening set	15100 Mar 23 14:59	26°♁19'45	evening max el	15101 Feb 13 09:24	3°♁53'37	27°28'44
min. Earth dist.	15100 Mar 27 09:52	23°♁03'44 0.63586 AU	retrograde	15101 Feb 27 08:30	11°♁15'49	
inferior conj	15100 Mar 30 03:54	20°♁15'11 -0°22'12	evening set	15101 Mar 06 04:31	9°♁05'40	
minimum elong	15100 Mar 30 04:37	20°♁13'23 0°22'09	min. Earth dist.	15101 Mar 09 23:14	6°♁13'11	0.61448 AU
asc. node	15100 Mar 31 07:38	19°♁05'09	inferior conj	15101 Mar 13 01:42	3°♁25'16	-1°39'37
morning rise	15100 Apr 05 20:39	14°♁58'31	minimum elong	15101 Mar 13 05:16	3°♁17'13	1°38'09
direct	15100 Apr 08 07:15	14°♁29'13		15101 Mar 17 06:15	30°♁	
morning max el	15100 Apr 14 17:37	17°♁46'27 17°47'04	asc. node	15101 Mar 18 05:05	29°♁24'27	
	15100 Apr 23 16:21	0°♁	morning rise	15101 Mar 20 09:08	28°♁26'37	
morning set	15100 May 01 06:40	12°♁47'21	direct	15101 Mar 22 13:04	28°♁06'24	
desc. node	15100 May 03 01:21	15°♁49'30		15101 Mar 27 14:30	0°♁	
	15100 May 11 11:56	0°♁	morning max el	15101 Mar 29 10:28	1°♁34'32	17°50'33
			morning set	15101 Apr 14 03:02	25°♁56'19	
superior conj	15100 May 14 00:58	4°♁09'55 -1°19'54		15101 Apr 16 09:23	0°♁	
minimum elong	15100 May 13 17:21	3°♁38'53 1°19'47	desc. node	15101 Apr 19 22:00	6°♁16'13	
max. Earth dist.	15100 May 19 17:49	13°♁19'44 1.44909 AU				
evening rise	15100 May 29 10:41	28°♁26'24	superior conj	15101 Apr 25 03:57	15°♁23'02	-0°41'21
	15100 May 30 11:10	0°♁	minimum elong	15101 Apr 25 00:08	15°♁06'45	0°41'23
	15100 Jun 20 01:04	0°♁	max. Earth dist.	15101 May 02 09:30	27°♁26'12	1.43402 AU
evening max el	15100 Jun 26 23:10	8°♁13'03 20°28'21		15101 May 03 23:29	0°♁	
asc. node	15100 Jun 27 05:36	8°♁28'57	evening rise	15101 May 09 03:56	8°♁13'32	
retrograde	15100 Jul 04 23:28	12°♁48'19		15101 May 23 15:48	0°♁	
evening set	15100 Jul 09 02:01	11°♁12'24	evening max el	15101 Jun 09 19:34	22°♁05'12	21°40'46
inferior conj	15100 Jul 14 08:08	5°♁07'12 3°09'18	asc. node	15101 Jun 14 02:33	25°♁42'03	
minimum elong	15100 Jul 14 08:29	5°♁06'00 3°08'27	retrograde	15101 Jun 18 21:57	27°♁23'48	
min. Earth dist.	15100 Jul 15 01:12	4°♁08'38 0.68428 AU	evening set	15101 Jun 23 11:27	25°♁31'00	
	15100 Jul 18 08:19	30°♁	inferior conj	15101 Jun 28 17:15	19°♁15'10	3°07'38
morning rise	15100 Jul 19 14:39	28°♁45'01	minimum elong	15101 Jun 28 16:38	19°♁17'17	3°06'38
direct	15100 Jul 25 01:30	26°♁21'44	min. Earth dist.	15101 Jun 28 20:54	19°♁02'23	0.68972 AU
desc. node	15100 Jul 30 00:28	27°♁56'17	morning rise	15101 Jul 03 21:38	12°♁58'45	
	15100 Aug 01 21:55	0°♁	direct	15101 Jul 08 20:05	10°♁51'52	
morning max el	15100 Aug 05 04:02	3°♁00'04 24°02'40	desc. node	15101 Jul 16 21:48	14°♁59'19	
	15100 Aug 25 19:22	0°♁	morning max el	15101 Jul 18 16:04	16°♁39'57	22°33'31
morning set	15100 Sep 09 11:16	23°♁30'08		15101 Jul 29 15:39	0°♁	
max. Earth dist.	15100 Sep 13 04:25	29°♁58'51 1.38429 AU		15101 Aug 18 20:02	0°♁	
	15100 Sep 13 04:41	0°♁	morning set	15101 Aug 21 07:46	4°♁00'55	
			max. Earth dist.	15101 Aug 26 04:44	12°♁05'49	1.40801 AU
superior conj	15100 Sep 20 14:19	13°♁36'37 -0°24'15				
minimum elong	15100 Sep 20 16:01	13°♁44'40 0°23'49	superior conj	15101 Sep 03 01:10	25°♁47'06	-1°00'18
asc. node	15100 Sep 23 07:04	18°♁47'36	minimum elong	15101 Sep 03 05:52	26°♁08'15	0°59'43
evening rise	15100 Sep 29 10:47	0°♁53'07		15101 Sep 05 08:56	0°♁	
	15100 Sep 29 00:00	0°♁	asc. node	15101 Sep 10 03:39	8°♁52'09	
evening max el	15100 Oct 15 20:14	27°♁42'30 19°00'32	evening rise	15101 Sep 13 02:44	14°♁26'49	
	15100 Oct 18 12:33	0°♁		15101 Sep 21 16:42	0°♁	
retrograde	15100 Oct 24 16:19	2°♁09'17	evening max el	15101 Sep 29 00:50	10°♁01'54	18°21'54
desc. node	15100 Oct 25 20:50	2°♁04'44	retrograde	15101 Oct 06 15:01	13°♁53'24	
evening set	15100 Oct 26 13:23	1°♁58'03	evening set	15101 Oct 08 15:48	13°♁37'30	
	15100 Oct 31 09:25	30°♁	desc. node	15101 Oct 12 18:14	11°♁40'42	
inferior conj	15100 Nov 03 22:02	27°♁42'05 -2°51'53	inferior conj	15101 Oct 16 07:12	9°♁00'31	-1°07'56
minimum elong	15100 Nov 03 14:53	27°♁54'29 2°48'24	minimum elong	15101 Oct 16 04:36	9°♁05'47	1°06'20
min. Earth dist.	15100 Nov 06 18:49	25°♁43'10 0.56319 AU	min. Earth dist.	15101 Oct 19 13:22	6°♁22'36	0.58282 AU
morning rise	15100 Nov 11 13:39	22°♁59'48	morning rise	15101 Oct 23 13:56	3°♁40'56	
direct	15100 Nov 17 06:52	21°♁43'09	direct	15101 Oct 29 20:58	1°♁57'26	

morning max el	15101 Nov 13 04:13	9° 	27°17'22
	15101 Nov 28 19:48	0° 	
asc. node	15101 Dec 07 04:54	14° 	44'37
morning set	15101 Dec 13 21:04	28° 	16'38
	15101 Dec 14 16:21	0° 	
superior conj	15101 Dec 20 17:57	13° 	24'25 1°35'33
minimum elong	15101 Dec 20 17:01	13° 	19'13 1°36'29
max. Earth dist.	15101 Dec 20 16:42	13° 	17'27 1.31087 AU
evening rise	15101 Dec 27 12:37	28° 	21'16
	15101 Dec 28 07:10	0° 	
desc. node	15102 Jan 08 16:39	21° 	50'07
	15102 Jan 13 19:04	0° 