

superior conj	16100 Jan 23 20:23	19° \approx 20'07	1°36'40	asc. node	16100 Dec 24 04:32	2° \approx 14'23	
minimum elong	16100 Jan 23 21:07	19° \approx 24'12	1°37'11	morning set	16101 Jan 01 12:26	18° \approx 58'32	
max. Earth dist.	16100 Jan 25 08:02	22° \approx 37'14	1.31655 AU		16101 Jan 06 12:47	0° \approx	
	16100 Jan 28 17:32	0° \approx					
evening rise	16100 Jan 31 00:26	4° \approx 49'15		superior conj	16101 Jan 08 07:35	3° \approx 59'32	1°37'52
desc. node	16100 Feb 07 17:58	19° \approx 56'20		minimum elong	16101 Jan 08 07:16	3° \approx 57'44	1°38'31
	16100 Feb 13 13:01	0° \approx		max. Earth dist.	16101 Jan 08 14:58	4° \approx 40'50	1.31080 AU
evening max el	16100 Mar 04 15:37	25° \approx 16'25	27°34'52	evening rise	16101 Jan 15 03:53	19° \approx 03'01	
	16100 Mar 10 12:38	0° \approx			16101 Jan 20 12:29	0° \approx	
retrograde	16100 Mar 18 14:53	2° \approx 44'24		desc. node	16101 Jan 25 14:42	9° \approx 27'55	
evening set	16100 Mar 25 10:24	0° \approx 29'56			16101 Feb 08 04:49	0° \approx	
	16100 Mar 26 03:55	30° \approx 1'0		evening max el	16101 Feb 14 20:48	7° \approx 22'11	27°07'14
min. Earth dist.	16100 Mar 29 04:37	27° \approx 31'15	0.62083 AU	retrograde	16101 Feb 28 21:47	14° \approx 39'56	
inferior conj	16100 Apr 01 05:42	24° \approx 39'30	-0°56'56	evening set	16101 Mar 07 12:55	12° \approx 45'43	
minimum elong	16100 Apr 01 07:40	24° \approx 34'52	0°56'22	min. Earth dist.	16101 Mar 11 11:10	10° \approx 03'19	0.59829 AU
asc. node	16100 Apr 04 04:42	22° \approx 01'43		inferior conj	16101 Mar 14 16:29	7° \approx 24'27	-2°21'59
morning rise	16100 Apr 08 08:03	19° \approx 35'36		minimum elong	16101 Mar 14 21:51	7° \approx 13'22	2°19'54
direct	16100 Apr 10 13:53	19° \approx 12'54		morning rise	16101 Mar 22 10:20	2° \approx 40'03	
morning max el	16100 Apr 17 06:45	22° \approx 35'52	17°47'31	asc. node	16101 Mar 22 02:03	2° \approx 45'48	
	16100 Apr 23 02:14	0° \approx		direct	16101 Mar 24 10:46	2° \approx 24'17	
morning set	16100 May 03 03:40	17° \approx 01'20		morning max el	16101 Mar 31 21:07	6° \approx 06'31	18°04'03
desc. node	16100 May 06 19:21	23° \approx 27'42		morning set	16101 Apr 16 10:59	0° \approx 40'04	
	16100 May 10 13:35	0° \approx			16101 Apr 16 02:20	0° \approx	
				desc. node	16101 Apr 23 16:07	13° \approx 56'23	
superior conj	16100 May 14 17:17	7° \approx 04'12	-1°01'17				
minimum elong	16100 May 14 11:38	6° \approx 40'26	1°01'07	superior conj	16101 Apr 26 12:11	19° \approx 00'57	-0°23'16
max. Earth dist.	16100 May 21 14:14	18° \approx 22'43	1.43954 AU	minimum elong	16101 Apr 26 10:14	18° \approx 52'18	0°23'28
	16100 May 28 22:45	0° \approx			16101 May 02 20:45	0° \approx	
evening rise	16100 May 29 04:07	0° \approx 20'46		max. Earth dist.	16101 May 04 02:11	2° \approx 03'19	1.42091 AU
	16100 Jun 18 07:55	0° \approx		evening rise	16101 May 09 08:56	10° \approx 41'11	
evening max el	16100 Jun 28 22:23	12° \approx 58'14	21°16'01		16101 May 21 23:13	0° \approx	
asc. node	16100 Jul 01 03:08	14° \approx 59'29		evening max el	16101 Jun 11 15:39	26° \approx 52'31	22°34'13
retrograde	16100 Jul 07 15:59	18° \approx 01'42			16101 Jun 15 04:21	0° \approx	
evening set	16100 Jul 12 02:10	16° \approx 01'49		asc. node	16101 Jun 18 00:05	1° \approx 46'13	
inferior conj	16100 Jul 17 07:38	10° \approx 01'35	3°08'33	retrograde	16101 Jun 21 13:14	2° \approx 40'23	
minimum elong	16100 Jul 17 07:37	10° \approx 01'37	3°07'57	evening set	16101 Jun 26 10:56	0° \approx 36'26	
min. Earth dist.	16100 Jul 17 15:49	9° \approx 33'03	0.68924 AU		16101 Jun 27 02:53	30° \approx 1'0	
morning rise	16100 Jul 22 12:49	3° \approx 41'56		inferior conj	16101 Jul 01 17:35	24° \approx 15'16	3°03'00
direct	16100 Jul 27 14:50	1° \approx 30'07		minimum elong	16101 Jul 01 16:40	24° \approx 18'29	3°02'13
desc. node	16100 Aug 02 18:16	3° \approx 58'38		min. Earth dist.	16101 Jul 01 12:40	24° \approx 32'24	0.69149 AU
morning max el	16100 Aug 06 20:34	7° \approx 34'54	23°00'03	morning rise	16101 Jul 06 22:14	18° \approx 02'56	
	16100 Aug 24 08:29	0° \approx		direct	16101 Jul 11 12:03	16° \approx 09'04	
morning set	16100 Sep 10 01:54	25° \approx 53'31		morning max el	16101 Jul 20 11:13	21° \approx 21'42	21°33'59
	16100 Sep 12 13:03	0° \approx		desc. node	16101 Jul 20 15:34	21° \approx 32'35	
max. Earth dist.	16100 Sep 14 11:14	3° \approx 15'57	1.40147 AU		16101 Jul 27 20:13	0° \approx	
					16101 Aug 17 13:54	0° \approx	
superior conj	16100 Sep 22 07:48	17° \approx 09'56	-0°41'54	morning set	16101 Aug 21 05:44	5° \approx 43'17	
minimum elong	16100 Sep 22 11:02	17° \approx 24'41	0°41'13	max. Earth dist.	16101 Aug 27 15:28	16° \approx 02'04	1.42406 AU
asc. node	16100 Sep 27 04:15	26° \approx 11'41					
	16100 Sep 29 04:20	0° \approx		superior conj	16101 Sep 04 04:40	28° \approx 44'52	-1°18'32
evening rise	16100 Oct 01 23:28	5° \approx 20'46		minimum elong	16101 Sep 04 11:05	29° \approx 12'35	1°17'46
	16100 Oct 16 20:00	0° \approx			16101 Sep 04 22:02	0° \approx	
evening max el	16100 Oct 17 22:40	1° \approx 11'00	18°31'15	asc. node	16101 Sep 14 00:55	16° \approx 15'33	
retrograde	16100 Oct 25 21:05	5° \approx 12'19		evening rise	16101 Sep 15 07:06	18° \approx 32'53	
evening set	16100 Oct 27 20:06	4° \approx 58'22			16101 Sep 21 16:20	0° \approx	
desc. node	16100 Oct 29 15:20	4° \approx 22'34		evening max el	16101 Oct 01 08:37	13° \approx 56'36	18°06'48
inferior conj	16100 Nov 04 17:13	0° \approx 28'00	-1°57'24	retrograde	16101 Oct 08 08:14	17° \approx 31'29	
minimum elong	16100 Nov 04 12:34	0° \approx 37'02	1°54'55	evening set	16101 Oct 10 13:31	17° \approx 10'10	
	16100 Nov 05 07:37	30° \approx 1'0		desc. node	16101 Oct 16 12:38	13° \approx 21'31	
min. Earth dist.	16100 Nov 07 21:53	28° \approx 00'23	0.57653 AU	inferior conj	16101 Oct 17 17:05	12° \approx 18'24	-0°22'37
morning rise	16100 Nov 12 01:38	25° \approx 20'57		minimum elong	16101 Oct 17 16:19	12° \approx 20'08	0°21'52
direct	16100 Nov 18 06:42	23° \approx 43'32		min. Earth dist.	16101 Oct 20 22:14	9° \approx 25'45	0.59864 AU
	16100 Dec 01 05:09	0° \approx		morning rise	16101 Oct 24 15:52	6° \approx 38'12	
morning max el	16100 Dec 02 12:39	1° \approx 13'31	26°59'02	direct	16101 Oct 31 05:57	4° \approx 35'36	
	16100 Dec 22 23:14	0° \approx		morning max el	16101 Nov 14 12:09	12° \approx 22'10	27°48'15

	16101 Nov 28 11:03	0°♊		morning max el	16102 Oct 27 18:30	24°♎19'58	27°58'04
asc. node	16101 Dec 11 01:35	21°♊41'37			16102 Nov 01 22:08	0°♎	
	16101 Dec 15 05:17	0°♊			16102 Nov 21 20:25	0°♊	
morning set	16101 Dec 16 18:03	3°♊12'00		asc. node	16102 Nov 27 22:34	11°♊27'59	
max. Earth dist.	16101 Dec 22 22:26	16°♊41'18	1.31047 AU	morning set	16102 Nov 30 17:39	17°♊05'43	
				max. Earth dist.	16102 Dec 06 02:37	28°♊29'54	1.31569 AU
superior conj	16101 Dec 23 18:52	18°♊35'25	1°33'03		16102 Dec 06 19:06	0°♊	
minimum elong	16101 Dec 23 17:34	18°♊28'07	1°33'41				
	16101 Dec 28 21:52	0°♋		superior conj	16102 Dec 08 04:21	3°♊02'52	1°22'10
evening rise	16101 Dec 30 11:39	3°♋25'43		minimum elong	16102 Dec 08 02:18	2°♊51'33	1°22'41
desc. node	16102 Jan 12 11:30	28°♋26'40		evening rise	16102 Dec 14 21:51	17°♊52'55	
	16102 Jan 13 10:17	0°♋			16102 Dec 20 18:05	0°♋	
evening max el	16102 Jan 27 18:25	18°♋35'24	26°04'52	desc. node	16102 Dec 30 08:22	16°♋40'44	
retrograde	16102 Feb 10 17:29	25°♋40'02		evening max el	16103 Jan 09 07:36	28°♋58'42	24°34'29
evening set	16102 Feb 16 20:45	24°♋11'22			16103 Jan 10 10:14	0°♋	
min. Earth dist.	16102 Feb 21 07:34	21°♋33'21	0.57658 AU	retrograde	16103 Jan 23 00:14	5°♋48'29	
inferior conj	16102 Feb 24 08:09	19°♋24'25	-3°52'46	evening set	16103 Jan 28 06:37	4°♋47'25	
minimum elong	16102 Feb 24 16:49	19°♋09'00	3°49'43	min. Earth dist.	16103 Feb 02 19:28	1°♋57'29	0.55846 AU
morning rise	16102 Mar 04 16:02	15°♋01'30		inferior conj	16103 Feb 05 02:34	0°♋32'03	-5°13'39
direct	16102 Mar 06 15:21	14°♋48'56		minimum elong	16103 Feb 05 11:26	0°♋18'17	5°11'19
asc. node	16102 Mar 08 23:24	15°♋07'27			16103 Feb 05 23:18	30°♌	
morning max el	16102 Mar 15 04:28	19°♋01'17	18°41'02	morning rise	16103 Feb 13 18:25	26°♌29'49	
	16102 Mar 23 05:37	0°♌		direct	16103 Feb 16 00:15	26°♌16'19	
morning set	16102 Mar 31 06:23	14°♌50'42		asc. node	16103 Feb 23 20:46	29°♌15'23	
	16102 Apr 08 03:17	0°♌			16103 Feb 24 18:47	0°♌	
superior conj	16102 Apr 09 03:02	1°♌51'29	0°11'50	morning max el	16103 Feb 26 00:33	1°♌08'04	19°40'23
minimum elong	16102 Apr 09 03:49	1°♌55'08	0°11'21	morning set	16103 Mar 15 09:48	29°♌20'30	
behind sun begin	16102 Apr 08 22:54	1°♌32'09			16103 Mar 15 17:38	0°♌	
behind sun end	16102 Apr 09 08:43	2°♌18'04		superior conj	16103 Mar 23 09:19	15°♌22'39	0°41'37
desc. node	16102 Apr 10 12:52	4°♌28'43		minimum elong	16103 Mar 23 11:31	15°♌33'28	0°41'08
max. Earth dist.	16102 Apr 16 10:21	15°♌04'22	1.39889 AU	desc. node	16103 Mar 28 09:32	25°♌00'21	
evening rise	16102 Apr 20 10:50	21°♌57'31		max. Earth dist.	16103 Mar 29 16:39	27°♌24'59	1.37589 AU
	16102 Apr 25 08:24	0°♍			16103 Mar 31 02:30	0°♌	
	16102 May 15 22:52	0°♍		evening rise	16103 Apr 02 09:07	4°♌04'51	
evening max el	16102 May 25 06:03	10°♍48'03	23°55'44		16103 Apr 18 09:10	0°♍	
asc. node	16102 Jun 04 21:05	17°♍16'18		evening max el	16103 May 07 19:25	24°♍42'35	25°13'59
retrograde	16102 Jun 05 07:36	17°♍17'07			16103 May 14 09:06	0°♍	
evening set	16102 Jun 10 17:00	14°♍59'28		retrograde	16103 May 19 22:01	1°♍44'35	
min. Earth dist.	16102 Jun 15 09:02	9°♍32'59	0.68885 AU	asc. node	16103 May 22 18:11	1°♍11'11	
inferior conj	16102 Jun 16 03:00	8°♍31'47	2°47'02		16103 May 24 20:54	30°♌♍	
minimum elong	16102 Jun 16 01:19	8°♍37'30	2°46'00	evening set	16103 May 25 18:43	29°♍16'58	
morning rise	16102 Jun 21 09:40	2°♍28'13		min. Earth dist.	16103 May 30 02:52	24°♍27'29	0.68136 AU
direct	16102 Jun 25 11:32	0°♍54'01		inferior conj	16103 May 31 09:54	22°♍46'15	2°20'21
morning max el	16102 Jul 03 07:58	5°♍19'41	20°17'36	minimum elong	16103 May 31 07:46	22°♍53'13	2°19'05
desc. node	16102 Jul 07 12:47	10°♍01'44		morning rise	16103 Jun 05 21:13	16°♍52'35	
	16102 Jul 21 20:14	0°♎		direct	16103 Jun 09 11:43	15°♍38'02	
morning set	16102 Jul 31 14:31	14°♎46'34		morning max el	16103 Jun 16 12:00	19°♍27'44	19°15'01
max. Earth dist.	16102 Aug 10 02:49	29°♎40'20	1.44249 AU	desc. node	16103 Jun 24 09:55	29°♍11'01	
	16102 Aug 10 07:45	0°♏			16103 Jun 24 23:52	0°♍	
superior conj	16102 Aug 16 02:30	9°♏21'26	-1°50'38	greatest brilliancy	16103 Jun 29 06:05	6°♍10'54	-0.7m
minimum elong	16102 Aug 16 10:21	9°♏53'39	1°50'15	morning set	16103 Jul 10 19:32	23°♍44'45	
	16102 Aug 28 07:58	0°♏			16103 Jul 14 20:52	0°♎	
evening rise	16102 Aug 28 22:19	1°♏01'58		max. Earth dist.	16103 Jul 23 19:22	13°♎54'14	1.45482 AU
asc. node	16102 Aug 31 21:36	6°♏09'46					
evening max el	16102 Sep 14 22:46	27°♏11'13	18°01'46	superior conj	16103 Jul 27 01:52	19°♎03'13	-2°10'49
	16102 Sep 18 20:22	0°♏		minimum elong	16103 Jul 27 06:18	19°♎20'45	2°11'13
retrograde	16102 Sep 21 10:11	0°♏33'21			16103 Aug 02 22:29	0°♏	
evening set	16102 Sep 23 23:24	0°♏01'02		evening rise	16103 Aug 10 15:45	12°♏34'35	
	16102 Sep 24 00:24	30°♏		asc. node	16103 Aug 18 18:16	25°♏49'16	
inferior conj	16102 Sep 30 11:14	24°♏50'09	0°53'51		16103 Aug 21 10:00	0°♏	
minimum elong	16102 Sep 30 12:44	24°♏46'18	0°53'33	evening max el	16103 Aug 29 13:27	10°♏45'33	18°15'04
desc. node	16102 Oct 03 09:58	21°♏49'13		retrograde	16103 Sep 04 22:20	14°♏08'10	
min. Earth dist.	16102 Oct 03 08:34	21°♏52'39	0.62154 AU	evening set	16103 Sep 07 20:14	13°♏21'55	
morning rise	16102 Oct 06 23:31	18°♏45'20		inferior conj	16103 Sep 13 19:36	7°♏54'39	1°50'54
direct	16102 Oct 13 15:58	16°♏23'03		minimum elong	16103 Sep 13 21:53	7°♏48'03	1°50'14
				min. Earth dist.	16103 Sep 16 04:55	5°♏10'39	0.64298 AU





























































































































morning rise	16103 Sep 19 21:50	1°♌35'01		morning rise	16104 Sep 02 08:03	14°♏58'01	
desc. node	16103 Sep 20 07:20	1°♌16'50		desc. node	16104 Sep 06 04:42	12°♏42'49	
	16103 Sep 22 08:59	30°♏00'46		direct	16104 Sep 08 14:30	12°♏20'33	
direct	16103 Sep 26 11:19	29°♏00'46		morning max el	16104 Sep 21 16:14	20°♏04'56	26°35'02
	16103 Sep 30 20:47	0°♌			16104 Sep 30 04:52	0°♌	
morning max el	16103 Oct 10 04:48	6°♌58'28	27°31'19		16104 Oct 20 00:48	0°♏	
	16103 Oct 27 22:32	0°♏		morning set	16104 Oct 27 12:08	13°♏29'00	
morning set	16103 Nov 14 08:43	0°♏34'01		max. Earth dist.	16104 Oct 31 10:46	21°♏07'04	1.34289 AU
	16103 Nov 14 01:50	0°♏		asc. node	16104 Oct 31 16:17	21°♏34'23	
asc. node	16103 Nov 14 19:29	1°♏27'24			16104 Nov 04 19:53	0°♏	
max. Earth dist.	16103 Nov 18 23:36	9°♏58'48	1.32652 AU				
				superior conj	16104 Nov 05 09:19	1°♏09'42	0°41'59
superior conj	16103 Nov 22 09:58	17°♏16'33	1°05'09	minimum elong	16104 Nov 05 07:17	0°♏59'08	0°42'15
minimum elong	16103 Nov 22 07:36	17°♏03'48	1°05'30	evening rise	16104 Nov 12 18:07	16°♏42'04	
	16103 Nov 28 06:37	0°♏			16104 Nov 19 08:36	0°♏	
evening rise	16103 Nov 29 08:39	2°♏20'10		evening max el	16104 Dec 02 08:15	19°♏02'08	21°13'21
	16103 Dec 14 08:08	0°♏		desc. node	16104 Dec 03 02:17	19°♏45'16	
desc. node	16103 Dec 17 05:17	3°♏54'13		retrograde	16104 Dec 14 04:19	24°♏53'31	
evening max el	16103 Dec 21 17:02	8°♏55'19	22°51'23	evening set	16104 Dec 16 23:25	24°♏35'20	
retrograde	16104 Jan 03 18:24	15°♏23'00		inferior conj	16104 Dec 25 17:06	20°♏44'52	-5°46'41
evening set	16104 Jan 07 19:12	14°♏47'35		minimum elong	16104 Dec 25 10:37	20°♏54'00	5°45'07
min. Earth dist.	16104 Jan 15 02:25	11°♏26'06	0.54682 AU	min. Earth dist.	16104 Dec 26 07:46	20°♏24'09	0.54398 AU
inferior conj	16104 Jan 16 02:20	10°♏52'06	-5°59'13	morning rise	16105 Jan 02 22:06	16°♏54'07	
minimum elong	16104 Jan 16 05:03	10°♏48'15	5°58'28	direct	16105 Jan 06 22:46	16°♏19'03	
morning rise	16104 Jan 24 16:09	7°♏03'03		morning max el	16105 Jan 19 21:35	22°♏37'21	22°45'06
direct	16104 Jan 27 15:16	6°♏42'45			16105 Jan 26 06:07	0°♏	
morning max el	16104 Feb 08 06:08	12°♏19'15	21°02'52	asc. node	16105 Jan 27 15:24	1°♏56'58	
asc. node	16104 Feb 10 18:06	14°♏58'20		morning set	16105 Feb 11 05:29	28°♏44'42	
	16104 Feb 20 16:16	0°♏			16105 Feb 11 19:37	0°♏	
morning set	16104 Feb 27 18:17	14°♏00'59					
				superior conj	16105 Feb 18 04:44	13°♏43'43	1°22'22
superior conj	16104 Mar 06 03:00	29°♏23'26	1°05'12	minimum elong	16105 Feb 18 06:53	13°♏55'10	1°22'25
minimum elong	16104 Mar 06 05:33	29°♏36'31	1°04'55	max. Earth dist.	16105 Feb 21 17:06	21°♏07'57	1.33615 AU
	16104 Mar 06 10:07	0°♏		evening rise	16105 Feb 26 06:18	0°♏18'02	
max. Earth dist.	16104 Mar 11 01:29	9°♏19'22	1.35438 AU		16105 Feb 26 02:37	0°♏	
desc. node	16104 Mar 14 06:11	15°♏27'50		desc. node	16105 Mar 01 02:50	5°♏46'33	
evening rise	16104 Mar 15 00:48	16°♏54'59			16105 Mar 15 10:45	0°♏	
	16104 Mar 22 09:21	0°♏		evening max el	16105 Apr 01 22:40	22°♏08'21	27°11'09
	16104 Apr 11 17:50	0°♏		retrograde	16105 Apr 15 11:05	29°♏40'06	
evening max el	16104 Apr 19 08:59	8°♏32'04	26°21'38	evening set	16105 Apr 22 01:42	27°♏09'16	
retrograde	16104 May 02 07:33	15°♏55'09		asc. node	16105 Apr 25 12:35	23°♏55'53	
evening set	16104 May 08 14:17	13°♏22'45		min. Earth dist.	16105 Apr 25 22:54	23°♏28'01	0.65298 AU
asc. node	16104 May 08 15:21	13°♏20'35		inferior conj	16105 Apr 28 07:33	20°♏49'08	0°51'15
min. Earth dist.	16104 May 12 16:08	9°♏08'43	0.66926 AU	minimum elong	16105 Apr 28 06:13	20°♏52'52	0°50'14
inferior conj	16104 May 14 12:13	6°♏54'00	1°42'09	morning rise	16105 May 04 12:27	15°♏19'27	
minimum elong	16104 May 14 10:08	7°♏00'24	1°40'49	direct	16105 May 07 06:53	14°♏38'34	
morning rise	16104 May 20 06:56	1°♏11'26		morning max el	16105 May 13 14:07	17°♏54'28	17°58'45
direct	16104 May 23 10:52	0°♏15'01			16105 May 22 15:55	0°♏	
morning max el	16104 May 29 22:40	3°♏41'34	18°28'25	desc. node	16105 May 28 03:54	8°♏49'40	
desc. node	16104 Jun 10 06:57	18°♏49'41		morning set	16105 May 31 16:07	14°♏34'27	
	16104 Jun 17 10:53	0°♏			16105 Jun 10 04:16	0°♏	
morning set	16104 Jun 19 16:28	3°♏30'59					
				superior conj	16105 Jun 15 00:52	7°♏43'33	-1°54'36
superior conj	16104 Jul 05 11:54	28°♏16'30	-2°12'30	minimum elong	16105 Jun 14 16:33	7°♏10'41	1°54'42
minimum elong	16104 Jul 05 08:40	28°♏03'55	2°13'08	max. Earth dist.	16105 Jun 18 11:04	13°♏06'40	1.45759 AU
max. Earth dist.	16104 Jul 05 14:47	28°♏27'45	1.45998 AU		16105 Jun 29 08:34	0°♏	
	16104 Jul 06 14:28	0°♏		evening rise	16105 Jul 01 02:53	2°♏42'29	
evening rise	16104 Jul 21 08:06	23°♏03'52		greatest brilliancy	16105 Jul 14 15:08	23°♏08'23	-0.7m
	16104 Jul 25 17:49	0°♏			16105 Jul 19 10:44	0°♏	
greatest brilliancy	16104 Jul 29 23:06	6°♏35'55	-0.8m	asc. node	16105 Jul 22 11:44	3°♏59'54	
asc. node	16104 Aug 04 14:58	15°♏08'23		evening max el	16105 Jul 26 09:26	8°♏25'30	19°33'00
evening max el	16104 Aug 12 01:44	24°♏32'14	18°45'48	retrograde	16105 Aug 02 14:39	12°♏27'03	
retrograde	16104 Aug 18 16:46	28°♏08'07		evening set	16105 Aug 06 07:56	11°♏06'55	
evening set	16104 Aug 22 00:02	27°♏05'37		inferior conj	16105 Aug 11 16:35	5°♏12'29	2°55'01
inferior conj	16104 Aug 27 14:25	21°♏24'04	2°30'26	minimum elong	16105 Aug 11 18:03	5°♏07'39	2°54'27
minimum elong	16104 Aug 27 16:33	21°♏17'23	2°29'46	min. Earth dist.	16105 Aug 12 22:10	3°♏34'25	0.67596 AU
min. Earth dist.	16104 Aug 29 10:03	19°♏08'02	0.66148 AU		16105 Aug 15 21:12	30°♏00'00	

morning rise	16105 Aug 17 03:37	28° Ω 46'09		asc. node	16106 Jul 09 08:33	22° Ω 13'20	
direct	16105 Aug 23 00:13	26° Ω 13'49		evening max el	16106 Jul 09 11:08	22° Ω 19'46	20°34'54
desc. node	16105 Aug 24 02:04	26° Ω 18'23		retrograde	16106 Jul 17 13:40	26° Ω 58'05	
	16105 Aug 31 07:56	0° Π		evening set	16106 Jul 21 17:37	25° Ω 19'57	
morning max el	16105 Sep 04 03:18	3° Π 29'00	25°18'31	inferior conj	16106 Jul 26 23:29	19° Ω 13'50	3°06'53
	16105 Sep 24 10:22	0° Ω		minimum elong	16106 Jul 27 00:02	19° Ω 11'57	3°06'19
morning set	16105 Oct 10 00:17	25° Ω 43'08		min. Earth dist.	16106 Jul 27 15:18	18° Ω 19'22	0.68583 AU
	16105 Oct 12 08:48	0° Π		morning rise	16106 Aug 01 06:08	12° Ω 51'08	
max. Earth dist.	16105 Oct 13 13:12	2° Π 11'37	1.36397 AU	direct	16106 Aug 06 15:09	10° Ω 30'36	
asc. node	16105 Oct 18 13:02	11° Π 45'30		desc. node	16106 Aug 10 23:25	11° Ω 45'11	
				morning max el	16106 Aug 17 14:13	17° Ω 03'07	23°51'22
superior conj	16105 Oct 19 23:35	14° Π 36'12	0°13'00		16106 Aug 28 08:51	0° Π	
minimum elong	16105 Oct 19 22:47	14° Π 32'12	0°13'19		16106 Sep 17 10:38	0° Ω	
behind sun begin	16105 Oct 19 19:09	14° Π 14'11		morning set	16106 Sep 21 16:57	7° Ω 06'28	
behind sun end	16105 Oct 20 02:24	14° Π 50'13		max. Earth dist.	16106 Sep 25 12:05	13° Ω 40'44	1.38773 AU
	16105 Oct 27 13:33	0° Σ					
evening rise	16105 Oct 28 00:14	0° Σ 54'30		superior conj	16106 Oct 03 01:09	27° Ω 26'54	-0°20'55
evening max el	16105 Nov 14 12:44	29° Σ 49'57	19°52'51	minimum elong	16106 Oct 03 02:37	27° Ω 33'54	0°20'23
	16105 Nov 14 16:47	0° Σ			16106 Oct 04 09:24	0° Π	
desc. node	16105 Nov 19 23:22	3° Σ 49'56		asc. node	16106 Oct 05 09:45	1° Π 56'36	
retrograde	16105 Nov 24 17:57	4° Σ 55'46		evening rise	16106 Oct 12 00:23	14° Π 50'37	
evening set	16105 Nov 26 19:29	4° Σ 44'16			16106 Oct 20 02:12	0° Σ	
inferior conj	16105 Dec 05 13:29	0° Σ 44'24	-4°37'10	evening max el	16106 Oct 28 07:22	11° Σ 28'03	18°54'33
minimum elong	16105 Dec 05 03:27	0° Σ 59'46	4°33'35	retrograde	16106 Nov 05 23:30	15° Σ 50'34	
	16105 Dec 06 18:21	30° Σ		desc. node	16106 Nov 06 20:32	15° Σ 48'01	
min. Earth dist.	16105 Dec 07 14:32	29° Σ 29'14	0.55064 AU	evening set	16106 Nov 07 20:55	15° Σ 38'52	
morning rise	16105 Dec 13 10:10	26° Σ 33'19		inferior conj	16106 Nov 16 03:27	11° Σ 20'16	-2°57'08
direct	16105 Dec 18 11:45	25° Σ 37'01		minimum elong	16106 Nov 15 20:13	11° Σ 33'05	2°53'42
	16105 Dec 29 09:38	0° Σ		min. Earth dist.	16106 Nov 19 02:03	9° Σ 15'46	0.56539 AU
morning max el	16106 Jan 01 05:57	2° Σ 27'53	24°35'16	morning rise	16106 Nov 23 16:40	6° Σ 34'40	
asc. node	16106 Jan 14 12:37	19° Σ 53'51		direct	16106 Nov 29 13:22	5° Σ 13'07	
	16106 Jan 20 04:01	0° \approx		morning max el	16106 Dec 13 17:07	12° Σ 29'54	26°14'27
morning set	16106 Jan 26 17:28	13° \approx 26'12			16106 Dec 27 08:08	0° Σ	
				asc. node	16107 Jan 01 09:48	8° Σ 34'34	
superior conj	16106 Feb 02 11:51	28° \approx 15'58	1°33'13	morning set	16107 Jan 11 04:26	28° Σ 00'55	
minimum elong	16106 Feb 02 13:10	28° \approx 23'12	1°33'35		16107 Jan 12 02:26	0° \approx	
	16106 Feb 03 06:51	0° Σ					
max. Earth dist.	16106 Feb 04 16:29	3° Σ 02'55	1.32231 AU	superior conj	16107 Jan 17 22:08	12° \approx 54'12	1°37'55
evening rise	16106 Feb 09 22:24	14° Σ 05'40		minimum elong	16107 Jan 17 22:25	12° \approx 55'49	1°38'30
desc. node	16106 Feb 15 23:29	25° Σ 51'48		max. Earth dist.	16107 Jan 18 21:42	15° \approx 05'27	1.31345 AU
	16106 Feb 18 06:02	0° Υ		evening rise	16107 Jan 24 22:23	28° \approx 11'19	
	16106 Mar 10 11:10	0° Σ			16107 Jan 25 19:12	0° Σ	
evening max el	16106 Mar 15 11:00	5° Σ 19'29	27°35'10	desc. node	16107 Feb 02 20:11	15° Σ 37'50	
retrograde	16106 Mar 29 07:25	12° Σ 50'03			16107 Feb 11 12:10	0° Υ	
evening set	16106 Apr 05 02:35	10° Σ 27'43		evening max el	16107 Feb 25 19:31	17° Υ 52'16	27°27'29
min. Earth dist.	16106 Apr 08 21:07	7° Σ 15'16	0.63329 AU	retrograde	16107 Mar 11 19:31	25° Υ 15'45	
inferior conj	16106 Apr 11 16:59	4° Σ 24'14	-0°13'24	evening set	16107 Mar 18 14:12	23° Υ 09'01	
minimum elong	16106 Apr 11 17:25	4° Σ 23'09	0°13'34	min. Earth dist.	16107 Mar 22 09:21	20° Υ 18'46	0.61129 AU
transit middle	16106 Apr 11 17:25	4° Σ 23'09	0°13'34	inferior conj	16107 Mar 25 13:09	17° Υ 30'29	-1°31'41
transit begin	16106 Apr 11 15:44	4° Σ 27'24		minimum elong	16107 Mar 25 16:28	17° Υ 23'05	1°30'29
transit end	16106 Apr 11 19:06	4° Σ 18'54		asc. node	16107 Mar 30 07:12	13° Υ 46'44	
asc. node	16106 Apr 12 09:52	3° Σ 41'47		morning rise	16107 Apr 01 22:02	12° Υ 34'35	
	16106 Apr 16 19:14	30° Σ		direct	16107 Apr 04 01:23	12° Υ 15'10	
morning rise	16106 Apr 18 10:50	29° Υ 09'55		morning max el	16107 Apr 11 00:21	15° Υ 44'36	17°52'16
direct	16106 Apr 20 20:57	28° Υ 41'28			16107 Apr 20 23:42	0° Σ	
	16106 Apr 24 21:18	0° Σ		morning set	16107 Apr 26 16:00	10° Σ 05'51	
morning max el	16106 Apr 27 07:42	1° Σ 58'22	17°46'29	desc. node	16107 May 01 21:36	19° Σ 29'41	
morning set	16106 May 13 17:46	26° Σ 51'31					
desc. node	16106 May 15 00:47	29° Σ 04'34		superior conj	16107 May 07 13:10	29° Σ 22'29	-0°45'03
	16106 May 15 13:43	0° Π		minimum elong	16107 May 07 09:08	29° Σ 05'09	0°45'02
					16107 May 07 21:55	0° Π	
superior conj	16106 May 26 07:16	18° Π 00'27	-1°22'43	max. Earth dist.	16107 May 14 21:07	11° Π 39'00	1.43218 AU
minimum elong	16106 May 25 23:40	17° Π 29'23	1°22'30	evening rise	16107 May 21 08:08	21° Π 58'57	
max. Earth dist.	16106 Jun 01 05:56	27° Π 35'31	1.44801 AU		16107 May 26 12:40	0° Σ	
	16106 Jun 02 18:24	0° Σ			16107 Jun 16 18:45	0° Ω	
evening rise	16106 Jun 10 13:20	12° Σ 06'43		evening max el	16107 Jun 22 07:00	6° Ω 13'40	21°48'20
	16106 Jun 22 11:25	0° Ω		asc. node	16107 Jun 26 05:27	9° Ω 36'19	

retrograde	16107 Jul 01 12:07	11°♎35'53			16108 May 18 20:13	0°♊	
evening set	16107 Jul 06 03:14	9°♎40'40		evening max el	16108 Jun 03 22:35	20°♊07'34	23°08'46
inferior conj	16107 Jul 11 08:55	3°♎24'13	3°07'29	asc. node	16108 Jun 12 02:27	25°♊52'38	
minimum elong	16107 Jul 11 08:31	3°♎25'39	3°06'48	retrograde	16108 Jun 14 08:27	26°♊14'26	
min. Earth dist.	16107 Jul 11 11:24	3°♎15'31	0.69086 AU	evening set	16108 Jun 19 11:05	24°♊04'10	
	16107 Jul 13 21:26	30°♋♊		inferior conj	16108 Jun 24 18:53	17°♊39'35	2°57'32
morning rise	16107 Jul 16 13:36	27°♊07'38		minimum elong	16108 Jun 24 17:37	17°♊43'59	2°56'38
direct	16107 Jul 21 10:21	25°♊03'26		min. Earth dist.	16108 Jun 24 08:22	18°♊16'00	0.69095 AU
desc. node	16107 Jul 28 20:45	28°♊39'13		morning rise	16108 Jun 30 00:05	11°♊30'43	
	16107 Jul 30 08:18	0°♎		direct	16108 Jul 04 08:38	9°♊45'19	
morning max el	16107 Jul 31 02:56	0°♎45'41	22°22'35	morning max el	16108 Jul 12 20:01	14°♊37'25	20°59'57
	16107 Aug 22 04:24	0°♎		desc. node	16108 Jul 14 18:00	16°♊38'33	
morning set	16107 Sep 02 10:34	17°♎31'07			16108 Jul 25 02:49	0°♎	
max. Earth dist.	16107 Sep 07 13:19	25°♎56'33	1.41150 AU	morning set	16108 Aug 12 05:13	26°♎58'23	
	16107 Sep 09 22:47	0°♎			16108 Aug 14 03:38	0°♎	
				max. Earth dist.	16108 Aug 19 20:10	9°♎04'30	1.43251 AU
superior conj	16107 Sep 15 09:43	9°♎31'55	-0°57'38				
minimum elong	16107 Sep 15 14:21	9°♎52'33	0°56'51	superior conj	16108 Aug 26 21:05	20°♎42'26	-1°33'08
asc. node	16107 Sep 22 06:26	22°♎04'07		minimum elong	16108 Aug 27 04:30	21°♎13'46	1°32'26
evening rise	16107 Sep 25 15:15	28°♎21'58			16108 Sep 01 07:06	0°♎	
	16107 Sep 26 12:12	0°♎		evening rise	16108 Sep 07 16:35	11°♎17'35	
evening max el	16107 Oct 11 12:56	23°♎51'40	18°18'18	asc. node	16108 Sep 08 03:07	12°♎04'29	
retrograde	16107 Oct 19 00:31	27°♎40'31			16108 Sep 18 16:09	0°♎	
evening set	16107 Oct 21 01:43	27°♎24'00		evening max el	16108 Sep 24 01:10	6°♎51'04	18°02'23
desc. node	16107 Oct 24 17:49	25°♎41'13		retrograde	16108 Sep 30 18:30	10°♎19'00	
inferior conj	16107 Oct 28 15:19	22°♎44'11	-1°15'14	evening set	16108 Oct 03 02:55	9°♎53'33	
minimum elong	16107 Oct 28 12:28	22°♎50'03	1°13'32	inferior conj	16108 Oct 09 23:29	4°♎53'38	0°12'15
min. Earth dist.	16107 Oct 31 21:23	20°♎03'26	0.58564 AU	minimum elong	16108 Oct 09 23:53	4°♎52'41	0°12'26
morning rise	16107 Nov 04 19:45	17°♎21'47		transit middle	16108 Oct 09 23:53	4°♎52'41	0°12'26
direct	16107 Nov 11 05:15	15°♎33'24		transit begin	16108 Oct 09 21:48	4°♎57'41	
morning max el	16107 Nov 25 12:13	23°♎11'34	27°24'51	transit end	16108 Oct 10 01:59	4°♎47'40	
	16107 Dec 01 15:03	0°♎		desc. node	16108 Oct 10 15:07	4°♎16'04	
asc. node	16107 Dec 19 06:53	27°♎47'25		min. Earth dist.	16108 Oct 13 02:12	1°♎56'07	0.60840 AU
	16107 Dec 20 10:36	0°♎			16108 Oct 15 09:03	30°♋♎	
morning set	16107 Dec 26 12:32	12°♎23'29		morning rise	16108 Oct 16 17:48	29°♎01'32	
				direct	16108 Oct 23 09:38	26°♎49'23	
superior conj	16108 Jan 02 09:34	27°♎32'20	1°36'33		16108 Nov 01 01:07	0°♎	
minimum elong	16108 Jan 02 08:48	27°♎28'05	1°37'14	morning max el	16108 Nov 06 15:01	4°♎42'17	27°57'09
max. Earth dist.	16108 Jan 02 05:20	27°♎08'38	1.30992 AU		16108 Nov 25 11:55	0°♎	
	16108 Jan 03 11:55	0°♎		asc. node	16108 Dec 05 03:54	17°♎23'41	
evening rise	16108 Jan 09 03:52	12°♎28'49		morning set	16108 Dec 09 15:52	26°♎29'27	
	16108 Jan 17 22:20	0°♎			16108 Dec 11 07:44	0°♎	
desc. node	16108 Jan 20 16:57	4°♎56'29		max. Earth dist.	16108 Dec 15 11:42	9°♎04'24	1.31195 AU
evening max el	16108 Feb 07 21:27	29°♎34'49	26°44'44				
	16108 Feb 08 08:11	0°♎		superior conj	16108 Dec 16 20:19	12°♎05'33	1°29'10
retrograde	16108 Feb 21 21:59	6°♎47'53		minimum elong	16108 Dec 16 18:40	11°♎56'18	1°29'47
evening set	16108 Feb 28 09:14	5°♎03'39		evening rise	16108 Dec 23 12:53	26°♎53'55	
min. Earth dist.	16108 Mar 03 11:16	2°♎25'07	0.58875 AU		16108 Dec 24 23:36	0°♎	
inferior conj	16108 Mar 06 16:09	29°♎56'42	-3°00'28	desc. node	16109 Jan 06 13:46	23°♎37'54	
minimum elong	16108 Mar 06 23:03	29°♎43'19	2°57'51		16109 Jan 10 19:37	0°♎	
	16108 Mar 06 14:27	30°♋♎		evening max el	16109 Jan 19 15:12	10°♎24'57	25°29'08
morning rise	16108 Mar 14 16:25	25°♎21'45		retrograde	16109 Feb 02 12:44	17°♎24'22	
asc. node	16108 Mar 16 04:34	25°♎08'38		evening set	16109 Feb 08 08:02	16°♎07'30	
direct	16108 Mar 16 15:40	25°♎07'51		min. Earth dist.	16109 Feb 13 03:59	13°♎26'21	0.56821 AU
morning max el	16108 Mar 24 12:17	29°♎01'22	18°17'18	inferior conj	16109 Feb 15 22:48	11°♎34'27	-4°29'41
	16108 Mar 25 10:59	0°♎		minimum elong	16109 Feb 16 08:10	11°♎18'44	4°26'42
morning set	16108 Apr 09 04:58	23°♎59'09		morning rise	16109 Feb 24 11:08	7°♎20'44	
	16108 Apr 12 09:17	0°♎		direct	16109 Feb 26 11:49	7°♎08'28	
desc. node	16108 Apr 17 18:21	10°♎00'03		asc. node	16109 Mar 03 01:54	8°♎15'19	
				morning max el	16109 Mar 07 15:22	11°♎37'01	19°03'27
superior conj	16108 Apr 18 17:06	11°♎43'32	-0°07'54		16109 Mar 19 21:14	0°♎	
minimum elong	16108 Apr 18 16:27	11°♎40'39	0°08'13	morning set	16109 Mar 24 04:07	8°♎18'20	
behind sun begin	16108 Apr 18 10:03	11°♎11'33					
behind sun end	16108 Apr 18 22:52	12°♎09'41		superior conj	16109 Apr 01 14:58	24°♎52'04	0°25'11
max. Earth dist.	16108 Apr 26 07:01	25°♎01'58	1.41176 AU	minimum elong	16109 Apr 01 16:30	24°♎59'24	0°24'41
	16108 Apr 29 06:08	0°♎			16109 Apr 04 08:09	0°♎	
evening rise	16108 Apr 30 21:36	2°♎42'13		desc. node	16109 Apr 04 15:03	0°♎32'05	

max. Earth dist.	16109 Apr 08 13:18	7°♄41'50	1.38905 AU	evening rise	16110 Mar 25 14:31	26°♄47'26	
evening rise	16109 Apr 12 08:24	14°♄20'42			16110 Mar 27 09:31	0°♄	
	16109 Apr 21 22:06	0°♄			16110 Apr 15 08:37	0°♄	
	16109 May 13 17:25	0°♄		evening max el	16110 Apr 30 01:56	17°♄56'40	25°44'40
evening max el	16109 May 17 12:19	4°♄02'38	24°29'57	retrograde	16110 May 12 13:40	25°♄08'32	
retrograde	16109 May 29 01:21	10°♄47'26		asc. node	16110 May 16 20:36	23°♄54'16	
asc. node	16109 May 29 23:30	10°♄43'50		evening set	16110 May 18 14:48	22°♄38'28	
evening set	16109 Jun 03 15:30	8°♄25'14		min. Earth dist.	16110 May 22 20:12	18°♄04'11	0.67672 AU
min. Earth dist.	16109 Jun 08 04:01	3°♄14'19	0.68619 AU	inferior conj	16110 May 24 08:42	16°♄08'05	2°05'39
inferior conj	16109 Jun 09 03:28	1°♄55'36	2°37'06	minimum elong	16110 May 24 06:31	16°♄15'04	2°04'20
minimum elong	16109 Jun 09 01:33	2°♄02'02	2°35'57	morning rise	16110 May 29 22:47	10°♄18'47	
	16109 Jun 10 14:30	30°♄♄		direct	16110 Jun 02 08:46	9°♄11'59	
morning rise	16109 Jun 14 11:45	25°♄55'50		morning max el	16110 Jun 09 02:38	12°♄50'07	18°53'12
direct	16109 Jun 18 08:41	24°♄30'02		desc. node	16110 Jun 18 12:14	24°♄48'49	
morning max el	16109 Jun 25 19:42	28°♄39'13	19°49'03		16110 Jun 21 23:58	0°♄	
	16109 Jun 27 02:58	0°♄		greatest brilliancy	16110 Jun 22 13:32	0°♄51'18	-0.8m
desc. node	16109 Jul 01 15:10	5°♄25'57		morning set	16110 Jul 01 19:42	15°♄05'55	
	16109 Jul 18 13:35	0°♄			16110 Jul 11 10:03	0°♄	
morning set	16109 Jul 22 09:54	5°♄52'23		max. Earth dist.	16110 Jul 16 04:03	7°♄24'13	1.45796 AU
max. Earth dist.	16109 Aug 02 09:32	22°♄58'10	1.44855 AU				
	16109 Aug 06 19:23	0°♄		superior conj	16110 Jul 18 01:04	10°♄20'18	-2°14'02
				minimum elong	16110 Jul 18 02:27	10°♄25'42	2°14'38
superior conj	16109 Aug 07 08:56	0°♄54'32	-2°01'06		16110 Jul 30 10:55	0°♄	
minimum elong	16109 Aug 07 16:03	1°♄23'13	2°01'04	evening rise	16110 Aug 02 06:06	4°♄30'00	
evening rise	16109 Aug 20 23:08	23°♄23'49		asc. node	16110 Aug 12 20:30	21°♄24'51	
	16109 Aug 24 20:54	0°♄			16110 Aug 18 19:49	0°♄	
asc. node	16109 Aug 25 23:48	1°♄52'57		evening max el	16110 Aug 22 06:06	3°♄56'36	18°26'00
evening max el	16109 Sep 07 16:01	20°♄15'28	18°05'17	retrograde	16110 Aug 28 16:21	7°♄22'55	
retrograde	16109 Sep 14 01:08	23°♄35'53		evening set	16110 Aug 31 18:18	6°♄29'48	
evening set	16109 Sep 16 18:02	22°♄57'56		inferior conj	16110 Sep 06 13:24	0°♄56'09	2°09'36
inferior conj	16109 Sep 23 00:09	17°♄40'03	1°20'21	minimum elong	16110 Sep 06 15:43	0°♄49'13	2°08'55
minimum elong	16109 Sep 23 02:08	17°♄34'40	1°19'49		16110 Sep 07 08:08	30°♄♄	
min. Earth dist.	16109 Sep 25 16:50	14°♄46'08	0.63101 AU	min. Earth dist.	16110 Sep 08 16:56	28°♄22'52	0.65138 AU
desc. node	16109 Sep 27 12:28	12°♄58'56		morning rise	16110 Sep 12 11:49	24°♄33'10	
morning rise	16109 Sep 29 08:04	11°♄28'02		desc. node	16110 Sep 14 09:49	23°♄13'03	
direct	16109 Oct 06 00:03	8°♄59'20		direct	16110 Sep 18 22:47	21°♄56'41	
morning max el	16109 Oct 19 23:09	16°♄57'48	27°50'40	morning max el	16110 Oct 02 10:07	29°♄49'30	27°10'24
	16109 Oct 30 19:39	0°♄			16110 Oct 02 14:17	0°♄	
	16109 Nov 18 06:31	0°♄			16110 Oct 24 18:24	0°♄	
asc. node	16109 Nov 22 00:50	7°♄15'56		morning set	16110 Nov 06 22:37	23°♄27'23	
morning set	16109 Nov 23 12:07	10°♄12'39		asc. node	16110 Nov 08 21:43	27°♄19'01	
max. Earth dist.	16109 Nov 28 13:02	20°♄44'03	1.31963 AU		16110 Nov 10 05:47	0°♄	
				max. Earth dist.	16110 Nov 11 06:08	2°♄03'57	1.33295 AU
superior conj	16109 Dec 01 04:25	26°♄27'43	1°15'42				
minimum elong	16109 Dec 01 02:10	26°♄15'25	1°16'09	superior conj	16110 Nov 15 07:42	10°♄33'26	0°56'05
	16109 Dec 02 19:06	0°♄		minimum elong	16110 Nov 15 05:22	10°♄21'07	0°56'22
evening rise	16109 Dec 07 23:32	11°♄21'25		evening rise	16110 Nov 22 10:01	25°♄47'09	
	16109 Dec 17 07:17	0°♄			16110 Nov 24 09:59	0°♄	
desc. node	16109 Dec 24 10:39	11°♄28'06		desc. node	16110 Dec 11 07:37	28°♄09'08	
evening max el	16110 Jan 01 02:03	20°♄33'21	23°51'07		16110 Dec 13 00:55	0°♄	
retrograde	16110 Jan 14 13:42	27°♄14'22		evening max el	16110 Dec 13 12:43	0°♄29'20	22°07'58
evening set	16110 Jan 19 08:07	26°♄25'08		retrograde	16110 Dec 26 02:50	6°♄42'49	
min. Earth dist.	16110 Jan 25 13:30	23°♄24'06	0.55257 AU	evening set	16110 Dec 29 14:31	6°♄15'53	
inferior conj	16110 Jan 27 08:33	22°♄20'18	-5°38'58	inferior conj	16111 Jan 07 02:48	2°♄24'34	-6°01'36
minimum elong	16110 Jan 27 15:37	22°♄09'50	5°37'23	minimum elong	16111 Jan 07 01:26	2°♄26'29	6°00'54
morning rise	16110 Feb 05 00:43	18°♄24'35		min. Earth dist.	16111 Jan 06 19:00	2°♄35'29	0.54451 AU
direct	16110 Feb 07 12:39	18°♄08'56			16111 Jan 11 17:09	30°♄♄	
asc. node	16110 Feb 17 23:13	23°♄05'08		morning rise	16111 Jan 15 13:15	28°♄37'19	
morning max el	16110 Feb 18 05:26	23°♄20'00	20°12'40	direct	16111 Jan 18 23:00	28°♄11'35	
	16110 Feb 23 18:11	0°♄			16111 Jan 25 17:08	0°♄	
morning set	16110 Mar 08 10:00	22°♄53'24		morning max el	16111 Jan 31 04:24	4°♄06'05	21°44'30
	16110 Mar 11 21:02	0°♄		asc. node	16111 Feb 04 20:32	9°♄22'14	
					16111 Feb 17 03:13	0°♄	
superior conj	16110 Mar 16 02:30	8°♄36'34	0°52'25	morning set	16111 Feb 20 19:54	7°♄36'07	
minimum elong	16110 Mar 16 04:57	8°♄48'54	0°51'59				
max. Earth dist.	16110 Mar 21 20:14	19°♄49'21	1.36645 AU	superior conj	16111 Feb 27 23:57	22°♄46'25	1°13'17
desc. node	16110 Mar 22 11:42	21°♄02'17		minimum elong	16111 Feb 28 02:23	22°♄59'13	1°13'07

	16111 Mar 03 12:02	0°♿		minimum elong	16112 Feb 12 06:10	7°♿23'22	1°27'55
max. Earth dist.	16111 Mar 04 07:59	1°♿40'36	1.34613 AU	max. Earth dist.	16112 Feb 15 03:02	13°♿31'44	1.32965 AU
evening rise	16111 Mar 08 12:28	9°♿52'21		evening rise	16112 Feb 19 22:54	23°♿27'09	
desc. node	16111 Mar 09 08:20	11°♿26'24			16112 Feb 23 07:42	0°♿	
	16111 Mar 19 22:25	0°♿		desc. node	16112 Feb 24 05:00	1°♿40'25	
	16111 Apr 10 23:22	0°♿			16112 Mar 12 13:37	0°♿	
evening max el	16111 Apr 12 15:40	1°♿41'43	26°45'25	evening max el	16112 Mar 25 04:49	15°♿08'14	27°24'46
retrograde	16111 Apr 25 20:33	9°♿09'16		retrograde	16112 Apr 07 21:11	22°♿40'55	
evening set	16111 May 02 07:08	6°♿36'40		evening set	16112 Apr 14 14:23	20°♿12'25	
asc. node	16111 May 03 17:48	5°♿20'14		min. Earth dist.	16112 Apr 18 10:00	16°♿44'23	0.64500 AU
min. Earth dist.	16111 May 06 06:48	2°♿37'11	0.66281 AU	asc. node	16112 Apr 19 15:02	15°♿27'11	
inferior conj	16111 May 08 08:20	0°♿10'59	1°22'10	inferior conj	16112 Apr 20 23:49	13°♿58'22	0°25'32
minimum elong	16111 May 08 06:28	0°♿16'31	1°20'56	minimum elong	16112 Apr 20 23:07	14°♿00'18	0°24'48
	16111 May 08 12:03	30°♿8		morning rise	16112 Apr 27 09:58	8°♿35'13	
morning rise	16111 May 14 07:03	24°♿33'48		direct	16112 Apr 30 00:40	8°♿00'06	
direct	16111 May 17 06:55	23°♿44'14		morning max el	16112 May 06 08:26	11°♿14'55	17°51'25
morning max el	16111 May 23 15:38	27°♿04'23	18°13'48		16112 May 19 09:59	0°♿	
	16111 May 26 07:32	0°♿		desc. node	16112 May 22 06:09	4°♿43'57	
desc. node	16111 Jun 05 09:13	14°♿37'07		morning set	16112 May 23 14:34	6°♿59'23	
morning set	16111 Jun 12 03:27	25°♿23'41					
	16111 Jun 15 00:38	0°♿		superior conj	16112 Jun 06 05:07	29°♿18'04	-1°42'17
superior conj	16111 Jun 27 10:05	19°♿33'12	-2°07'06	minimum elong	16112 Jun 05 20:31	28°♿43'38	1°42'11
minimum elong	16111 Jun 27 04:00	19°♿09'25	2°07'32		16112 Jun 06 15:37	0°♿	
max. Earth dist.	16111 Jun 29 00:37	22°♿03'31	1.45988 AU	max. Earth dist.	16112 Jun 10 20:21	6°♿39'01	1.45431 AU
	16111 Jul 04 03:03	0°♿		evening rise	16112 Jun 22 01:21	24°♿01'06	
evening rise	16111 Jul 13 12:16	14°♿34'50			16112 Jun 25 23:36	0°♿	
	16111 Jul 23 11:58	0°♿		greatest brilliancy	16112 Jul 06 20:41	16°♿11'29	-0.6m
greatest brilliancy	16111 Jul 24 08:55	1°♿19'23	-0.7m	asc. node	16112 Jul 16 14:02	29°♿09'37	
asc. node	16111 Jul 30 17:15	10°♿33'11			16112 Jul 17 07:51	0°♿	
evening max el	16111 Aug 05 16:38	17°♿46'28	19°03'53	evening max el	16112 Jul 18 21:44	1°♿39'45	19°57'42
retrograde	16111 Aug 12 12:43	21°♿31'55		retrograde	16112 Jul 26 11:26	5°♿56'18	
evening set	16111 Aug 16 00:11	20°♿21'53		evening set	16112 Jul 30 09:06	4°♿28'34	
inferior conj	16111 Aug 21 11:43	14°♿34'26	2°42'31		16112 Aug 03 12:57	30°♿8	
minimum elong	16111 Aug 21 13:37	14°♿28'19	2°41'54	inferior conj	16112 Aug 04 16:12	28°♿28'51	3°01'31
min. Earth dist.	16111 Aug 23 01:16	12°♿33'52	0.66815 AU	minimum elong	16112 Aug 04 17:18	28°♿25'10	3°00'58
morning rise	16111 Aug 27 02:17	8°♿07'36		min. Earth dist.	16112 Aug 05 15:53	27°♿08'47	0.68065 AU
desc. node	16111 Sep 01 07:11	5°♿34'52		morning rise	16112 Aug 10 01:03	22°♿03'24	
direct	16111 Sep 02 04:41	5°♿31'44		direct	16112 Aug 15 16:45	19°♿35'25	
morning max el	16111 Sep 14 21:44	13°♿05'25	26°04'29	desc. node	16112 Aug 18 04:32	20°♿00'00	
	16111 Sep 28 14:30	0°♿		morning max el	16112 Aug 27 08:47	26°♿34'44	24°42'14
	16111 Oct 17 11:13	0°♿			16112 Aug 30 12:55	0°♿	
morning set	16111 Oct 20 20:06	6°♿06'40		morning set	16112 Sep 21 04:14	0°♿	
max. Earth dist.	16111 Oct 24 13:41	13°♿10'06	1.35140 AU	max. Earth dist.	16112 Oct 02 00:33	18°♿00'48	
asc. node	16111 Oct 26 18:32	17°♿28'33			16112 Oct 05 13:41	24°♿20'54	1.37380 AU
					16112 Oct 08 15:05	0°♿	
superior conj	16111 Oct 30 03:37	24°♿16'30	0°30'23	superior conj	16112 Oct 12 12:58	7°♿28'53	-0°00'52
minimum elong	16111 Oct 30 01:58	24°♿08'09	0°30'38	minimum elong	16112 Oct 12 12:59	7°♿29'00	0°00'29
	16111 Nov 01 22:12	0°♿		behind sun begin	16112 Oct 12 06:20	6°♿56'41	
evening rise	16111 Nov 06 18:24	10°♿06'26		behind sun end	16112 Oct 12 19:38	8°♿01'23	
	16111 Nov 17 04:41	0°♿		asc. node	16112 Oct 12 15:18	7°♿40'16	
evening max el	16111 Nov 25 08:57	10°♿51'10	20°36'26	evening rise	16112 Oct 20 22:21	24°♿12'53	
desc. node	16111 Nov 28 04:39	13°♿18'31			16112 Oct 23 20:09	0°♿	
retrograde	16111 Dec 06 13:10	16°♿24'20		evening max el	16112 Nov 06 19:44	22°♿00'49	19°25'21
evening set	16111 Dec 08 22:54	16°♿10'04		desc. node	16112 Nov 14 01:48	26°♿31'31	
inferior conj	16111 Dec 17 18:15	12°♿16'42	-5°22'58	retrograde	16112 Nov 16 08:43	26°♿47'33	
minimum elong	16111 Dec 17 09:18	12°♿29'40	5°20'26	evening set	16112 Nov 18 06:55	26°♿36'45	
min. Earth dist.	16111 Dec 19 00:31	11°♿32'50	0.54567 AU	inferior conj	16112 Nov 26 21:13	22°♿29'55	-3°56'38
morning rise	16111 Dec 25 19:30	8°♿19'38		minimum elong	16112 Nov 26 11:52	22°♿45'06	3°52'48
direct	16111 Dec 30 06:59	7°♿36'31		min. Earth dist.	16112 Nov 29 09:18	20°♿52'27	0.55600 AU
morning max el	16112 Jan 12 15:54	14°♿09'30	23°32'06	morning rise	16112 Dec 04 14:42	18°♿04'48	
asc. node	16112 Jan 22 17:48	26°♿48'01		direct	16112 Dec 10 01:04	16°♿58'02	
	16112 Jan 24 17:47	0°♿		morning max el	16112 Dec 24 00:39	24°♿01'32	25°19'53
morning set	16112 Feb 05 07:43	22°♿20'19			16112 Dec 29 11:03	0°♿	
	16112 Feb 08 20:38	0°♿		asc. node	16113 Jan 08 15:01	15°♿05'15	
					16113 Jan 16 11:52	0°♿	
superior conj	16112 Feb 12 04:20	7°♿13'28	1°27'44	morning set	16113 Jan 19 19:29	6°♿59'44	

superior conj	16113 Jan 26 13:05	21°  49'28	1°35'57		16114 Jan 08 02:35	0° 	
minimum elong	16113 Jan 26 13:59	21°  54'25	1°36'25				
max. Earth dist.	16113 Jan 28 05:01	25°  29'25	1.31790 AU	superior conj	16114 Jan 11 00:07	6°  28'32	1°38'04
	16113 Jan 30 06:45	0° 		minimum elong	16114 Jan 10 23:57	6°  27'38	1°38'43
evening rise	16113 Feb 02 18:42	7°  23'28		max. Earth dist.	16114 Jan 11 11:36	7°  32'47	1.31134 AU
desc. node	16113 Feb 10 01:43	21°  38'24		evening rise	16114 Jan 17 21:18	21°  35'11	
	16113 Feb 14 19:34	0° 			16114 Jan 21 23:24	0° 	
evening max el	16113 Mar 07 15:42	28°  04'11	27°35'59	desc. node	16114 Jan 27 22:27	11°  13'55	
	16113 Mar 09 18:49	0° 			16114 Feb 08 23:33	0° 	
retrograde	16113 Mar 21 14:30	5°  33'11		evening max el	16114 Feb 17 21:56	10°  17'30	27°13'37
evening set	16113 Mar 28 10:00	3°  16'32		retrograde	16114 Mar 03 22:45	17°  13'33	
min. Earth dist.	16113 Apr 01 04:13	0°  14'24	0.62410 AU	evening set	16114 Mar 10 14:59	15°  13'33	
	16113 Apr 01 10:25	30°  14'24		min. Earth dist.	16114 Mar 14 12:16	12°  14'24	0.60164 AU
inferior conj	16113 Apr 04 04:03	27°  22'19	-0°45'01	inferior conj	16114 Mar 17 17:24	10°  13'10	-2°08'27
minimum elong	16113 Apr 04 05:35	27°  18'39	0°44'41	minimum elong	16114 Mar 17 22:13	10°  03'01	2°06'37
asc. node	16113 Apr 06 12:20	25°  12'29		asc. node	16114 Mar 24 09:40	5°  44'30	
morning rise	16113 Apr 11 04:09	22°  15'35		morning rise	16114 Mar 25 08:56	5°  25'35	
direct	16113 Apr 13 10:59	21°  15'33		direct	16114 Mar 27 10:01	5°  08'58	
morning max el	16113 Apr 20 02:03	25°  12'42	17°46'39	morning max el	16114 Apr 03 17:07	8°  47'36	18°00'23
	16113 Apr 24 02:27	0° 			16114 Apr 17 12:11	0° 	
morning set	16113 May 06 01:42	19°  42'53		morning set	16114 Apr 19 06:52	3°  15'59	
desc. node	16113 May 09 03:01	25°  03'46		desc. node	16114 Apr 25 23:49	15°  31'40	
	16113 May 11 23:19	0° 					
superior conj	16113 May 17 21:20	10°  02'29	-1°07'01	superior conj	16114 Apr 29 12:58	21°  50'30	-0°28'57
minimum elong	16113 May 17 15:08	9°  36'34	1°06'50	minimum elong	16114 Apr 29 10:29	21°  39'38	0°29'04
max. Earth dist.	16113 May 24 13:14	20°  56'33	1.44191 AU	max. Earth dist.	16114 May 04 06:25	0° 	
	16113 May 30 06:38	0° 		evening rise	16114 May 07 02:12	4°  44'08	1.42396 AU
evening rise	16113 Jun 01 13:28	3°  32'37			16114 May 12 15:28	13°  45'27	
	16113 Jun 19 10:18	0° 		evening max el	16114 May 23 05:01	0° 	
evening max el	16113 Jul 01 20:50	15°  34'06	21°05'05		16114 Jun 14 14:45	29°  28'26	22°22'10
asc. node	16113 Jul 03 10:53	17°  03'34		asc. node	16114 Jun 15 03:37	0° 	
retrograde	16113 Jul 10 10:25	20°  30'50		retrograde	16114 Jun 20 07:48	4°  00'26	
evening set	16113 Jul 14 18:57	18°  04'53		evening set	16114 Jun 24 07:57	5°  09'27	
inferior conj	16113 Jul 20 00:26	12°  34'55	3°08'29		16114 Jun 29 03:58	3°  07'40	
minimum elong	16113 Jul 20 00:35	12°  34'25	3°07'53	inferior conj	16114 Jul 02 01:30	30°  07'40	
min. Earth dist.	16113 Jul 20 10:38	11°  59'29	0.68850 AU	minimum elong	16114 Jul 04 10:19	26°  47'45	3°04'32
morning rise	16113 Jul 25 05:56	6°  14'23		min. Earth dist.	16114 Jul 04 09:31	26°  50'31	3°03'46
direct	16113 Jul 30 09:49	4°  00'05		morning rise	16114 Jul 04 07:18	26°  58'14	0.69152 AU
desc. node	16113 Aug 05 01:53	6°  06'50		direct	16114 Jul 09 14:54	20°  34'20	
morning max el	16113 Aug 09 20:01	10°  12'14	23°13'19	desc. node	16114 Jul 14 06:32	18°  37'43	
	16113 Aug 25 12:30	0° 		morning max el	16114 Jul 22 23:10	23°  30'51	
morning set	16113 Sep 13 07:46	29°  00'21			16114 Jul 23 10:03	23°  57'41	21°46'18
	16113 Sep 13 22:05	0° 			16114 Jul 28 18:07	0° 	
max. Earth dist.	16113 Sep 17 12:24	6°  06'09	1.39794 AU	morning set	16114 Aug 18 21:05	8°  07'41	
				max. Earth dist.	16114 Aug 24 15:04	18°  44'53	1.42095 AU
superior conj	16113 Sep 25 07:53	20°  01'57	-0°36'19		16114 Aug 30 15:55	0° 	
minimum elong	16113 Sep 25 10:38	20°  14'36	0°35'39				
asc. node	16113 Sep 29 12:01	27°  50'37		superior conj	16114 Sep 07 07:53	1°  44'41	-1°13'09
	16113 Sep 30 15:11	0° 		minimum elong	16114 Sep 07 13:51	2°  10'43	1°12'20
evening rise	16113 Oct 04 19:02	7°  15'59		asc. node	16114 Sep 16 08:41	17°  55'32	
	16113 Oct 17 10:33	0° 		evening rise	16114 Sep 18 04:39	21°  16'58	
evening max el	16113 Oct 20 19:39	4°  00'17	18°36'37		16114 Sep 22 23:42	0° 	
retrograde	16113 Oct 28 22:16	8°  06'34		evening max el	16114 Oct 04 04:33	16°  40'09	18°09'10
evening set	16113 Oct 30 20:45	7°  05'18		retrograde	16114 Oct 11 06:54	20°  18'17	
desc. node	16113 Oct 31 23:00	7°  03'42		evening set	16114 Oct 13 11:05	19°  15'58	
inferior conj	16113 Nov 07 20:24	3°  26'01	-2°12'54	desc. node	16114 Oct 18 20:16	16°  45'41	
minimum elong	16113 Nov 07 15:04	3°  36'07	2°10'08	inferior conj	16114 Oct 20 17:12	15°  09'27	-0°35'53
min. Earth dist.	16113 Nov 10 23:57	1°  03'56	0.57354 AU	minimum elong	16114 Oct 20 15:56	15°  12'13	0°34'54
	16113 Nov 12 12:44	30°  12'44		min. Earth dist.	16114 Oct 23 22:50	12°  19'20	0.59521 AU
morning rise	16113 Nov 15 06:07	28°  12'44		morning rise	16114 Oct 27 17:29	9°  33'38	
direct	16113 Nov 21 09:20	26°  51'12		direct	16114 Nov 03 06:33	7°  34'42	
	16113 Nov 30 09:13	0° 		morning max el	16114 Nov 17 13:05	15°  19'04	27°43'32
morning max el	16113 Dec 05 14:42	4°  17'39	26°48'29		16114 Nov 29 11:56	0° 	
	16113 Dec 24 06:35	0° 		asc. node	16114 Dec 13 09:15	23°  25'02	
asc. node	16113 Dec 26 12:11	4° 01'04			16114 Dec 16 17:08	0°	
morning set	16114 Jan 04 05:28	21° 29'48		morning set	16114 Dec 19 11:48	5° 46'03	

superior conj	16114 Dec 26 11:29	21° ☿ 05'22	1°34'10			16115 Dec 08 08:30	0° ☿	
minimum elong	16114 Dec 26 10:19	20° ☿ 58'49	1°34'49	max. Earth dist.		16115 Dec 09 00:11	1° ☿ 25'41	1.31448 AU
max. Earth dist.	16114 Dec 25 19:21	19° ☿ 35'04	1.31013 AU					
	16114 Dec 30 11:16	0° \approx		superior conj		16115 Dec 10 21:19	5° ☿ 34'16	1°24'13
evening rise	16115 Jan 02 04:33	5° \approx 57'00		minimum elong		16115 Dec 10 19:21	5° ☿ 23'25	1°24'45
desc. node	16115 Jan 14 19:14	0° ☿ 18'40		evening rise		16115 Dec 17 14:27	20° ☿ 23'35	
	16115 Jan 14 14:47	0° ☿				16115 Dec 22 04:23	0° \approx	
evening max el	16115 Jan 30 20:46	21° ☿ 38'56	26°16'13	desc. node		16116 Jan 01 16:04	18° \approx 40'32	
retrograde	16115 Feb 13 20:09	28° ☿ 45'38				16116 Jan 10 08:18	0° ☿	
evening set	16115 Feb 20 01:53	27° ☿ 12'46		evening max el		16116 Jan 12 10:57	2° ☿ 08'25	24°49'18
min. Earth dist.	16115 Feb 24 10:01	24° ☿ 35'12	0.57966 AU	retrograde		16116 Jan 26 05:08	9° ☿ 01'12	
inferior conj	16115 Feb 27 12:09	22° ☿ 20'45	-3°39'10	evening set		16116 Jan 31 15:12	7° ☿ 55'59	
minimum elong	16115 Feb 27 20:25	22° ☿ 05'42	3°36'10	min. Earth dist.		16116 Feb 05 23:01	5° ☿ 08'59	0.56078 AU
morning rise	16115 Mar 07 18:12	17° ☿ 54'44		inferior conj		16116 Feb 08 09:42	3° ☿ 36'14	-5°03'03
direct	16115 Mar 09 17:21	17° ☿ 41'54		minimum elong		16116 Feb 08 18:54	3° ☿ 21'41	5°00'29
asc. node	16115 Mar 11 07:01	17° ☿ 50'27				16116 Feb 15 06:20	30° ☿	
morning max el	16115 Mar 18 01:48	21° ☿ 48'51	18°34'11	morning rise		16116 Feb 17 00:59	29° \approx 31'20	
	16115 Mar 24 09:27	0° ☿		direct		16116 Feb 19 05:05	29° \approx 18'21	
morning set	16115 Apr 03 00:43	17° ☿ 22'54				16116 Feb 22 23:34	0° ☿	
	16115 Apr 09 14:36	0° ☿		asc. node		16116 Feb 26 04:22	1° ☿ 42'40	
				morning max el		16116 Feb 28 23:51	4° ☿ 03'48	19°30'02
superior conj	16115 Apr 12 01:09	4° ☿ 34'13	0°06'47			16116 Mar 16 05:03	0° ☿	
minimum elong	16115 Apr 12 01:36	4° ☿ 36'18	0°06'21	morning set		16116 Mar 17 03:06	1° ☿ 50'16	
behind sun begin	16115 Apr 11 19:05	4° ☿ 06'01						
behind sun end	16115 Apr 12 08:07	5° ☿ 06'30		superior conj		16116 Mar 25 05:22	18° ☿ 00'03	0°37'29
desc. node	16115 Apr 12 20:32	6° ☿ 03'51		minimum elong		16116 Mar 25 07:26	18° ☿ 10'07	0°36'58
max. Earth dist.	16115 Apr 19 10:57	17° ☿ 51'58	1.40230 AU	desc. node		16116 Mar 29 17:13	26° ☿ 35'53	
evening rise	16115 Apr 23 14:10	24° ☿ 53'34		max. Earth dist.		16116 Mar 31 16:58	0° ☿ 16'41	1.37929 AU
	16115 Apr 26 16:44	0° ☿				16116 Mar 31 13:19	0° ☿	
	16115 May 16 23:07	0° ☿		evening rise		16116 Apr 04 09:32	6° ☿ 53'42	
evening max el	16115 May 28 05:21	13° ☿ 23'34	23°43'31			16116 Apr 18 14:34	0° ☿	
asc. node	16115 Jun 07 04:47	19° ☿ 43'26		evening max el		16116 May 09 18:42	27° ☿ 18'10	25°02'47
retrograde	16115 Jun 08 02:51	19° ☿ 47'03				16116 May 12 17:30	0° ☿	
evening set	16115 Jun 13 10:32	17° ☿ 31'05		retrograde		16116 May 21 17:59	4° ☿ 16'20	
min. Earth dist.	16115 Jun 18 03:51	11° ☿ 59'04	0.68961 AU	asc. node		16116 May 24 01:52	3° ☿ 53'44	
inferior conj	16115 Jun 18 19:55	11° ☿ 04'05	2°50'09	evening set		16116 May 27 13:01	1° ☿ 49'54	
minimum elong	16115 Jun 18 18:20	11° ☿ 09'29	2°49'08			16116 May 29 09:34	30° ☿	
morning rise	16115 Jun 24 02:07	4° ☿ 59'12		min. Earth dist.		16116 May 31 22:13	26° ☿ 54'54	0.68277 AU
direct	16115 Jun 28 05:42	3° ☿ 22'09		inferior conj		16116 Jun 02 03:18	25° ☿ 19'13	2°25'07
morning max el	16115 Jul 06 05:49	7° ☿ 54'14	20°28'07	minimum elong		16116 Jun 02 01:13	25° ☿ 26'05	2°23'54
desc. node	16115 Jul 09 20:22	11° ☿ 52'39		morning rise		16116 Jun 07 13:45	19° ☿ 23'56	
	16115 Jul 23 01:39	0° ☿		direct		16116 Jun 11 05:50	18° ☿ 06'36	
morning set	16115 Aug 04 01:56	18° ☿ 06'49		morning max el		16116 Jun 18 08:44	22° ☿ 01'03	19°23'19
	16115 Aug 11 16:08	0° ☿				16116 Jun 25 00:52	0° ☿	
max. Earth dist.	16115 Aug 13 02:09	2° ☿ 15'42	1.44012 AU	desc. node		16116 Jun 25 17:29	0° ☿ 56'39	
				greatest brilliancy		16116 Jul 01 00:44	8° ☿ 31'49	-0.7m
superior conj	16115 Aug 19 09:10	12° ☿ 29'37	-1°46'21	morning set		16116 Jul 13 06:15	27° ☿ 02'34	
minimum elong	16115 Aug 19 17:03	13° ☿ 02'11	1°45'53			16116 Jul 15 04:23	0° ☿	
	16115 Aug 29 16:57	0° ☿		max. Earth dist.		16116 Jul 25 17:50	16° ☿ 24'48	1.45341 AU
evening rise	16115 Aug 31 22:36	3° ☿ 53'10						
asc. node	16115 Sep 03 05:20	7° ☿ 51'23		superior conj		16116 Jul 29 11:37	22° ☿ 19'10	-2°08'50
	16115 Sep 17 22:04	0° ☿		minimum elong		16116 Jul 29 16:56	22° ☿ 40'17	2°09'07
evening max el	16115 Sep 17 18:14	29° ☿ 50'36	18°01'20			16116 Aug 03 06:53	0° ☿	
retrograde	16115 Sep 24 06:57	3° ☿ 13'58		evening rise		16116 Aug 12 19:39	15° ☿ 35'23	
evening set	16115 Sep 26 18:51	2° ☿ 43'35		asc. node		16116 Aug 20 02:01	27° ☿ 33'51	
	16115 Sep 30 20:46	30° ☿				16116 Aug 21 14:22	0° ☿	
inferior conj	16115 Oct 03 08:50	27° ☿ 35'23	0°43'33	evening max el		16116 Aug 31 09:04	13° ☿ 23'00	18°11'56
minimum elong	16115 Oct 03 10:06	27° ☿ 32'12	0°43'21	retrograde		16116 Sep 06 17:46	16° ☿ 44'41	
desc. node	16115 Oct 05 17:35	25° ☿ 11'48		evening set		16116 Sep 09 14:19	16° ☿ 00'43	
min. Earth dist.	16115 Oct 06 07:42	24° ☿ 37'15	0.61814 AU	inferior conj		16116 Sep 15 15:20	10° ☿ 35'55	1°43'23
morning rise	16115 Oct 09 22:39	21° ☿ 33'28		minimum elong		16116 Sep 15 17:35	10° ☿ 29'32	1°42'45
direct	16115 Oct 16 15:04	19° ☿ 13'36		min. Earth dist.		16116 Sep 18 02:41	7° ☿ 48'43	0.63997 AU
morning max el	16115 Oct 30 18:38	27° ☿ 10'01	27°59'08	morning rise		16116 Sep 21 19:00	4° ☿ 17'53	
	16115 Nov 02 11:25	0° ☿		desc. node		16116 Sep 21 14:54	4° ☿ 25'58	
	16115 Nov 23 04:44	0° ☿		direct		16116 Sep 28 09:15	1° ☿ 44'42	
asc. node	16115 Nov 30 06:14	13° ☿ 08'56		morning max el		16116 Oct 12 04:28	9° ☿ 43'18	27°37'18
morning set	16115 Dec 03 12:24	19° ☿ 43'02				16116 Oct 28 02:22	0° ☿	

	16116 Nov 14 13:11	0°♊			16117 Oct 21 09:12	0°♍		
morning set	16116 Nov 16 04:52	3°♊15'22		morning set	16117 Oct 30 10:14	16°♍15'50		
asc. node	16116 Nov 16 03:08	3°♊06'43		asc. node	16117 Nov 02 23:59	23°♍13'04		
max. Earth dist.	16116 Nov 20 22:18	12°♊56'59	1.32452 AU	max. Earth dist.	16117 Nov 03 10:55	24°♍07'35	1.34019 AU	
					16117 Nov 06 08:21	0°♊		
superior conj	16116 Nov 24 03:38	19°♊50'17	1°08'09					
minimum elong	16116 Nov 24 01:16	19°♊37'32	1°08'30	superior conj	16117 Nov 08 04:06	3°♊47'08	0°45'55	
	16116 Nov 28 19:32	0°♊		minimum elong	16117 Nov 08 01:58	3°♊35'58	0°46'09	
evening rise	16116 Dec 01 01:14	4°♊50'49		evening rise	16117 Nov 15 11:02	19°♊13'59		
	16116 Dec 14 07:23	0°♊			16117 Nov 20 17:27	0°♊		
desc. node	16116 Dec 18 12:58	6°♊04'10		desc. node	16117 Dec 05 09:58	22°♊09'01		
evening max el	16116 Dec 23 20:24	12°♊06'35	23°06'52	evening max el	16117 Dec 05 10:11	22°♊09'32	21°26'58	
retrograde	16117 Jan 06 01:01	18°♊38'15		retrograde	16117 Dec 17 11:13	28°♊06'45		
evening set	16117 Jan 10 06:24	17°♊59'33		evening set	16117 Dec 20 10:19	27°♊46'40		
min. Earth dist.	16117 Jan 17 06:34	14°♊43'56	0.54801 AU	inferior conj	16117 Dec 29 02:52	23°♊56'37	-5°52'34	
inferior conj	16117 Jan 18 11:44	14°♊02'07	-5°55'42	minimum elong	16117 Dec 28 21:35	24°♊04'01	5°51'19	
minimum elong	16117 Jan 18 15:45	13°♊56'21	5°54'48	min. Earth dist.	16117 Dec 29 11:53	23°♊43'58	0.54382 AU	
morning rise	16117 Jan 27 02:26	10°♊11'40		morning rise	16118 Jan 06 09:17	20°♊07'22		
direct	16117 Jan 29 22:14	9°♊52'50		direct	16118 Jan 10 06:09	19°♊34'51		
morning max el	16117 Feb 10 07:39	15°♊23'04	20°49'10	morning max el	16118 Jan 23 00:47	25°♊47'22	22°29'05	
asc. node	16117 Feb 12 01:41	17°♊11'54			16118 Jan 26 21:52	0°♊		
	16117 Feb 20 23:04	0°♊		asc. node	16118 Jan 29 22:58	4°♊00'03		
morning set	16117 Mar 01 10:59	16°♊29'21			16118 Feb 13 08:06	0°♊		
	16117 Mar 07 22:49	0°♊		morning set	16118 Feb 13 21:57	1°♊13'10		
superior conj	16117 Mar 08 21:33	1°♊56'47	1°02'02	superior conj	16118 Feb 20 22:17	16°♊14'44	1°20'11	
minimum elong	16117 Mar 09 00:06	2°♊09'48	1°01'42	minimum elong	16118 Feb 21 00:32	16°♊26'38	1°20'10	
max. Earth dist.	16117 Mar 14 01:01	12°♊13'11	1.35741 AU	max. Earth dist.	16118 Feb 24 15:39	24°♊02'24	1.33857 AU	
desc. node	16117 Mar 16 13:53	17°♊04'13			16118 Feb 27 14:28	0°♊		
evening rise	16117 Mar 17 22:51	19°♊38'03		evening rise	16118 Mar 01 02:32	2°♊57'00		
	16117 Mar 23 18:19	0°♊		desc. node	16118 Mar 03 10:34	7°♊24'55		
	16117 Apr 12 15:36	0°♊			16118 Mar 16 15:33	0°♊		
evening max el	16117 Apr 22 08:17	11°♊09'09	26°12'35	evening max el	16118 Apr 04 22:09	24°♊48'57	27°05'18	
retrograde	16117 May 05 04:20	18°♊29'51			16118 Apr 11 08:28	0°♊		
asc. node	16117 May 10 23:01	16°♊19'06		retrograde	16118 Apr 18 08:46	2°♊19'45		
evening set	16117 May 11 09:38	15°♊57'55		evening set	16118 Apr 24 22:26	29°♊48'22		
min. Earth dist.	16117 May 15 12:22	11°♊38'35	0.67132 AU		16118 Apr 24 16:19	30°♊		
inferior conj	16117 May 17 06:28	9°♊28'27	1°48'43	asc. node	16118 Apr 27 20:13	27°♊07'23		
minimum elong	16117 May 17 04:20	9°♊35'05	1°47'25	min. Earth dist.	16118 Apr 28 20:15	26°♊02'28	0.65564 AU	
morning rise	16117 May 22 23:52	3°♊44'01		inferior conj	16118 May 01 03:03	23°♊26'35	0°59'53	
direct	16117 May 26 05:20	2°♊44'58		minimum elong	16118 May 01 01:33	23°♊30'52	0°58'47	
morning max el	16117 Jun 01 18:29	6°♊14'16	18°34'16	morning rise	16118 May 07 06:15	17°♊54'47		
desc. node	16117 Jun 12 14:32	20°♊31'29		direct	16118 May 10 02:06	17°♊11'42		
	16117 Jun 18 17:55	0°♊		morning max el	16118 May 16 09:25	20°♊28'15	18°02'06	
morning set	16117 Jun 22 23:50	6°♊39'06			16118 May 23 19:44	0°♊		
	16117 Jul 07 22:28	0°♊		desc. node	16118 May 30 11:32	10°♊29'04		
				morning set	16118 Jun 03 19:26	17°♊31'27		
					16118 Jun 11 12:38	0°♊		
superior conj	16117 Jul 08 22:44	1°♊34'36	-2°13'35					
minimum elong	16117 Jul 08 20:41	1°♊26'37	2°14'13	superior conj	16118 Jun 18 10:12	10°♊57'05	-1°58'23	
max. Earth dist.	16117 Jul 08 12:59	0°♊56'36	1.45968 AU	minimum elong	16118 Jun 18 02:16	10°♊25'50	1°58'35	
evening rise	16117 Jul 24 15:44	26°♊14'06		max. Earth dist.	16118 Jun 21 09:34	15°♊36'55	1.45846 AU	
	16117 Jul 27 00:47	0°♊			16118 Jun 30 15:58	0°♊		
greatest brilliancy	16117 Aug 01 09:06	8°♊26'10	-0.8m		16118 Jul 04 13:09	5°♊58'57		
asc. node	16117 Aug 06 22:44	16°♊56'47		evening rise	16118 Jul 17 10:06	25°♊32'07	-0.7m	
evening max el	16117 Aug 14 21:58	27°♊08'55	18°40'09	greatest brilliancy	16118 Jul 20 11:50	0°♊		
	16117 Aug 18 16:42	0°♊			16118 Jul 24 19:30	5°♊53'16		
retrograde	16117 Aug 21 11:28	0°♊41'49		asc. node	16118 Jul 29 06:30	11°♊01'52	19°24'57	
	16117 Aug 24 04:25	30°♊		evening max el	16118 Jul 29 09:02	14°♊58'43		
evening set	16117 Aug 24 17:20	29°♊41'48		retrograde	16118 Aug 05 09:02	13°♊41'09		
inferior conj	16117 Aug 30 08:51	24°♊02'22	2°25'24	evening set	16118 Aug 09 00:50	7°♊48'30	2°52'07	
minimum elong	16117 Aug 30 11:03	23°♊55'32	2°24'44	inferior conj	16118 Aug 14 10:09	7°♊43'17	2°51'32	
min. Earth dist.	16117 Sep 01 06:34	21°♊41'29	0.65901 AU	minimum elong	16118 Aug 14 11:44	6°♊04'29	0.67412 AU	
morning rise	16117 Sep 05 03:40	17°♊36'57		min. Earth dist.	16118 Aug 15 17:46	1°♊21'59		
desc. node	16117 Sep 08 12:16	15°♊32'55		morning rise	16118 Aug 19 22:02	30°♊		
direct	16117 Sep 11 11:27	14°♊59'24			16118 Aug 21 18:20	28°♊48'34		
morning max el	16117 Sep 24 15:47	22°♊46'22	26°44'51	direct	16118 Aug 25 20:12	28°♊49'48		
	16117 Oct 01 01:23	0°♊		desc. node	16118 Aug 26 09:38			

	16118 Aug 30 07:35	0° \mathbb{M}		morning rise	16119 Aug 03 23:40	15° Ω 24'54	
morning max el	16118 Sep 07 03:00	6° \mathbb{M} 08'38	25°30'47	direct	16119 Aug 09 10:24	13° Ω 02'24	
	16118 Sep 25 15:15	0° $\underline{\Omega}$		desc. node	16119 Aug 13 06:59	14° Ω 01'16	
morning set	16118 Oct 13 00:56	28° $\underline{\Omega}$ 36'45		morning max el	16119 Aug 20 14:01	19° Ω 42'07	24°04'39
	16118 Oct 13 19:16	0° \mathbb{M}			16119 Aug 29 08:42	0° \mathbb{M}	
max. Earth dist.	16118 Oct 16 14:38	5° \mathbb{M} 12'13	1.36066 AU		16119 Sep 18 18:35	0° $\underline{\Omega}$	
asc. node	16118 Oct 20 20:47	13° \mathbb{M} 24'05		morning set	16119 Sep 24 20:49	10° $\underline{\Omega}$ 08'45	
				max. Earth dist.	16119 Sep 28 13:48	16° $\underline{\Omega}$ 36'47	1.38410 AU
superior conj	16118 Oct 22 19:58	17° \mathbb{M} 18'21	0°17'45				
minimum elong	16118 Oct 22 18:54	17° \mathbb{M} 13'02	0°18'03	superior conj	16119 Oct 05 23:41	0° \mathbb{M} 15'18	-0°15'33
	16118 Oct 29 01:15	0° \mathbb{M}		minimum elong	16119 Oct 06 00:45	0° \mathbb{M} 20'22	0°15'01
evening rise	16118 Oct 30 17:51	3° \mathbb{M} 28'35		behind sun begin	16119 Oct 05 22:10	0° \mathbb{M} 08'03	
	16118 Nov 14 23:22	0° \mathbb{M}		behind sun end	16119 Oct 06 03:21	0° \mathbb{M} 32'41	
evening max el	16118 Nov 17 12:27	2° \mathbb{M} 50'13	20°03'22		16119 Oct 05 20:29	0° \mathbb{M}	
desc. node	16118 Nov 22 07:03	6° \mathbb{M} 31'32		asc. node	16119 Oct 07 17:33	3° \mathbb{M} 35'52	
retrograde	16118 Nov 27 23:33	8° \mathbb{M} 03'05		evening rise	16119 Oct 14 19:07	17° \mathbb{M} 28'10	
evening set	16118 Nov 30 02:49	7° \mathbb{M} 51'04			16119 Oct 21 08:16	0° \mathbb{M}	
inferior conj	16118 Dec 08 21:33	3° \mathbb{M} 53'08	-4°50'23	evening max el	16119 Oct 31 05:10	14° \mathbb{M} 21'33	19°01'49
minimum elong	16118 Dec 08 11:33	4° \mathbb{M} 08'12	4°47'00	retrograde	16119 Nov 09 02:31	18° \mathbb{M} 50'16	
min. Earth dist.	16118 Dec 10 18:06	2° \mathbb{M} 46'01	0.54909 AU	desc. node	16119 Nov 09 04:11	18° \mathbb{M} 50'15	
	16118 Dec 16 04:25	30° \mathbb{M} 46'21		evening set	16119 Nov 10 23:49	18° \mathbb{M} 38'58	
morning rise	16118 Dec 16 19:22	29° \mathbb{M} 46'21		inferior conj	16119 Nov 19 08:35	14° \mathbb{M} 23'27	-3°12'58
direct	16118 Dec 21 17:31	28° \mathbb{M} 53'37		minimum elong	16119 Nov 19 00:42	14° \mathbb{M} 37'05	3°09'22
	16118 Dec 27 03:40	0° \mathbb{M}		min. Earth dist.	16119 Nov 22 04:51	12° \mathbb{M} 25'38	0.56274 AU
morning max el	16119 Jan 04 09:36	5° \mathbb{M} 39'52	24°19'12	morning rise	16119 Nov 26 22:54	9° \mathbb{M} 43'15	
asc. node	16119 Jan 16 20:14	21° \mathbb{M} 49'20		direct	16119 Dec 02 17:02	8° \mathbb{M} 25'41	
	16119 Jan 21 12:42	0° \mathbb{M}		morning max el	16119 Dec 16 20:04	15° \mathbb{M} 39'14	26°01'09
morning set	16119 Jan 29 09:56	15° \mathbb{M} 55'36			16119 Dec 28 09:23	0° \mathbb{M}	
	16119 Feb 04 20:23	0° \mathbb{M}		asc. node	16120 Jan 03 17:26	10° \mathbb{M} 24'45	
				morning set	16120 Jan 13 21:11	0° \mathbb{M} 32'07	
superior conj	16119 Feb 05 04:45	0° \mathbb{M} 45'47	1°31'58		16120 Jan 13 15:13	0° \mathbb{M}	
minimum elong	16119 Feb 05 06:13	0° \mathbb{M} 53'46	1°32'18				
max. Earth dist.	16119 Feb 07 14:02	5° \mathbb{M} 56'40	1.32403 AU	superior conj	16120 Jan 20 14:42	15° \mathbb{M} 23'57	1°37'35
evening rise	16119 Feb 12 17:15	16° \mathbb{M} 41'28		minimum elong	16120 Jan 20 15:10	15° \mathbb{M} 26'28	1°38'09
desc. node	16119 Feb 18 07:15	27° \mathbb{M} 32'46		max. Earth dist.	16120 Jan 21 18:32	17° \mathbb{M} 58'31	1.31443 AU
	16119 Feb 19 15:15	0° \mathbb{M}			16120 Jan 27 07:37	0° \mathbb{M}	
	16119 Mar 11 04:09	0° \mathbb{M}		evening rise	16120 Jan 27 16:13	0° \mathbb{M} 45'06	
evening max el	16119 Mar 18 10:47	8° \mathbb{M} 04'40	27°33'30	desc. node	16120 Feb 05 03:58	17° \mathbb{M} 22'19	
retrograde	16119 Apr 01 06:13	15° \mathbb{M} 35'52			16120 Feb 12 15:14	0° \mathbb{M}	
evening set	16119 Apr 08 01:03	13° \mathbb{M} 11'41		evening max el	16120 Feb 28 19:53	20° \mathbb{M} 43'22	27°30'45
min. Earth dist.	16119 Apr 11 19:46	9° \mathbb{M} 55'30	0.63640 AU	retrograde	16120 Mar 13 19:38	28° \mathbb{M} 08'38	
inferior conj	16119 Apr 14 14:11	7° \mathbb{M} 05'20	-0°02'37	evening set	16120 Mar 20 14:48	25° \mathbb{M} 59'00	
minimum elong	16119 Apr 14 14:17	7° \mathbb{M} 05'06	0°02'58	min. Earth dist.	16120 Mar 24 09:29	23° \mathbb{M} 06'03	0.61464 AU
transit middle	16119 Apr 14 14:17	7° \mathbb{M} 05'06	0°02'58	inferior conj	16120 Mar 27 12:29	20° \mathbb{M} 16'09	-1°18'59
transit begin	16119 Apr 14 11:11	7° \mathbb{M} 13'05		minimum elong	16120 Mar 27 15:18	20° \mathbb{M} 09'44	1°18'02
transit end	16119 Apr 14 17:22	6° \mathbb{M} 57'08		asc. node	16120 Mar 31 14:47	16° \mathbb{M} 53'57	
asc. node	16119 Apr 14 17:30	6° \mathbb{M} 56'48		morning rise	16120 Apr 03 19:05	15° \mathbb{M} 17'30	
morning rise	16119 Apr 21 05:57	1° \mathbb{M} 48'41		direct	16120 Apr 05 23:15	14° \mathbb{M} 57'00	
direct	16119 Apr 23 17:16	1° \mathbb{M} 18'33		morning max el	16120 Apr 12 19:53	18° \mathbb{M} 23'51	17°50'15
morning max el	16119 Apr 30 02:55	4° \mathbb{M} 34'26	17°47'14		16120 Apr 21 06:07	0° \mathbb{M}	
morning set	16119 May 16 17:31	29° \mathbb{M} 38'43		morning set	16120 Apr 28 12:59	12° \mathbb{M} 45'12	
	16119 May 16 22:31	0° \mathbb{M}		desc. node	16120 May 03 05:18	21° \mathbb{M} 06'13	
desc. node	16119 May 17 08:27	0° \mathbb{M} 42'20			16120 May 08 07:36	0° \mathbb{M}	
superior conj	16119 May 29 13:27	21° \mathbb{M} 05'28	-1°28'08	superior conj	16120 May 09 15:47	2° \mathbb{M} 17'42	-0°50'52
minimum elong	16119 May 29 05:28	20° \mathbb{M} 33'02	1°27'55	minimum elong	16120 May 09 11:10	1° \mathbb{M} 58'02	0°50'47
max. Earth dist.	16119 Jun 04 05:00	0° \mathbb{M} 09'14	1.44988 AU	max. Earth dist.	16120 May 16 20:31	14° \mathbb{M} 16'12	1.43486 AU
	16119 Jun 04 02:40	0° \mathbb{M}		evening rise	16120 May 23 16:22	25° \mathbb{M} 08'18	
evening rise	16119 Jun 13 23:48	15° \mathbb{M} 22'46			16120 May 26 19:46	0° \mathbb{M}	
	16119 Jun 23 16:36	0° \mathbb{M}			16120 Jun 16 16:29	0° \mathbb{M}	
asc. node	16119 Jul 11 16:19	24° \mathbb{M} 13'19		evening max el	16120 Jun 24 05:41	8° \mathbb{M} 49'54	21°36'50
evening max el	16119 Jul 12 09:06	24° \mathbb{M} 56'09	20°24'48	asc. node	16120 Jun 27 13:11	11° \mathbb{M} 44'55	
retrograde	16119 Jul 20 08:05	29° \mathbb{M} 28'31		retrograde	16120 Jul 03 06:45	14° \mathbb{M} 05'39	
evening set	16119 Jul 24 10:25	27° \mathbb{M} 53'00		evening set	16120 Jul 07 20:08	12° \mathbb{M} 12'57	
inferior conj	16119 Jul 29 16:30	21° \mathbb{M} 48'22	3°05'50	inferior conj	16120 Jul 13 01:40	5° \mathbb{M} 57'53	3°08'05
minimum elong	16119 Jul 29 17:12	21° \mathbb{M} 45'59	3°05'16	minimum elong	16120 Jul 13 01:24	5° \mathbb{M} 58'48	3°07'26
min. Earth dist.	16119 Jul 30 10:19	20° \mathbb{M} 47'17	0.68467 AU	min. Earth dist.	16120 Jul 13 06:09	5° \mathbb{M} 42'16	0.69041 AU

	16120 Jul 17 21:40	30° RE	retrograde	16121 Jun 17 03:26	28° E 44'39	
morning rise	16120 Jul 18 06:29	29° E 40'07	evening set	16121 Jun 22 04:18	26° E 36'35	
direct	16120 Jul 23 05:02	27° E 33'15	inferior conj	16121 Jun 27 11:40	20° E 13'09	2°59'43
	16120 Jul 29 05:50	0° Ω	minimum elong	16121 Jun 27 10:31	20° E 17'09	2°58'52
desc. node	16120 Jul 30 04:19	0° Ω 43'35	min. Earth dist.	16121 Jun 27 03:07	20° E 42'48	0.69123 AU
morning max el	16120 Aug 02 02:16	3° Ω 23'33	22°35'34	morning rise	16121 Jul 02 16:36	14° E 02'58
	16120 Aug 22 09:56	0° M	direct	16121 Jul 07 03:00	12° E 14'33	
morning set	16120 Sep 04 18:01	20° M 42'45	morning max el	16121 Jul 15 18:26	17° E 13'50	21°11'38
max. Earth dist.	16120 Sep 09 14:03	28° M 43'46	1.40803 AU	desc. node	16121 Jul 17 01:35	18° E 34'31
	16120 Sep 10 08:03	0° E			16121 Jul 26 04:51	0° Ω
					16121 Aug 15 11:11	0° M
superior conj	16120 Sep 17 11:04	12° E 27'51	-0°52'02	morning set	16121 Aug 15 15:46	0° M 17'58
minimum elong	16120 Sep 17 15:12	12° E 46'25	0°51'16	max. Earth dist.	16121 Aug 22 19:55	11° M 44'18
asc. node	16120 Sep 23 14:14	23° E 44'20				1.42968 AU
	16120 Sep 26 22:04	0° M	superior conj	16121 Aug 30 01:51	23° M 47'26	-1°28'03
evening rise	16120 Sep 27 11:36	1° M 03'54	minimum elong	16121 Aug 30 08:58	24° M 17'43	1°27'19
evening max el	16120 Oct 13 09:23	26° M 39'14	18°22'24		16121 Sep 02 16:28	0° E
	16120 Oct 18 04:30	0° E	asc. node	16121 Sep 10 10:54	13° E 46'13	
retrograde	16120 Oct 21 00:36	0° E 32'14	evening rise	16121 Sep 10 15:15	14° E 05'45	
evening set	16120 Oct 23 00:54	0° E 16'45		16121 Sep 19 18:21	0° M	
	16120 Oct 23 22:48	30° RM	evening max el	16121 Sep 26 20:53	9° M 34'09	18°03'31
desc. node	16120 Oct 26 01:25	29° M 00'52	retrograde	16121 Oct 03 16:11	13° M 04'09	
inferior conj	16120 Oct 30 17:09	25° M 40'16	-1°29'59	evening set	16121 Oct 05 23:29	12° M 40'12
minimum elong	16120 Oct 30 13:41	25° M 47'17	1°28'00	inferior conj	16121 Oct 12 22:28	7° M 43'10
min. Earth dist.	16120 Nov 02 23:00	23° M 03'40	0.58238 AU	minimum elong	16121 Oct 12 22:29	7° M 43'07
morning rise	16120 Nov 06 22:59	20° M 23'05		transit middle	16121 Oct 12 22:29	7° M 43'07
direct	16120 Nov 13 07:04	18° M 38'24		transit begin	16121 Oct 12 19:11	7° M 50'50
morning max el	16120 Nov 27 13:50	26° M 14'01	27°16'37	transit end	16121 Oct 13 01:47	7° M 35'23
	16120 Dec 01 03:28	0° E	desc. node	16121 Oct 12 22:41	7° M 42'40	
asc. node	16120 Dec 20 14:33	29° E 33'36	min. Earth dist.	16121 Oct 16 02:14	4° M 46'52	0.60502 AU
	16120 Dec 20 20:09	0° E	morning rise	16121 Oct 19 18:21	1° M 55'04	
morning set	16120 Dec 28 05:48	14° E 56'53		16121 Oct 24 05:01	30° RE	
			direct	16121 Oct 26 09:46	29° E 46'01	
superior conj	16121 Jan 04 02:05	0° \approx 02'40	1°37'09		16121 Oct 28 15:43	0° M
minimum elong	16121 Jan 04 01:29	29° E 59'17	1°37'49	morning max el	16121 Nov 09 15:28	7° M 36'51
max. Earth dist.	16121 Jan 04 01:55	0° \approx 01'43	1.31010 AU		16121 Nov 26 16:39	0° E
	16121 Jan 04 01:36	0° \approx	asc. node	16121 Dec 07 11:37	19° E 06'54	
evening rise	16121 Jan 10 21:00	15° \approx 01'17	morning set	16121 Dec 12 09:56	29° E 05'24	
	16121 Jan 18 07:09	0° H		16121 Dec 12 20:19	0° E	
desc. node	16121 Jan 22 00:41	6° H 45'40	max. Earth dist.	16121 Dec 18 08:41	11° E 58'58	1.31130 AU
	16121 Feb 07 10:08	0° Y				
evening max el	16121 Feb 09 22:55	2° Y 33'55	26°53'17	superior conj	16121 Dec 19 13:02	14° E 36'49
retrograde	16121 Feb 23 23:47	9° Y 48'54		minimum elong	16121 Dec 19 11:30	14° E 28'14
evening set	16121 Mar 02 12:29	8° Y 01'05		evening rise	16121 Dec 26 05:35	29° E 25'31
min. Earth dist.	16121 Mar 06 12:59	5° Y 21'25	0.59203 AU		16121 Dec 26 11:58	0° \approx
inferior conj	16121 Mar 09 18:14	2° Y 48'56	-2°46'42	desc. node	16122 Jan 08 21:27	25° \approx 33'21
minimum elong	16121 Mar 10 00:37	2° Y 36'18	2°44'15		16122 Jan 11 17:55	0° H
	16121 Mar 13 14:49	30° RH	evening max el	16122 Jan 22 18:03	13° H 32'11	25°42'12
morning rise	16121 Mar 17 16:20	28° H 10'42	retrograde	16122 Feb 05 16:18	20° H 33'24	
asc. node	16121 Mar 18 12:07	28° H 01'14	evening set	16122 Feb 11 14:30	19° H 12'28	
direct	16121 Mar 19 15:51	27° H 56'15	min. Earth dist.	16122 Feb 16 07:00	16° H 32'42	0.57102 AU
	16121 Mar 25 07:22	0° Y	inferior conj	16122 Feb 19 04:05	14° H 34'39	-4°16'55
morning max el	16121 Mar 27 08:44	1° Y 45'42	18°12'16	minimum elong	16122 Feb 19 13:17	14° H 18'53
morning set	16121 Apr 12 00:03	26° Y 33'36		morning rise	16122 Feb 27 15:00	10° H 17'40
	16121 Apr 13 19:58	0° E	direct	16122 Mar 01 14:59	10° H 05'23	
desc. node	16121 Apr 20 02:04	11° E 36'09	asc. node	16122 Mar 05 09:29	10° H 51'39	
			morning max el	16122 Mar 10 13:23	14° H 28'13	18°55'08
superior conj	16121 Apr 21 16:36	14° E 30'28	-0°13'19		16122 Mar 21 05:39	0° Y
minimum elong	16121 Apr 21 15:31	14° E 25'36	0°13'36	morning set	16122 Mar 26 21:55	10° Y 49'54
behind sun begin	16121 Apr 21 11:32	14° E 07'40				
behind sun end	16121 Apr 21 19:30	14° E 43'31		superior conj	16122 Apr 04 12:03	27° Y 32'42
max. Earth dist.	16121 Apr 29 06:56	27° E 44'49	1.41498 AU	minimum elong	16122 Apr 04 13:20	27° Y 38'50
	16121 Apr 30 15:10	0° H			16122 Apr 05 19:16	0° E
evening rise	16121 May 04 02:42	5° H 43'30		desc. node	16122 Apr 06 22:45	2° E 08'16
	16121 May 20 00:10	0° E	max. Earth dist.	16122 Apr 11 13:47	10° E 31'58	1.39248 AU
evening max el	16121 Jun 06 21:47	22° E 44'13	22°56'38	evening rise	16122 Apr 15 10:23	17° E 14'15
asc. node	16121 Jun 14 10:06	28° E 12'45			16122 Apr 23 05:13	0° H

	16122 May 14 11:29	0°☿			16123 Mar 28 19:30	0°♄	
evening max el	16122 May 20 11:44	6°☿39'32	24°18'07		16123 Apr 16 11:30	0°♄	
retrograde	16122 May 31 20:49	13°☿18'57		evening max el	16123 May 03 01:17	20°♄33'59	25°34'09
asc. node	16122 Jun 01 07:07	13°☿18'10		retrograde	16123 May 15 09:51	27°♄42'28	
evening set	16122 Jun 06 09:18	10°☿58'18		asc. node	16123 May 19 04:13	26°♄44'41	
min. Earth dist.	16122 Jun 10 23:02	5°☿41'57	0.68721 AU	evening set	16123 May 21 09:30	25°♄13'07	
inferior conj	16122 Jun 11 20:33	4°☿29'21	2°40'53	min. Earth dist.	16123 May 25 15:49	20°♄33'35	0.67847 AU
minimum elong	16122 Jun 11 18:43	4°☿35'34	2°39'47	inferior conj	16123 May 27 02:25	18°♄42'35	2°11'10
	16122 Jun 15 11:30	30°♄11		minimum elong	16123 May 27 00:15	18°♄49'34	2°09'52
morning rise	16122 Jun 17 04:12	28°♄28'12		morning rise	16123 Jun 01 15:28	12°♄51'45	
direct	16122 Jun 21 02:52	26°♄59'25		direct	16123 Jun 05 03:03	11°♄42'14	
	16122 Jun 27 09:05	0°☿		morning max el	16123 Jun 11 22:56	15°♄24'01	19°00'29
morning max el	16122 Jun 28 17:01	1°☿14'06	19°58'45	desc. node	16123 Jun 20 19:51	26°♄33'40	
desc. node	16122 Jul 03 22:45	7°☿15'33			16123 Jun 23 04:24	0°☿	
	16122 Jul 19 19:51	0°♄		greatest brilliancy	16123 Jun 25 01:53	2°☿49'42	-0.7m
morning set	16122 Jul 25 21:30	9°♄14'14		morning set	16123 Jul 05 05:12	18°☿21'11	
max. Earth dist.	16122 Aug 05 08:40	25°♄33'13	1.44660 AU		16123 Jul 12 17:41	0°♄	
	16122 Aug 08 03:35	0°♄		max. Earth dist.	16123 Jul 19 02:37	9°♄55'33	1.45704 AU
superior conj	16122 Aug 10 17:09	4°♄08'06	-1°57'39	superior conj	16123 Jul 21 11:32	13°♄38'34	-2°13'18
minimum elong	16122 Aug 11 00:39	4°♄38'30	1°57'29	minimum elong	16123 Jul 21 14:04	13°♄48'34	2°13'51
evening rise	16122 Aug 24 00:55	26°♄20'19			16123 Jul 31 18:42	0°♄	
	16122 Aug 26 04:29	0°♄		evening rise	16123 Aug 05 11:36	7°♄35'50	
asc. node	16122 Aug 28 07:33	3°♄36'52		asc. node	16123 Aug 15 04:14	23°♄11'31	
evening max el	16122 Sep 10 11:34	22°♄55'30	18°03'39		16123 Aug 19 17:18	0°♄	
retrograde	16122 Sep 16 21:15	26°♄16'07		evening max el	16123 Aug 25 01:56	6°♄34'20	18°21'48
evening set	16122 Sep 19 12:52	25°♄40'11		retrograde	16123 Aug 31 11:31	9°♄59'09	
inferior conj	16122 Sep 25 20:56	20°♄24'39	1°11'13	evening set	16123 Sep 03 12:02	9°♄08'27	
minimum elong	16122 Sep 25 22:46	20°♄19'46	1°10'46	inferior conj	16123 Sep 09 08:33	3°♄36'53	2°03'14
min. Earth dist.	16122 Sep 28 15:17	17°♄29'12	0.62778 AU	minimum elong	16123 Sep 09 10:53	3°♄30'01	2°02'32
desc. node	16122 Sep 29 20:01	16°♄18'25		min. Earth dist.	16123 Sep 11 14:06	0°♄59'41	0.64853 AU
morning rise	16122 Oct 02 06:22	14°♄15'01			16123 Sep 12 11:27	30°♄11	
direct	16122 Oct 08 22:40	11°♄48'26		morning rise	16123 Sep 15 08:17	27°♄14'55	
morning max el	16122 Oct 22 22:59	19°♄46'19	27°53'58	desc. node	16123 Sep 16 17:23	26°♄15'04	
	16122 Oct 31 17:24	0°♄		direct	16123 Sep 21 20:10	24°♄39'07	
	16122 Nov 19 16:13	0°♄			16123 Oct 02 16:25	0°♄	
asc. node	16122 Nov 24 08:34	8°♄57'17		morning max el	16123 Oct 05 09:48	2°♄33'48	27°18'16
morning set	16122 Nov 26 07:25	12°♄52'27			16123 Oct 26 00:22	0°♄	
max. Earth dist.	16122 Dec 01 11:04	23°♄41'57	1.31812 AU	morning set	16123 Nov 09 19:35	26°♄12'03	
				asc. node	16123 Nov 11 05:27	28°♄59'08	
superior conj	16122 Dec 03 21:39	29°♄01'07	1°18'10		16123 Nov 11 17:39	0°♄	
minimum elong	16122 Dec 03 19:28	28°♄49'06	1°18'37	max. Earth dist.	16123 Nov 14 05:41	5°♄05'20	1.33060 AU
	16122 Dec 04 08:23	0°♄					
evening rise	16122 Dec 10 16:06	13°♄53'14		superior conj	16123 Nov 18 01:49	13°♄09'39	0°59'28
	16122 Dec 18 14:31	0°♄		minimum elong	16123 Nov 17 23:28	12°♄57'06	0°59'46
desc. node	16122 Dec 26 18:19	13°♄32'33		evening rise	16123 Nov 25 02:46	28°♄19'36	
evening max el	16123 Jan 04 05:42	23°♄45'47	24°06'34		16123 Nov 25 21:39	0°♄	
	16123 Jan 14 04:09	0°♄			16123 Dec 13 06:46	0°♄	
retrograde	16123 Jan 17 19:12	0°♄29'55		desc. node	16123 Dec 13 15:16	0°♄25'25	
	16123 Jan 21 11:36	30°♄11		evening max el	16123 Dec 16 15:39	3°♄40'43	22°22'57
evening set	16123 Jan 22 18:03	29°♄36'37		retrograde	16123 Dec 29 09:58	9°♄59'34	
min. Earth dist.	16123 Jan 28 17:20	26°♄39'57	0.55446 AU	evening set	16124 Jan 02 02:14	9°♄29'49	
inferior conj	16123 Jan 30 16:51	25°♄28'30	-5°30'51	min. Earth dist.	16124 Jan 09 23:09	5°♄56'24	0.54511 AU
minimum elong	16123 Jan 31 00:42	25°♄16'40	5°29'01	inferior conj	16124 Jan 10 12:44	5°♄37'21	-6°02'05
morning rise	16123 Feb 08 09:08	21°♄30'40		minimum elong	16124 Jan 10 12:50	5°♄37'12	6°01'27
direct	16123 Feb 10 18:44	21°♄15'53		morning rise	16124 Jan 19 00:29	1°♄49'56	
asc. node	16123 Feb 20 06:51	25°♄27'11		direct	16124 Jan 22 06:22	1°♄26'17	
morning max el	16123 Feb 21 05:38	26°♄20'03	20°00'51	morning max el	16124 Feb 03 06:53	7°♄14'33	21°29'37
	16123 Feb 24 12:24	0°♄		asc. node	16124 Feb 07 04:11	11°♄32'15	
morning set	16123 Mar 11 03:02	25°♄23'47			16124 Feb 18 13:10	0°♄	
	16123 Mar 13 09:07	0°♄		morning set	16124 Feb 23 12:31	10°♄05'51	
superior conj	16123 Mar 18 21:51	11°♄13'08	0°48'41	superior conj	16124 Mar 01 18:05	25°♄20'01	1°10'30
minimum elong	16123 Mar 19 00:14	11°♄25'01	0°48'13	minimum elong	16124 Mar 01 20:35	25°♄32'59	1°10'18
desc. node	16123 Mar 24 19:25	22°♄39'15			16124 Mar 04 00:24	0°♄	
max. Earth dist.	16123 Mar 24 20:33	22°♄44'33	1.36973 AU	max. Earth dist.	16124 Mar 06 07:15	4°♄36'32	1.34893 AU
evening rise	16123 Mar 28 13:53	29°♄34'47		evening rise	16124 Mar 10 09:44	12°♄34'37	

desc. node	16124 Mar 10 16:05	13°Υ04'33			16125 Feb 23 18:37	0°Υ	
	16124 Mar 20 05:49	0°Ϸ		desc. node	16125 Feb 25 12:45	3°Υ20'07	
	16124 Apr 10 12:21	0°Π			16125 Mar 13 15:03	0°Ϸ	
evening max el	16124 Apr 14 14:57	4°Π20'35	26°37'28	evening max el	16125 Mar 28 04:15	17°Ϸ50'27	27°20'35
retrograde	16124 Apr 27 17:42	11°Π46'51		retrograde	16125 Apr 10 19:26	25°Ϸ23'16	
evening set	16124 May 04 03:01	9°Π14'04		evening set	16125 Apr 17 11:48	22°Ϸ53'46	
asc. node	16124 May 05 01:25	8°Π25'46		min. Earth dist.	16125 Apr 21 07:54	19°Ϸ21'12	0.64783 AU
min. Earth dist.	16124 May 08 03:23	5°Π09'38	0.66517 AU	asc. node	16125 Apr 21 22:40	18°Ϸ41'36	
inferior conj	16124 May 10 03:04	2°Π47'10	1°29'37	inferior conj	16125 Apr 23 19:58	16°Ϸ37'19	0°35'04
minimum elong	16124 May 10 01:06	2°Π53'03	1°28'20	minimum elong	16125 Apr 23 19:01	16°Ϸ39'57	0°34'12
	16124 May 12 13:32	30°ϣϷ		morning rise	16125 Apr 30 04:14	11°Ϸ11'52	
morning rise	16124 May 16 00:19	27°Ϸ08'09		direct	16125 May 02 20:11	10°Ϸ34'51	
direct	16124 May 19 01:36	26°Ϸ16'14		morning max el	16125 May 09 03:38	13°Ϸ49'51	17°53'37
morning max el	16124 May 25 11:14	29°Ϸ38'20	18°18'33		16125 May 20 16:50	0°Π	
	16124 May 25 20:00	0°Π		desc. node	16125 May 24 13:51	6°Π23'02	
desc. node	16124 Jun 06 16:54	16°Π18'35		morning set	16125 May 26 16:12	9°Π51'54	
morning set	16124 Jun 14 09:02	28°Π27'27			16125 Jun 07 23:58	0°Ϸ	
	16124 Jun 15 08:19	0°Ϸ		superior conj	16125 Jun 09 13:12	2°Ϸ28'31	-1°46'56
superior conj	16124 Jun 29 20:33	22°Ϸ50'38	-2°09'25	minimum elong	16125 Jun 09 04:35	1°Ϸ54'11	1°46'53
minimum elong	16124 Jun 29 15:23	22°Ϸ30'28	2°09'57	max. Earth dist.	16125 Jun 13 18:41	9°Ϸ09'29	1.45558 AU
max. Earth dist.	16124 Jun 30 22:52	24°Ϸ33'12	1.46004 AU	evening rise	16125 Jun 25 11:57	27°Ϸ18'15	
	16124 Jul 04 10:48	0°Ω			16125 Jun 27 06:17	0°Ω	
evening rise	16124 Jul 15 21:14	17°Ω48'55		greatest brilliancy	16125 Jul 09 23:48	19°Ω04'17	-0.6m
	16124 Jul 23 17:14	0°Π			16125 Jul 17 23:59	0°Π	
greatest brilliancy	16124 Jul 25 23:59	3°Π30'02	-0.8m	asc. node	16125 Jul 18 21:44	1°Π05'54	
asc. node	16124 Aug 01 00:58	12°Π24'00		evening max el	16125 Jul 21 19:09	4°Π16'28	19°48'48
evening max el	16124 Aug 07 13:09	20°Π23'23	18°57'14	retrograde	16125 Jul 29 05:48	8°Π27'38	
retrograde	16124 Aug 14 07:20	24°Π05'20		evening set	16125 Aug 02 01:54	7°Π02'37	
evening set	16124 Aug 17 17:18	22°Π58'00		inferior conj	16125 Aug 07 09:29	1°Π04'46	2°59'27
inferior conj	16124 Aug 23 05:45	17°Π12'33	2°38'28	minimum elong	16125 Aug 07 10:43	1°Π00'38	2°58'52
minimum elong	16124 Aug 23 07:45	17°Π06'12	2°37'49		16125 Aug 08 04:44	30°ϣΩ	
min. Earth dist.	16124 Aug 24 21:25	15°Π06'23	0.66587 AU	min. Earth dist.	16125 Aug 08 11:15	29°Ω38'12	0.67908 AU
morning rise	16124 Aug 28 21:21	10°Π45'48		morning rise	16125 Aug 12 19:03	24°Ω38'53	
desc. node	16124 Sep 02 14:45	8°Π17'15		direct	16125 Aug 18 12:29	22°Ω09'11	
direct	16124 Sep 04 01:10	8°Π09'16		desc. node	16125 Aug 20 12:08	22°Ω24'48	
morning max el	16124 Sep 16 21:29	15°Π47'14	26°15'34	morning max el	16125 Aug 30 08:30	29°Ω14'30	24°55'06
	16124 Sep 28 15:35	0°Ϸ			16125 Aug 31 02:12	0°Π	
	16124 Oct 17 20:27	0°Π			16125 Sep 22 10:36	0°Ϸ	
morning set	16124 Oct 22 19:18	8°Π57'29		morning set	16125 Oct 05 02:30	20°Ϸ58'42	
max. Earth dist.	16124 Oct 26 14:33	16°Π12'27	1.34836 AU	max. Earth dist.	16125 Oct 08 15:08	27°Ϸ19'43	1.37031 AU
asc. node	16124 Oct 28 02:17	19°Π08'04			16125 Oct 10 01:48	0°Π	
				asc. node	16125 Oct 14 23:01	9°Π19'29	
superior conj	16124 Oct 31 23:03	26°Π56'46	0°34'40	superior conj	16125 Oct 15 10:11	10°Π14'06	0°04'13
minimum elong	16124 Oct 31 21:15	26°Π47'31	0°34'55	minimum elong	16125 Oct 15 09:54	10°Π12'41	0°04'35
	16124 Nov 02 10:30	0°Ϸ		behind sun begin	16125 Oct 15 03:35	9°Π41'44	
evening rise	16124 Nov 08 11:38	12°Ϸ40'14		behind sun end	16125 Oct 15 16:13	10°Π43'42	
	16124 Nov 17 08:36	0°Ϸ		evening rise	16125 Oct 23 16:23	26°Π48'44	
evening max el	16124 Nov 27 10:00	13°Ϸ56'49	20°48'52		16125 Oct 25 06:26	0°Ϸ	
desc. node	16124 Nov 29 12:18	15°Ϸ50'16		evening max el	16125 Nov 09 18:37	24°Ϸ58'55	19°34'30
retrograde	16124 Dec 08 19:58	19°Ϸ36'32		desc. node	16125 Nov 16 09:26	29°Ϸ22'12	
evening set	16124 Dec 11 08:38	19°Ϸ21'07		retrograde	16125 Nov 19 13:11	29°Ϸ52'06	
inferior conj	16124 Dec 20 03:38	15°Ϸ28'59	-5°32'31	evening set	16125 Nov 21 12:18	29°Ϸ41'10	
minimum elong	16124 Dec 19 19:24	15°Ϸ40'47	5°30'19	inferior conj	16125 Nov 30 04:08	25°Ϸ37'01	-4°11'29
min. Earth dist.	16124 Dec 21 04:37	14°Ϸ53'09	0.54491 AU	minimum elong	16125 Nov 29 18:26	25°Ϸ52'26	4°07'41
morning rise	16124 Dec 28 06:09	11°Ϸ34'27		min. Earth dist.	16125 Dec 02 12:43	24°Ϸ07'08	0.55400 AU
direct	16125 Jan 01 13:52	10°Ϸ54'16		morning rise	16125 Dec 07 22:42	21°Ϸ17'00	
morning max el	16125 Jan 14 19:38	17°Ϸ22'27	23°15'36	direct	16125 Dec 13 06:11	20°Ϸ13'53	
asc. node	16125 Jan 24 01:29	28°Ϸ48'34		morning max el	16125 Dec 27 04:02	27°Ϸ13'09	25°04'34
	16125 Jan 24 20:06	0°≈			16125 Dec 29 20:57	0°Ϸ	
morning set	16125 Feb 07 00:10	24°≈49'45		asc. node	16126 Jan 10 22:42	16°Ϸ58'50	
	16125 Feb 09 09:46	0°Ϸ			16126 Jan 17 22:50	0°≈	
superior conj	16125 Feb 13 21:37	9°Ϸ44'40	1°25'55	morning set	16126 Jan 22 12:02	9°≈29'53	
minimum elong	16125 Feb 13 23:34	9°Ϸ55'11	1°26'04	superior conj	16126 Jan 29 05:50	24°≈19'27	1°35'06
max. Earth dist.	16125 Feb 17 01:00	16°Ϸ25'52	1.33181 AU	minimum elong	16126 Jan 29 06:53	24°≈25'15	1°35'32
evening rise	16125 Feb 21 18:31	26°Ϸ05'13					

max. Earth dist.	16126 Jan 31 02:04	28° \approx 22'22	1.31933 AU	max. Earth dist.	16127 Jan 14 08:18	10° \approx 25'52	1.31199 AU
	16126 Jan 31 20:00	0° H		evening rise	16127 Jan 20 14:47	24° \approx 08'18	
evening rise	16126 Feb 05 13:04	9° H 58'41			16127 Jan 23 10:40	0° H	
desc. node	16126 Feb 12 09:27	23° H 20'51		desc. node	16127 Jan 30 06:09	13° H 00'10	
	16126 Feb 16 02:50	0° Y			16127 Feb 09 21:10	0° Y	
	16126 Mar 09 18:24	0° B		evening max el	16127 Feb 20 22:54	13° Y 12'33	27°19'13
evening max el	16126 Mar 10 15:46	0° B 52'18	27°36'27	retrograde	16127 Mar 06 23:26	20° Y 33'01	
retrograde	16126 Mar 24 13:55	8° B 22'03		evening set	16127 Mar 13 16:40	18° Y 32'14	
evening set	16126 Mar 31 09:21	6° B 03'21		min. Earth dist.	16127 Mar 17 13:06	15° Y 46'09	0.60502 AU
min. Earth dist.	16126 Apr 04 03:36	2° B 57'43	0.62732 AU	inferior conj	16127 Mar 20 17:54	13° Y 01'51	-1°55'09
inferior conj	16126 Apr 07 02:07	0° B 05'39	-0°33'23	minimum elong	16127 Mar 20 22:10	12° Y 52'40	1°53'32
minimum elong	16126 Apr 07 03:14	0° B 02'56	0°33'15	asc. node	16127 Mar 26 17:18	8° Y 46'30	
	16126 Apr 07 04:26	30° R Y		morning rise	16127 Mar 28 07:05	8° Y 11'14	
asc. node	16126 Apr 08 19:58	28° Y 25'49		direct	16127 Mar 30 08:56	7° Y 53'41	
morning rise	16126 Apr 13 23:58	24° Y 56'10		morning max el	16127 Apr 06 12:56	11° Y 28'49	17°57'08
direct	16126 Apr 16 07:55	24° Y 30'39			16127 Apr 18 21:11	0° B	
morning max el	16126 Apr 22 21:19	27° Y 50'10	17°46'13	morning set	16127 Apr 22 03:00	5° B 53'29	
	16126 Apr 24 21:03	0° B		desc. node	16127 Apr 28 07:32	17° B 08'10	
morning set	16126 May 09 00:11	22° B 26'53					
desc. node	16126 May 11 10:44	26° B 41'23		superior conj	16127 May 02 14:12	24° B 42'15	-0°34'40
	16126 May 13 08:41	0° II		minimum elong	16127 May 02 11:11	24° B 29'06	0°34'44
					16127 May 05 15:57	0° II	
superior conj	16126 May 21 01:58	13° II 03'29	-1°12'43	max. Earth dist.	16127 May 10 02:12	7° II 25'13	1.42693 AU
minimum elong	16126 May 20 19:14	12° II 35'34	1°12'30	evening rise	16127 May 15 22:30	16° II 51'52	
max. Earth dist.	16126 May 27 12:20	23° II 31'36	1.44418 AU		16127 May 24 11:04	0° B	
	16126 May 31 14:26	0° B			16127 Jun 15 14:05	0° B	
evening rise	16126 Jun 04 23:12	6° B 46'47		evening max el	16127 Jun 17 13:44	2° B 05'02	22°10'10
	16126 Jun 20 13:30	0° B		asc. node	16127 Jun 22 15:28	6° B 13'41	
evening max el	16126 Jul 04 19:12	18° B 10'59	20°54'17	retrograde	16127 Jun 27 02:37	7° B 39'20	
asc. node	16126 Jul 05 18:34	19° B 07'11		evening set	16127 Jul 01 20:57	5° B 39'44	
retrograde	16126 Jul 13 04:46	23° B 00'57			16127 Jul 06 15:49	30° R B	
evening set	16126 Jul 17 11:43	21° B 18'10		inferior conj	16127 Jul 07 03:00	29° B 21'01	3°05'45
inferior conj	16126 Jul 22 17:17	15° B 09'09	3°08'06	minimum elong	16127 Jul 07 02:21	29° B 23'18	3°05'03
minimum elong	16126 Jul 22 17:34	15° B 08'10	3°07'31	min. Earth dist.	16127 Jul 07 01:55	29° B 24'50	0.69144 AU
min. Earth dist.	16126 Jul 23 05:28	14° B 26'58	0.68771 AU	morning rise	16127 Jul 12 07:36	23° B 06'31	
morning rise	16126 Jul 27 23:09	8° B 47'49		direct	16127 Jul 17 01:02	21° B 07'12	
direct	16126 Aug 02 04:51	6° B 31'13		desc. node	16127 Jul 25 06:45	25° B 31'15	
desc. node	16126 Aug 07 09:28	8° B 17'40		morning max el	16127 Jul 26 09:01	26° B 34'46	21°58'49
morning max el	16126 Aug 12 19:31	12° B 50'27	23°26'33		16127 Jul 29 12:46	0° B	
	16126 Aug 26 15:27	0° B			16127 Aug 20 03:43	0° B	
	16126 Sep 15 06:45	0° B		morning set	16127 Aug 27 23:54	12° B 13'25	
morning set	16126 Sep 16 13:01	2° B 06'07		max. Earth dist.	16127 Sep 02 16:28	21° B 29'21	1.41772 AU
max. Earth dist.	16126 Sep 20 13:42	8° B 58'19	1.39439 AU		16127 Sep 07 17:17	0° B	
superior conj	16126 Sep 28 07:28	22° B 53'11	-0°30'46	superior conj	16127 Sep 10 10:33	4° B 43'49	-1°07'40
minimum elong	16126 Sep 28 09:45	23° B 03'46	0°30'09	minimum elong	16127 Sep 10 16:04	5° B 08'02	1°06'52
asc. node	16126 Oct 01 19:44	29° B 30'00		asc. node	16127 Sep 18 16:24	19° B 35'57	
	16126 Oct 02 02:01	0° B		evening rise	16127 Sep 21 01:49	24° B 00'53	
evening rise	16126 Oct 07 14:17	10° B 38'33			16127 Sep 24 07:55	0° B	
	16126 Oct 18 08:17	0° B		evening max el	16127 Oct 07 00:33	19° B 24'58	18°11'57
evening max el	16126 Oct 23 16:45	6° B 50'47	18°42'28	retrograde	16127 Oct 14 05:55	23° B 06'40	
retrograde	16126 Oct 31 23:50	11° B 02'26		evening set	16127 Oct 16 09:00	22° B 47'58	
evening set	16126 Nov 02 21:52	10° B 49'46		desc. node	16127 Oct 21 03:49	20° B 09'38	
desc. node	16126 Nov 03 06:35	10° B 44'37		inferior conj	16127 Oct 23 17:42	18° B 02'10	-0°49'36
inferior conj	16126 Nov 11 00:00	6° B 25'32	-2°28'31	minimum elong	16127 Oct 23 15:54	18° B 06'01	0°48'21
minimum elong	16126 Nov 10 17:59	6° B 36'39	2°25'31	min. Earth dist.	16127 Oct 26 23:38	15° B 14'59	0.59179 AU
min. Earth dist.	16126 Nov 14 02:06	4° B 09'20	0.57060 AU	morning rise	16127 Oct 30 19:26	12° B 30'54	
morning rise	16126 Nov 18 10:58	1° B 29'44		direct	16127 Nov 06 07:22	10° B 35'39	
direct	16126 Nov 24 12:07	0° B 00'28		morning max el	16127 Nov 20 14:11	18° B 17'53	27°37'54
morning max el	16126 Dec 08 16:55	7° B 23'27	26°37'15		16127 Nov 30 10:22	0° B	
	16126 Dec 25 12:29	0° B		asc. node	16127 Dec 15 16:55	25° B 09'48	
asc. node	16126 Dec 28 19:51	5° B 49'28			16127 Dec 18 04:18	0° B	
morning set	16127 Jan 06 22:22	24° B 01'31		morning set	16127 Dec 22 05:21	8° B 20'18	
	16127 Jan 09 16:03	0° B		max. Earth dist.	16127 Dec 28 16:08	22° B 29'07	1.30995 AU
superior conj	16127 Jan 13 16:36	8° B 58'10	1°38'09	superior conj	16127 Dec 29 04:01	23° B 35'40	1°35'10
minimum elong	16127 Jan 13 16:36	8° B 58'10	1°38'46	minimum elong	16127 Dec 29 03:00	23° B 29'55	1°35'49

	16128 Jan 01 00:44	0°♊		max. Earth dist.	16128 Dec 10 21:33	4°♊21'09	1.31343 AU
evening rise	16128 Jan 04 21:26	8°♊28'51					
	16128 Jan 15 20:40	0°♋		superior conj	16128 Dec 12 14:12	8°♊05'44	1°26'08
desc. node	16128 Jan 17 02:53	2°♋10'07		minimum elong	16128 Dec 12 12:20	7°♊55'26	1°26'41
evening max el	16128 Feb 02 22:47	24°♋41'18	26°26'48	evening rise	16128 Dec 19 07:02	22°♊54'29	
	16128 Feb 10 02:06	0°♌			16128 Dec 22 15:25	0°♊	
retrograde	16128 Feb 16 22:32	1°♌50'13		desc. node	16129 Jan 02 23:42	20°♊38'54	
evening set	16128 Feb 23 06:27	0°♌13'14			16129 Jan 09 17:22	0°♋	
	16128 Feb 23 16:48	30°♋		evening max el	16129 Jan 14 14:07	5°♋17'17	25°03'39
min. Earth dist.	16128 Feb 27 12:11	27°♋35'40	0.58283 AU	retrograde	16129 Jan 28 09:42	12°♋12'41	
inferior conj	16128 Mar 01 15:34	25°♋15'58	-3°25'26	evening set	16129 Feb 02 23:09	11°♋03'23	
minimum elong	16128 Mar 01 23:23	25°♋01'25	3°22'32	min. Earth dist.	16129 Feb 08 02:25	8°♋18'48	0.56325 AU
morning rise	16128 Mar 09 19:43	20°♋46'52		inferior conj	16129 Feb 10 16:17	6°♋39'04	-4°51'42
direct	16128 Mar 11 18:47	20°♋33'44		minimum elong	16129 Feb 11 01:40	6°♋23'56	4°48'58
asc. node	16128 Mar 12 14:38	20°♋36'09		morning rise	16129 Feb 19 06:46	2°♋31'14	
morning max el	16128 Mar 19 22:50	24°♋35'36	18°27'48	direct	16129 Feb 21 09:23	2°♋18'39	
	16128 Mar 24 09:50	0°♍		asc. node	16129 Feb 27 11:59	4°♋12'04	
morning set	16128 Apr 04 19:11	19°♍55'31		morning max el	16129 Mar 02 22:47	6°♋58'04	19°20'15
	16128 Apr 10 01:46	0°♎			16129 Mar 17 15:56	0°♍	
				morning set	16129 Mar 19 20:31	4°♍20'10	
superior conj	16128 Apr 13 23:33	7°♎17'54	0°01'39				
minimum elong	16128 Apr 13 23:39	7°♎18'20	0°01'15	superior conj	16129 Mar 28 01:40	20°♍38'01	0°33'12
behind sun begin	16128 Apr 13 16:29	6°♎45'21		minimum elong	16129 Mar 28 03:33	20°♍47'13	0°32'40
behind sun end	16128 Apr 14 06:48	7°♎51'14		desc. node	16129 Apr 01 00:57	28°♍11'39	
desc. node	16128 Apr 14 04:18	7°♎39'44			16129 Apr 02 00:17	0°♏	
max. Earth dist.	16128 Apr 21 11:15	20°♎37'49	1.40566 AU	max. Earth dist.	16129 Apr 03 17:13	3°♎07'21	1.38268 AU
evening rise	16128 Apr 25 17:53	27°♎50'44		evening rise	16129 Apr 07 10:20	9°♎43'28	
	16128 Apr 27 01:19	0°♐			16129 Apr 19 20:37	0°♐	
	16128 May 17 00:38	0°♑		evening max el	16129 May 12 18:01	29°♐54'00	24°51'29
evening max el	16128 May 30 04:34	15°♑59'13	23°31'22		16129 May 12 20:27	0°♑	
asc. node	16128 Jun 08 12:26	22°♑08'43		retrograde	16129 May 24 13:54	6°♑47'56	
retrograde	16128 Jun 09 22:02	22°♑17'08		asc. node	16129 May 26 09:30	6°♑34'05	
evening set	16128 Jun 15 03:59	20°♑03'00		evening set	16129 May 30 07:12	4°♑22'52	
min. Earth dist.	16128 Jun 19 22:37	14°♑25'23	0.69018 AU		16129 Jun 03 05:58	30°♒♐	
inferior conj	16128 Jun 20 12:45	13°♑36'45	2°52'59	min. Earth dist.	16129 Jun 03 17:31	29°♐22'18	0.68404 AU
minimum elong	16128 Jun 20 11:17	13°♑41'49	2°52'02	inferior conj	16129 Jun 04 20:39	27°♐52'24	2°29'40
morning rise	16128 Jun 25 18:34	7°♑30'29		minimum elong	16129 Jun 04 18:37	27°♐59'09	2°28'28
direct	16128 Jun 29 23:51	5°♑50'35		morning rise	16129 Jun 10 06:16	21°♐55'29	
morning max el	16128 Jul 08 03:49	10°♑29'29	20°39'00	direct	16129 Jun 14 00:01	20°♐35'14	
desc. node	16128 Jul 11 03:59	13°♑45'11		morning max el	16129 Jun 21 05:39	24°♐34'45	19°32'00
	16128 Jul 23 06:19	0°♓			16129 Jun 25 23:21	0°♑	
morning set	16128 Aug 06 13:16	21°♓27'41		desc. node	16129 Jun 28 01:09	2°♑43'35	
	16128 Aug 12 00:14	0°♑		greatest brilliancy	16129 Jul 03 22:36	11°♑04'36	-0.6m
max. Earth dist.	16128 Aug 15 01:35	4°♑52'30	1.43757 AU		16129 Jul 16 11:38	0°♒	
				morning set	16129 Jul 16 17:19	0°♒21'47	
superior conj	16128 Aug 21 15:24	15°♑37'32	-1°41'51	max. Earth dist.	16129 Jul 28 16:26	18°♒56'23	1.45184 AU
minimum elong	16128 Aug 21 23:12	16°♑10'01	1°41'17				
	16128 Aug 30 02:02	0°♒		superior conj	16129 Aug 01 21:03	25°♒34'51	-2°06'27
evening rise	16128 Sep 02 22:30	6°♒44'08		minimum elong	16129 Aug 02 03:09	25°♒59'08	2°06'36
asc. node	16128 Sep 04 13:04	9°♒33'21			16129 Aug 04 15:15	0°♑	
	16128 Sep 17 07:45	0°♓		evening rise	16129 Aug 15 23:00	18°♑35'10	
evening max el	16128 Sep 19 13:46	2°♓31'23	18°01'17	asc. node	16129 Aug 22 09:45	29°♑18'08	
retrograde	16128 Sep 26 03:57	5°♓56'10			16129 Aug 22 19:58	0°♒	
evening set	16128 Sep 28 14:34	5°♓27'38		evening max el	16129 Sep 03 04:44	16°♑01'25	18°09'14
inferior conj	16128 Oct 05 06:48	0°♓22'16	0°32'45	retrograde	16129 Sep 09 13:24	19°♑22'22	
minimum elong	16128 Oct 05 07:47	0°♓19'49	0°32'42	evening set	16129 Sep 12 08:39	18°♑40'36	
	16128 Oct 05 15:44	30°♒♑		inferior conj	16129 Sep 18 11:24	13°♑18'14	1°35'29
desc. node	16128 Oct 07 01:08	28°♑36'42		minimum elong	16129 Sep 18 13:34	13°♑12'10	1°34'52
min. Earth dist.	16128 Oct 08 07:07	27°♑23'52	0.61473 AU	min. Earth dist.	16129 Sep 21 00:40	10°♑28'19	0.63691 AU
morning rise	16128 Oct 11 22:10	24°♑23'29		desc. node	16129 Sep 23 22:29	7°♑38'32	
direct	16128 Oct 18 14:28	22°♑06'08		morning rise	16129 Sep 24 16:31	7°♑02'06	
	16128 Nov 01 18:11	0°♓		direct	16129 Oct 01 07:31	4°♑30'11	
morning max el	16128 Nov 01 18:52	0°♓01'42	27°59'17	morning max el	16129 Oct 15 04:12	12°♑29'07	27°42'35
	16128 Nov 23 12:12	0°♑			16129 Oct 29 04:55	0°♓	
asc. node	16128 Dec 01 13:56	14°♑50'49			16129 Nov 16 00:12	0°♑	
morning set	16128 Dec 05 06:57	22°♑20'10		asc. node	16129 Nov 18 10:52	4°♑46'38	
	16128 Dec 08 21:42	0°♒		morning set	16129 Nov 19 00:49	5°♑56'13	

max. Earth dist.	16129 Nov 23 20:46	15° ♁ 54'40	1.32269 AU	max. Earth dist.	16130 Nov 06 10:59	27° ♁ 08'23	1.33755 AU
					16130 Nov 07 20:46	0° ♁	
superior conj	16129 Nov 26 21:12	22° ♁ 23'52	1°10'59	superior conj	16130 Nov 10 22:46	6° ♁ 24'11	0°49'41
minimum elong	16129 Nov 26 18:53	22° ♁ 11'13	1°11'23	minimum elong	16130 Nov 10 20:33	6° ♁ 12'31	0°49'57
	16129 Nov 30 08:41	0° ♁		evening rise	16130 Nov 18 03:58	21° ♁ 46'01	
evening rise	16129 Dec 03 17:50	7° ♁ 21'38			16130 Nov 22 03:23	0° ♁	
	16129 Dec 15 09:47	0° ♁		desc. node	16130 Dec 07 17:35	24° ♁ 30'27	
desc. node	16129 Dec 20 20:36	8° ♁ 12'02		evening max el	16130 Dec 08 12:29	25° ♁ 18'13	21°41'02
evening max el	16129 Dec 26 23:54	15° ♁ 18'06	23°22'23		16130 Dec 14 23:08	0° ♁	
retrograde	16130 Jan 09 07:21	21° ♁ 53'16		retrograde	16130 Dec 20 18:15	1° ♁ 21'15	
evening set	16130 Jan 13 17:19	21° ♁ 11'04		evening set	16130 Dec 23 21:39	0° ♁ 58'57	
min. Earth dist.	16130 Jan 20 10:42	18° ♁ 00'54	0.54939 AU		16130 Dec 26 22:10	30° ♁	
inferior conj	16130 Jan 21 20:52	17° ♁ 11'25	-5°50'55	inferior conj	16131 Jan 01 12:51	27° ♁ 08'54	-5°57'08
minimum elong	16130 Jan 22 02:06	17° ♁ 03'50	5°49'48	minimum elong	16131 Jan 01 08:53	27° ♁ 14'27	5°56'08
morning rise	16130 Jan 30 12:17	13° ♁ 19'16		min. Earth dist.	16131 Jan 01 16:03	27° ♁ 04'26	0.54384 AU
direct	16130 Feb 02 05:02	13° ♁ 01'43		morning rise	16131 Jan 09 20:42	23° ♁ 20'45	
morning max el	16130 Feb 13 08:48	18° ♁ 25'28	20°35'58	direct	16131 Jan 13 13:41	22° ♁ 50'44	
asc. node	16130 Feb 14 09:21	19° ♁ 27'24		morning max el	16131 Jan 26 03:53	28° ♁ 57'07	22°13'15
	16130 Feb 22 03:48	0° ♁			16131 Jan 27 05:13	0° ♁	
morning set	16130 Mar 04 03:46	18° ♁ 57'57		asc. node	16131 Feb 01 06:40	6° ♁ 05'03	
	16130 Mar 09 11:30	0° ♁			16131 Feb 14 20:06	0° ♁	
superior conj	16130 Mar 11 16:19	4° ♁ 30'38	0°58'42	morning set	16131 Feb 16 14:27	3° ♁ 41'48	
minimum elong	16130 Mar 11 18:51	4° ♁ 43'29	0°58'20				
max. Earth dist.	16130 Mar 17 00:47	15° ♁ 07'12	1.36050 AU	superior conj	16131 Feb 23 16:00	18° ♁ 46'09	1°17'49
desc. node	16130 Mar 18 21:37	18° ♁ 40'38		minimum elong	16131 Feb 23 18:19	18° ♁ 58'27	1°17'45
evening rise	16130 Mar 20 21:14	22° ♁ 22'01		max. Earth dist.	16131 Feb 27 14:28	26° ♁ 57'26	1.34113 AU
	16130 Mar 25 03:40	0° ♁			16131 Mar 01 02:36	0° ♁	
	16130 Apr 13 15:16	0° ♁		evening rise	16131 Mar 03 23:02	5° ♁ 36'34	
evening max el	16130 Apr 25 07:39	13° ♁ 46'23	26°03'11	desc. node	16131 Mar 05 18:16	9° ♁ 02'40	
retrograde	16130 May 08 00:59	21° ♁ 04'17			16131 Mar 17 21:19	0° ♁	
asc. node	16130 May 13 06:40	19° ♁ 15'41		evening max el	16131 Apr 07 21:36	27° ♁ 28'42	26°58'48
evening set	16130 May 14 04:50	18° ♁ 32'58			16131 Apr 10 16:22	0° ♁	
min. Earth dist.	16130 May 18 08:30	14° ♁ 08'22	0.67330 AU	retrograde	16131 Apr 21 06:16	4° ♁ 58'21	
inferior conj	16130 May 20 00:37	12° ♁ 03'02	1°55'06	evening set	16131 Apr 27 18:55	2° ♁ 26'26	
minimum elong	16130 May 19 22:27	12° ♁ 09'49	1°53'46	asc. node	16131 Apr 30 03:52	0° ♁ 16'55	
morning rise	16130 May 25 16:48	6° ♁ 16'47			16131 Apr 30 10:25	30° ♁	
direct	16130 May 28 23:50	5° ♁ 15'03		min. Earth dist.	16131 May 01 17:22	28° ♁ 35'51	0.65827 AU
morning max el	16130 Jun 04 14:27	8° ♁ 47'11	18°40'30	inferior conj	16131 May 03 22:20	26° ♁ 03'11	1°08'13
desc. node	16130 Jun 14 22:15	22° ♁ 14'19		minimum elong	16131 May 03 20:41	26° ♁ 07'58	1°07'03
	16130 Jun 20 00:25	0° ♁		morning rise	16131 May 09 23:54	20° ♁ 29'24	
morning set	16130 Jun 26 07:51	9° ♁ 49'12		direct	16131 May 12 21:10	19° ♁ 44'02	
	16130 Jul 09 06:29	0° ♁		morning max el	16131 May 19 04:46	23° ♁ 01'31	18°05'48
max. Earth dist.	16130 Jul 11 11:20	3° ♁ 26'00	1.45925 AU		16131 May 24 21:36	0° ♁	
superior conj	16130 Jul 12 09:36	4° ♁ 52'53	-2°14'10	desc. node	16131 Jun 01 19:15	12° ♁ 08'50	
minimum elong	16130 Jul 12 08:47	4° ♁ 49'40	2°14'49	morning set	16131 Jun 06 23:19	20° ♁ 29'34	
evening rise	16130 Jul 27 22:52	29° ♁ 23'09			16131 Jun 12 21:00	0° ♁	
	16130 Jul 28 08:08	0° ♁		superior conj	16131 Jun 21 19:53	14° ♁ 11'05	-2°01'50
greatest brilliancy	16130 Aug 03 13:19	9° ♁ 53'18	-0.9m	minimum elong	16131 Jun 21 12:28	13° ♁ 41'59	2°02'07
asc. node	16130 Aug 09 06:27	18° ♁ 44'15		max. Earth dist.	16131 Jun 24 08:07	18° ♁ 06'49	1.45917 AU
	16130 Aug 17 23:58	0° ♁			16131 Jul 01 23:40	0° ♁	
evening max el	16130 Aug 17 18:08	29° ♁ 45'50	18°34'53	evening rise	16131 Jul 07 23:09	9° ♁ 14'20	
retrograde	16130 Aug 24 06:18	3° ♁ 16'04		greatest brilliancy	16131 Jul 20 03:47	27° ♁ 50'49	-0.7m
evening set	16130 Aug 27 10:48	2° ♁ 18'30			16131 Jul 21 14:44	0° ♁	
	16130 Aug 30 06:04	30° ♁		asc. node	16131 Jul 27 03:12	7° ♁ 44'54	
inferior conj	16130 Sep 02 03:30	26° ♁ 41'05	2°20'02	evening max el	16131 Aug 01 03:24	13° ♁ 37'33	19°17'15
minimum elong	16130 Sep 02 05:46	26° ♁ 34'11	2°19'21	retrograde	16131 Aug 08 03:28	17° ♁ 30'05	
min. Earth dist.	16130 Sep 04 03:17	24° ♁ 15'40	0.65644 AU	evening set	16131 Aug 11 17:47	16° ♁ 15'06	
morning rise	16130 Sep 07 23:34	20° ♁ 16'27		inferior conj	16131 Aug 17 03:48	10° ♁ 24'12	2°48'56
desc. node	16130 Sep 10 19:53	18° ♁ 26'07		minimum elong	16131 Aug 17 05:30	10° ♁ 18'38	2°48'19
direct	16130 Sep 14 08:34	17° ♁ 39'05		min. Earth dist.	16131 Aug 18 13:28	8° ♁ 34'20	0.67215 AU
morning max el	16130 Sep 27 15:23	25° ♁ 28'13	26°54'13	morning rise	16131 Aug 22 16:36	3° ♁ 57'32	
	16130 Oct 01 19:08	0° ♁		direct	16131 Aug 28 16:15	1° ♁ 23'12	
	16130 Oct 22 17:06	0° ♁		desc. node	16131 Aug 28 17:17	1° ♁ 23'13	
morning set	16130 Nov 02 08:05	19° ♁ 01'55		morning max el	16131 Sep 10 02:44	8° ♁ 48'08	25°42'50
asc. node	16130 Nov 05 07:44	24° ♁ 51'56			16131 Sep 26 19:29	0° ♁	

	16131 Oct 15 05:34	0°♄		morning max el	16132 Aug 22 13:48	22°♄20'41	24°17'53
morning set	16131 Oct 16 01:12	1°♄29'07			16132 Aug 29 06:50	0°♄	
max. Earth dist.	16131 Oct 19 16:03	8°♄13'16	1.35735 AU		16132 Sep 19 02:19	0°♄	
asc. node	16131 Oct 23 04:31	15°♄02'14		morning set	16132 Sep 27 00:10	13°♄09'15	
				max. Earth dist.	16132 Sep 30 15:24	19°♄32'46	1.38048 AU
superior conj	16131 Oct 25 16:06	19°♄59'29	0°22'23		16132 Oct 06 07:38	0°♄	
minimum elong	16131 Oct 25 14:48	19°♄52'59	0°22'40				
	16131 Oct 30 13:18	0°♄		superior conj	16132 Oct 07 21:51	3°♄02'02	-0°10'13
evening rise	16131 Nov 02 11:21	6°♄02'12		minimum elong	16132 Oct 07 22:31	3°♄05'17	0°09'45
	16131 Nov 15 16:12	0°♄		behind sun begin	16132 Oct 07 17:00	2°♄38'50	
evening max el	16131 Nov 20 12:32	5°♄51'36	20°14'28	behind sun end	16132 Oct 08 04:02	3°♄31'47	
desc. node	16131 Nov 24 14:39	9°♄10'06		asc. node	16132 Oct 09 01:14	5°♄14'01	
retrograde	16131 Dec 01 05:36	11°♄11'40		evening rise	16132 Oct 16 13:37	20°♄04'29	
evening set	16131 Dec 03 10:52	10°♄58'59			16132 Oct 21 16:05	0°♄	
inferior conj	16131 Dec 12 06:04	7°♄02'49	-5°02'48	evening max el	16132 Nov 02 03:11	17°♄15'23	19°09'35
minimum elong	16131 Dec 11 20:16	7°♄17'21	4°59'41	desc. node	16132 Nov 10 11:48	21°♄48'31	
min. Earth dist.	16131 Dec 13 21:48	6°♄03'50	0.54770 AU	retrograde	16132 Nov 11 05:57	21°♄50'20	
morning rise	16131 Dec 20 05:02	2°♄59'53		evening set	16132 Nov 13 03:17	21°♄39'21	
direct	16131 Dec 24 23:35	2°♄10'39		inferior conj	16132 Nov 21 14:09	17°♄26'56	-3°28'41
morning max el	16132 Jan 07 13:24	8°♄52'19	24°02'53	minimum elong	16132 Nov 21 05:41	17°♄41'15	3°24'58
asc. node	16132 Jan 19 03:55	23°♄46'03		min. Earth dist.	16132 Nov 24 07:51	15°♄36'01	0.56024 AU
	16132 Jan 22 20:10	0°♄		morning rise	16132 Nov 29 05:34	12°♄52'04	
morning set	16132 Feb 01 02:24	18°♄24'45		direct	16132 Dec 04 21:04	11°♄38'20	
	16132 Feb 06 09:57	0°♄		morning max el	16132 Dec 18 23:09	18°♄48'35	25°47'12
					16132 Dec 28 08:10	0°♄	
superior conj	16132 Feb 07 21:45	3°♄15'35	1°30'35	asc. node	16133 Jan 05 01:07	12°♄15'09	
minimum elong	16132 Feb 07 23:21	3°♄24'18	1°30'51		16133 Jan 14 03:44	0°♄	
max. Earth dist.	16132 Feb 10 11:44	8°♄50'26	1.32587 AU	morning set	16133 Jan 15 13:50	3°♄02'10	
evening rise	16132 Feb 15 12:16	19°♄17'25					
desc. node	16132 Feb 20 14:55	29°♄12'28		superior conj	16133 Jan 22 07:17	17°♄52'56	1°37'08
	16132 Feb 21 01:09	0°♄		minimum elong	16133 Jan 22 07:54	17°♄56'20	1°37'39
	16132 Mar 11 00:29	0°♄		max. Earth dist.	16133 Jan 23 15:19	20°♄50'23	1.31552 AU
evening max el	16132 Mar 20 10:24	10°♄48'06	27°31'03		16133 Jan 27 20:29	0°♄	
retrograde	16132 Apr 03 04:46	18°♄19'55		evening rise	16133 Jan 29 10:08	3°♄18'15	
evening set	16132 Apr 09 23:10	15°♄54'01		desc. node	16133 Feb 06 11:36	19°♄04'54	
min. Earth dist.	16132 Apr 13 18:07	12°♄33'53	0.63948 AU		16133 Feb 12 19:55	0°♄	
inferior conj	16132 Apr 16 11:01	9°♄44'51	0°07'46	evening max el	16133 Mar 02 20:04	23°♄32'32	27°33'18
minimum elong	16132 Apr 16 10:48	9°♄45'26	0°07'16		16133 Mar 12 01:10	0°♄	
transit middle	16132 Apr 16 10:48	9°♄45'26	0°07'16	retrograde	16133 Mar 16 19:36	0°♄59'27	
transit begin	16132 Apr 16 08:01	9°♄52'43			16133 Mar 21 09:07	30°♄	
transit end	16132 Apr 16 13:35	9°♄38'09		evening set	16133 Mar 23 15:01	28°♄47'08	
asc. node	16132 Apr 16 01:08	10°♄10'49		min. Earth dist.	16133 Mar 27 09:23	25°♄51'13	0.61795 AU
morning rise	16132 Apr 23 00:46	4°♄25'56		inferior conj	16133 Mar 30 11:26	23°♄00'06	-1°06'38
direct	16132 Apr 25 13:16	3°♄54'06		minimum elong	16133 Mar 30 13:46	22°♄54'40	1°05'54
morning max el	16132 May 01 22:03	7°♄09'15	17°48'21	asc. node	16133 Apr 02 22:27	20°♄01'43	
	16132 May 17 07:08	0°♄		morning rise	16133 Apr 06 15:44	17°♄58'39	
morning set	16132 May 18 17:39	2°♄26'06		direct	16133 Apr 08 20:46	17°♄37'01	
desc. node	16132 May 18 16:09	2°♄19'45		morning max el	16133 Apr 15 15:18	21°♄01'38	17°48'37
					16133 Apr 22 10:56	0°♄	
superior conj	16132 May 31 20:05	24°♄10'56	-1°33'22	morning set	16133 May 01 10:16	15°♄24'34	
minimum elong	16132 May 31 11:48	23°♄37'28	1°33'10	desc. node	16133 May 05 12:57	22°♄41'58	
	16132 Jun 04 11:12	0°♄			16133 May 09 17:26	0°♄	
max. Earth dist.	16132 Jun 06 03:46	2°♄40'52	1.45158 AU				
evening rise	16132 Jun 16 10:17	18°♄38'13		superior conj	16133 May 12 18:50	5°♄13'19	-0°56'39
	16132 Jun 23 22:29	0°♄		minimum elong	16133 May 12 13:38	4°♄51'22	0°56'32
asc. node	16132 Jul 12 23:59	26°♄11'15		max. Earth dist.	16133 May 19 19:39	16°♄51'15	1.43740 AU
evening max el	16132 Jul 14 06:51	27°♄31'37	20°15'01	evening rise	16133 May 27 00:57	28°♄17'56	
	16132 Jul 17 02:54	0°♄			16133 May 28 03:18	0°♄	
retrograde	16132 Jul 22 02:28	1°♄58'20			16133 Jun 17 16:28	0°♄	
evening set	16132 Jul 26 03:09	0°♄25'31		evening max el	16133 Jun 27 04:14	11°♄25'30	21°25'32
	16132 Jul 26 15:35	30°♄		asc. node	16133 Jun 29 20:50	13°♄51'15	
inferior conj	16132 Jul 31 09:32	24°♄22'30	3°04'30	retrograde	16133 Jul 06 01:16	16°♄34'40	
minimum elong	16132 Jul 31 10:22	24°♄19'38	3°03'57	evening set	16133 Jul 10 12:55	14°♄44'32	
min. Earth dist.	16132 Aug 01 05:22	23°♄14'46	0.68336 AU	inferior conj	16133 Jul 15 18:24	8°♄30'58	3°08'25
morning rise	16132 Aug 05 17:15	17°♄58'15		minimum elong	16133 Jul 15 18:16	8°♄31'23	3°07'48
direct	16132 Aug 11 05:42	15°♄33'49		min. Earth dist.	16133 Jul 16 00:52	8°♄08'22	0.68983 AU
desc. node	16132 Aug 14 14:38	16°♄18'50		morning rise	16133 Jul 20 23:24	2°♄12'07	

direct	16133 Jul 25 23:47	0°02'36		morning rise	16134 Jul 05 09:10	16°34'23	
desc. node	16133 Aug 01 11:57	2°04'57		direct	16134 Jul 09 21:25	14°43'00	
morning max el	16133 Aug 05 01:37	6°00'45	22°48'40	morning max el	16134 Jul 18 16:58	19°49'26	21°23'32
	16133 Aug 23 15:04	0°00		desc. node	16134 Jul 19 09:11	20°30'45	
morning set	16133 Sep 08 00:53	23°05'14			16134 Jul 27 05:46	0°00	
	16133 Sep 11 17:18	0°00			16134 Aug 16 18:44	0°00	
max. Earth dist.	16133 Sep 12 14:53	1°03'124	1.40455 AU	morning set	16134 Aug 19 01:53	3°03'524	
				max. Earth dist.	16134 Aug 25 19:53	14°02'428	1.42676 AU
superior conj	16133 Sep 20 11:55	15°02'150	-0°46'24				
minimum elong	16133 Sep 20 15:33	15°03'17	0°45'41	superior conj	16134 Sep 02 06:01	26°04'57	-1°22'51
asc. node	16133 Sep 25 21:54	25°02'308		minimum elong	16134 Sep 02 12:46	27°03'1854	1°22'04
	16133 Sep 28 08:27	0°00			16134 Sep 04 02:05	0°00	
evening rise	16133 Sep 30 07:37	3°00'44'08		asc. node	16134 Sep 12 18:34	15°02'26'21	
evening max el	16133 Oct 16 05:58	29°00'26'44	18°26'57	evening rise	16134 Sep 13 13:28	16°02'51'44	
	16133 Oct 16 19:43	0°00			16134 Sep 20 23:13	0°00	
retrograde	16133 Oct 24 00:58	3°00'24'07		evening max el	16134 Sep 29 16:40	12°00'16'46	18°05'04
evening set	16133 Oct 26 00:32	3°00'09'30		retrograde	16134 Oct 06 14:10	15°00'49'12	
desc. node	16133 Oct 28 09:02	2°00'17'08		evening set	16134 Oct 08 20:22	15°00'26'42	
	16133 Oct 31 23:59	30°00'00		desc. node	16134 Oct 15 06:18	11°00'07'47	
inferior conj	16133 Nov 02 19:25	28°00'36'20	-1°45'02	inferior conj	16134 Oct 15 21:49	10°00'32'28	-0°12'17
minimum elong	16133 Nov 02 15:18	28°00'44'28	1°42'46	minimum elong	16134 Oct 15 21:25	10°00'33'24	0°11'42
min. Earth dist.	16133 Nov 06 00:46	26°00'04'20	0.57923 AU	transit middle	16134 Oct 15 21:25	10°00'33'24	0°11'42
morning rise	16133 Nov 10 02:37	23°00'24'32		transit begin	16134 Oct 15 19:06	10°00'38'40	
direct	16133 Nov 16 09:10	21°00'43'41		transit end	16134 Oct 15 23:43	10°00'28'07	
morning max el	16133 Nov 30 15:33	29°00'16'22	27°07'30	min. Earth dist.	16134 Oct 19 02:24	7°00'37'57	0.60162 AU
	16133 Dec 01 09:14	0°00		morning rise	16134 Oct 22 19:15	4°00'48'34	
	16133 Dec 22 05:07	0°00		direct	16134 Oct 29 10:05	2°00'42'53	
asc. node	16133 Dec 22 22:13	1°00'03'19'21		morning max el	16134 Nov 12 16:01	10°00'31'27	27°51'41
morning set	16133 Dec 30 22:57	17°00'03'28'48			16134 Nov 27 20:16	0°00	
	16134 Jan 05 15:27	0°00		asc. node	16134 Dec 09 19:16	20°00'04'49'21	
					16134 Dec 14 08:47	0°00	
superior conj	16134 Jan 06 18:34	2°00'03'15'2	1°37'37	morning set	16134 Dec 15 03:54	1°00'03'40'04	
minimum elong	16134 Jan 06 18:07	2°00'02'29'22	1°38'16	max. Earth dist.	16134 Dec 21 05:37	14°00'03'52'38	1.31077 AU
max. Earth dist.	16134 Jan 06 22:26	2°00'02'53'32	1.31040 AU				
evening rise	16134 Jan 13 14:11	17°00'02'32'58		superior conj	16134 Dec 22 05:43	17°00'03'07'06	1°32'05
	16134 Jan 19 16:58	0°00		minimum elong	16134 Dec 22 04:18	16°00'03'59'13	1°32'42
desc. node	16134 Jan 24 08:20	8°00'03'32'51			16134 Dec 28 00:53	0°00	
	16134 Feb 07 20:45	0°00		evening rise	16134 Dec 28 22:21	1°00'02'56'33	
evening max el	16134 Feb 13 00:19	5°00'03'31'27	27°01'12	desc. node	16135 Jan 11 05:08	27°00'02'56'53	
retrograde	16134 Feb 27 01:21	12°00'04'48'05			16135 Jan 12 19:12	0°00	
evening set	16134 Mar 05 15:21	10°00'05'56'49		evening max el	16135 Jan 25 20:48	16°00'03'37'56	25°54'44
min. Earth dist.	16134 Mar 09 14:33	8°00'05'15'48	0.59533 AU	retrograde	16135 Feb 08 19:33	23°00'03'40'59	
inferior conj	16134 Mar 12 19:57	5°00'05'39'40	-2°32'58	evening set	16135 Feb 14 20:32	22°00'03'15'56	
minimum elong	16134 Mar 13 01:46	5°00'05'27'53	2°30'43	min. Earth dist.	16135 Feb 19 09:53	19°00'03'37'14	0.57394 AU
morning rise	16134 Mar 20 15:46	0°00'05'58'07		inferior conj	16135 Feb 22 08:57	17°00'03'33'15	-4°03'42
asc. node	16134 Mar 20 19:47	0°00'05'55'43		minimum elong	16135 Feb 22 17:54	17°00'03'17'37	4°00'38
direct	16134 Mar 22 15:42	0°00'05'43'01		morning rise	16135 Mar 02 18:19	13°00'03'13'03	
morning max el	16134 Mar 30 05:01	4°00'05'28'35	18°07'42	direct	16135 Mar 04 17:50	13°00'03'00'41	
morning set	16134 Apr 14 19:23	29°00'05'08'11		asc. node	16135 Mar 07 17:09	13°00'03'30'04	
	16134 Apr 15 06:29	0°00		morning max el	16135 Mar 13 11:10	17°00'03'17'48	18°47'20
desc. node	16134 Apr 22 09:43	13°00'03'11'19			16135 Mar 22 12:50	0°00	
				morning set	16135 Mar 29 15:57	13°00'05'21'30	
superior conj	16134 Apr 24 16:32	17°00'03'17'54	-0°18'50				
minimum elong	16134 Apr 24 14:58	17°00'03'10'58	0°19'04	superior conj	16135 Apr 07 09:32	0°00'03'13'49	0°15'42
	16134 May 02 00:32	0°00		minimum elong	16135 Apr 07 10:33	0°00'03'18'36	0°15'14
max. Earth dist.	16134 May 02 06:55	0°00'02'26'47	1.41817 AU	behind sun begin	16135 Apr 07 08:32	0°00'03'09'08	
evening rise	16134 May 07 08:20	8°00'02'45'32		behind sun end	16135 Apr 07 12:34	0°00'03'28'04	
	16134 May 21 05:03	0°00			16135 Apr 07 06:36	0°00	
evening max el	16134 Jun 09 20:59	25°00'02'20'13	22°44'29	desc. node	16135 Apr 09 06:25	3°00'03'43'27	
	16134 Jun 15 17:20	0°00		max. Earth dist.	16135 Apr 14 14:25	13°00'03'21'08	1.39593 AU
asc. node	16134 Jun 16 17:48	0°00'02'30'10		evening rise	16135 Apr 18 12:54	20°00'03'08'28	
retrograde	16134 Jun 19 22:19	1°00'02'13'52			16135 Apr 24 12:58	0°00	
	16134 Jun 23 18:06	30°00'03'00			16135 May 15 08:39	0°00	
evening set	16134 Jun 24 21:26	29°00'02'08'01		evening max el	16135 May 23 11:10	9°00'02'15'35	24°06'06
inferior conj	16134 Jun 30 04:24	22°00'02'45'47	3°01'38	retrograde	16135 Jun 03 16:11	15°00'02'49'27	
minimum elong	16134 Jun 30 03:22	22°00'02'49'21	3°00'50	asc. node	16135 Jun 03 14:50	15°00'02'49'26	
min. Earth dist.	16134 Jun 29 21:49	23°00'02'08'40	0.69145 AU	evening set	16135 Jun 09 03:03	13°00'02'30'21	

min. Earth dist.	16135 Jun 13 18:01	8°☿08'33	0.68817 AU			16136 May 19 04:27	30°♊II	
inferior conj	16135 Jun 14 13:36	7°☿02'07	2°44'26	asc. node		16136 May 20 11:56	29°♊31'42	
minimum elong	16135 Jun 14 11:51	7°☿08'04	2°43'23	evening set		16136 May 23 04:05	27°♊46'33	
morning rise	16135 Jun 19 20:41	0°☿59'37		min. Earth dist.		16136 May 27 11:21	23°♊01'43	0.68008 AU
	16135 Jun 21 11:44	30°♊II		inferior conj		16136 May 28 20:03	21°♊15'52	2°16'26
direct	16135 Jun 23 21:05	29°♊27'54		minimum elong		16136 May 28 17:54	21°♊22'52	2°15'10
	16135 Jun 26 09:19	0°☿		morning rise		16136 Jun 03 08:09	15°♊23'33	
morning max el	16135 Jul 01 14:32	3°☿48'20	20°08'45	direct		16136 Jun 06 21:18	14°♊11'20	
desc. node	16135 Jul 06 06:23	9°☿05'06		morning max el		16136 Jun 13 19:27	17°♊57'12	19°08'08
	16135 Jul 21 01:59	0°♊		desc. node		16136 Jun 22 03:31	28°♊18'14	
morning set	16135 Jul 29 09:08	12°♊35'11				16136 Jun 23 08:00	0°☿	
max. Earth dist.	16135 Aug 08 07:54	28°♊07'52	1.44448 AU	greatest brilliancy		16136 Jun 26 16:37	4°☿56'05	-0.7m
	16135 Aug 09 12:01	0°♊		morning set		16136 Jul 07 15:11	21°☿36'54	
						16136 Jul 13 01:27	0°♊	
superior conj	16135 Aug 14 00:51	7°♊19'21	-1°53'54	max. Earth dist.		16136 Jul 21 01:13	12°♊26'15	1.45590 AU
minimum elong	16135 Aug 14 08:36	7°♊50'58	1°53'36					
evening rise	16135 Aug 27 02:12	29°♊14'31		superior conj		16136 Jul 23 21:48	16°♊55'36	-2°12'07
	16135 Aug 27 12:48	0°♊		minimum elong		16136 Jul 24 01:26	17°♊09'54	2°12'35
asc. node	16135 Aug 30 15:16	5°♊19'20				16136 Aug 01 02:53	0°♊	
evening max el	16135 Sep 13 07:07	25°♊34'57	18°02'27	evening rise		16136 Aug 07 16:33	10°♊39'30	
retrograde	16135 Sep 19 17:38	28°♊56'15		asc. node		16136 Aug 16 11:58	24°♊57'00	
evening set	16135 Sep 22 07:57	28°♊22'18				16136 Aug 19 18:23	0°♊	
inferior conj	16135 Sep 28 18:01	23°♊09'12	1°01'43	evening max el		16136 Aug 26 21:43	9°♊11'41	18°18'00
minimum elong	16135 Sep 28 19:41	23°♊04'52	1°01'20	retrograde		16136 Sep 02 06:51	12°♊35'14	
min. Earth dist.	16135 Oct 01 14:00	20°♊12'33	0.62444 AU	evening set		16136 Sep 05 05:56	11°♊46'57	
desc. node	16135 Oct 02 03:38	19°♊38'56		inferior conj		16136 Sep 11 03:57	6°♊17'40	1°56'27
morning rise	16135 Oct 05 04:59	17°♊02'08		minimum elong		16136 Sep 11 06:16	6°♊10'55	1°55'46
direct	16135 Oct 11 21:25	14°♊37'48		min. Earth dist.		16136 Sep 13 11:32	3°♊36'42	0.64556 AU
morning max el	16135 Oct 25 22:58	22°♊35'09	27°56'33	morning rise		16136 Sep 17 05:01	29°♊56'51	
	16135 Nov 01 12:47	0°♊				16136 Sep 17 03:27	30°♊♊	
	16135 Nov 21 01:31	0°♊		desc. node		16136 Sep 18 01:00	29°♊19'26	
asc. node	16135 Nov 26 16:15	10°♊37'55		direct		16136 Sep 23 17:46	27°♊21'51	
morning set	16135 Nov 29 02:34	15°♊31'12				16136 Oct 01 02:43	0°♊	
max. Earth dist.	16135 Dec 04 09:04	26°♊39'18	1.31674 AU	morning max el		16136 Oct 07 09:35	5°♊18'17	27°25'33
	16135 Dec 05 21:50	0°♊				16136 Oct 26 05:41	0°♊	
				morning set		16136 Nov 11 16:19	28°♊55'33	
superior conj	16135 Dec 06 14:51	1°♊33'35	1°20'28			16136 Nov 12 05:22	0°♊	
minimum elong	16135 Dec 06 12:45	1°♊21'56	1°20'57	asc. node		16136 Nov 12 13:08	0°♊38'31	
evening rise	16135 Dec 13 08:45	16°♊24'29		max. Earth dist.		16136 Nov 16 05:01	8°♊05'49	1.32837 AU
	16135 Dec 19 23:11	0°♊						
desc. node	16135 Dec 29 02:00	15°♊34'46		superior conj		16136 Nov 19 19:49	15°♊44'55	1°02'43
evening max el	16136 Jan 07 09:15	26°♊56'48	24°21'43	minimum elong		16136 Nov 19 17:27	15°♊32'13	1°03'02
	16136 Jan 11 00:10	0°♊				16136 Nov 26 09:55	0°♊	
retrograde	16136 Jan 21 00:29	3°♊44'01		evening rise		16136 Nov 26 19:30	0°♊51'20	
evening set	16136 Jan 26 03:31	2°♊46'35				16136 Dec 12 21:49	0°♊	
	16136 Jan 31 16:51	30°♊		desc. node		16136 Dec 14 22:57	2°♊39'10	
min. Earth dist.	16136 Jan 31 21:01	29°♊53'45	0.55654 AU	evening max el		16136 Dec 18 18:47	6°♊51'56	22°38'07
inferior conj	16136 Feb 03 00:45	28°♊34'43	-5°21'45	retrograde		16136 Dec 31 17:02	13°♊15'39	
minimum elong	16136 Feb 03 09:14	28°♊21'44	5°19'39	evening set		16137 Jan 04 13:52	12°♊42'57	
morning rise	16136 Feb 11 16:57	24°♊34'37		min. Earth dist.		16137 Jan 12 03:21	9°♊16'06	0.54594 AU
direct	16136 Feb 14 00:24	24°♊20'36		inferior conj		16137 Jan 12 22:33	8°♊49'00	-6°01'06
asc. node	16136 Feb 22 14:30	27°♊50'31		minimum elong		16137 Jan 13 00:06	8°♊46'48	6°00'26
morning max el	16136 Feb 24 05:32	29°♊18'02	19°49'35	morning rise		16137 Jan 21 11:30	5°♊00'53	
	16136 Feb 24 22:15	0°♊		direct		16137 Jan 24 13:38	4°♊39'08	
morning set	16136 Mar 12 20:12	27°♊53'26		morning max el		16137 Feb 05 09:06	10°♊21'11	21°15'04
	16136 Mar 13 21:09	0°♊		asc. node		16137 Feb 08 11:50	13°♊43'09	
						16137 Feb 18 22:16	0°♊	
superior conj	16136 Mar 20 17:29	13°♊49'26	0°44'47	morning set		16137 Feb 25 05:10	12°♊34'37	
minimum elong	16136 Mar 20 19:47	14°♊00'46	0°44'18					
desc. node	16136 Mar 26 03:07	24°♊14'55		superior conj		16137 Mar 04 12:23	27°♊53'07	1°07'36
max. Earth dist.	16136 Mar 26 20:55	25°♊38'00	1.37306 AU	minimum elong		16137 Mar 04 14:54	28°♊06'10	1°07'20
	16136 Mar 29 06:01	0°♊				16137 Mar 05 13:01	0°♊	
evening rise	16136 Mar 30 13:38	2°♊21'58		max. Earth dist.		16137 Mar 09 06:35	7°♊31'06	1.35181 AU
	16136 Apr 16 15:38	0°♊		desc. node		16137 Mar 12 23:48	14°♊41'29	
evening max el	16136 May 05 00:37	23°♊10'01	25°23'24	evening rise		16137 Mar 13 07:16	15°♊16'39	
	16136 May 15 05:27	0°☿				16137 Mar 21 13:59	0°♊	
retrograde	16136 May 17 05:59	0°☿15'04				16137 Apr 11 05:40	0°♊	

evening max el	16137 Apr 17 14:12	6° Π 58'24	26°29'10	evening max el	16138 Mar 31 03:43	20° \mathcal{B} 32'01	27°15'49
retrograde	16137 Apr 30 14:46	14° Π 23'12		retrograde	16138 Apr 13 17:33	28° \mathcal{B} 04'31	
evening set	16137 May 06 22:45	11° Π 50'31		evening set	16138 Apr 20 08:57	25° \mathcal{B} 34'16	
asc. node	16137 May 07 09:07	11° Π 28'44		min. Earth dist.	16138 Apr 24 05:36	21° \mathcal{B} 57'05	0.65061 AU
min. Earth dist.	16137 May 10 23:53	7° Π 40'59	0.66739 AU	asc. node	16138 Apr 24 06:20	21° \mathcal{B} 55'06	
inferior conj	16137 May 12 21:39	5° Π 22'32	1°36'47	inferior conj	16138 Apr 26 15:52	19° \mathcal{B} 15'42	0°44'15
minimum elong	16137 May 12 19:36	5° Π 28'44	1°35'28	minimum elong	16138 Apr 26 14:42	19° \mathcal{B} 18'58	0°43'18
	16137 May 18 05:39	30° \mathcal{R} 8		morning rise	16138 May 02 22:18	13° \mathcal{B} 47'58	
morning rise	16137 May 18 17:30	29° \mathcal{B} 41'38		direct	16138 May 05 15:35	13° \mathcal{B} 08'54	
direct	16137 May 21 20:11	28° \mathcal{B} 47'20		morning max el	16138 May 11 22:50	16° \mathcal{B} 24'18	17°56'13
	16137 May 25 13:33	0° Π			16138 May 21 22:46	0° Π	
morning max el	16137 May 28 06:56	2° Π 11'44	18°23'42	desc. node	16138 May 26 21:31	8° Π 02'10	
desc. node	16137 Jun 09 00:34	18° Π 00'00		morning set	16138 May 29 18:25	12° Π 45'58	
	16137 Jun 16 15:52	0° \mathcal{E}			16138 Jun 09 08:23	0° \mathcal{E}	
morning set	16137 Jun 17 15:16	1° \mathcal{E} 32'33					
				superior conj	16138 Jun 12 21:46	5° \mathcal{E} 40'10	-1°51'18
superior conj	16137 Jul 03 07:14	26° \mathcal{E} 08'17	-2°11'20	minimum elong	16138 Jun 12 13:16	5° \mathcal{E} 06'28	1°51'19
minimum elong	16137 Jul 03 03:06	25° \mathcal{E} 52'10	2°11'54	max. Earth dist.	16138 Jun 16 17:02	11° \mathcal{E} 39'42	1.45675 AU
max. Earth dist.	16137 Jul 03 21:03	27° \mathcal{E} 02'06	1.46005 AU	evening rise	16138 Jun 28 22:31	0° \mathcal{Q} 35'24	
	16137 Jul 05 18:43	0° \mathcal{Q}			16138 Jun 28 13:17	0° \mathcal{Q}	
evening rise	16137 Jul 19 05:47	21° \mathcal{Q} 01'31		greatest brilliancy	16138 Jul 12 22:39	21° \mathcal{Q} 41'47	-0.6m
	16137 Jul 24 23:19	0° \mathcal{P}			16138 Jul 18 20:46	0° \mathcal{P}	
greatest brilliancy	16137 Jul 28 13:49	5° \mathcal{P} 35'29	-0.8m	asc. node	16138 Jul 21 05:27	3° \mathcal{P} 01'00	
asc. node	16137 Aug 03 08:41	14° \mathcal{P} 13'38		evening max el	16138 Jul 24 16:27	6° \mathcal{P} 52'55	19°40'09
evening max el	16137 Aug 10 09:33	22° \mathcal{P} 59'51	18°50'56	retrograde	16138 Aug 01 00:06	10° \mathcal{P} 58'46	
retrograde	16137 Aug 17 01:59	26° \mathcal{P} 38'28		evening set	16138 Aug 04 18:40	9° \mathcal{P} 36'24	
evening set	16137 Aug 20 10:28	25° \mathcal{P} 33'47		inferior conj	16138 Aug 10 02:49	3° \mathcal{P} 40'25	2°57'01
inferior conj	16137 Aug 25 23:56	19° \mathcal{P} 50'26	2°34'01	minimum elong	16138 Aug 10 04:11	3° \mathcal{P} 35'52	2°56'27
minimum elong	16137 Aug 26 02:00	19° \mathcal{P} 43'52	2°33'23	min. Earth dist.	16138 Aug 11 06:39	2° \mathcal{P} 07'33	0.67746 AU
min. Earth dist.	16137 Aug 27 17:44	17° \mathcal{P} 38'52	0.66353 AU		16138 Aug 12 22:38	30° \mathcal{R} 8	
morning rise	16137 Aug 31 16:37	13° \mathcal{P} 23'57		morning rise	16138 Aug 15 13:09	27° \mathcal{Q} 14'13	
desc. node	16137 Sep 04 22:23	11° \mathcal{P} 01'58		direct	16138 Aug 21 08:18	24° \mathcal{Q} 43'02	
direct	16137 Sep 06 21:51	10° \mathcal{P} 46'51		desc. node	16138 Aug 22 19:45	24° \mathcal{Q} 51'40	
morning max el	16137 Sep 19 21:10	18° \mathcal{P} 28'30	26°26'12		16138 Aug 31 08:58	0° \mathcal{P}	
	16137 Sep 29 15:19	0° \mathcal{L}		morning max el	16138 Sep 02 08:09	1° \mathcal{P} 53'47	25°07'44
	16137 Oct 19 05:26	0° \mathcal{M}			16138 Sep 23 16:32	0° \mathcal{L}	
morning set	16137 Oct 25 18:04	11° \mathcal{M} 46'30		morning set	16138 Oct 08 03:56	23° \mathcal{L} 54'37	
max. Earth dist.	16137 Oct 29 15:04	19° \mathcal{M} 13'29	1.34540 AU	max. Earth dist.	16138 Oct 11 16:29	0° \mathcal{M} 18'36	1.36686 AU
asc. node	16137 Oct 30 09:57	20° \mathcal{M} 46'46			16138 Oct 11 12:28	0° \mathcal{M}	
				asc. node	16138 Oct 17 06:43	10° \mathcal{M} 58'09	
superior conj	16137 Nov 03 18:14	29° \mathcal{M} 35'37	0°38'50				
minimum elong	16137 Nov 03 16:17	29° \mathcal{M} 25'35	0°39'04	superior conj	16138 Oct 18 07:03	12° \mathcal{M} 57'55	0°09'10
	16137 Nov 03 22:56	0° \mathcal{X}		minimum elong	16138 Oct 18 06:28	12° \mathcal{M} 55'00	0°09'29
evening rise	16137 Nov 11 04:43	15° \mathcal{X} 12'55		behind sun begin	16138 Oct 18 01:12	12° \mathcal{M} 29'02	
	16137 Nov 18 14:52	0° \mathcal{Z}		behind sun end	16138 Oct 18 11:44	13° \mathcal{M} 21'01	
evening max el	16137 Nov 30 11:22	17° \mathcal{Z} 02'56	21°01'49	evening rise	16138 Oct 26 10:11	29° \mathcal{M} 23'31	
desc. node	16137 Dec 01 19:57	18° \mathcal{Z} 18'55			16138 Oct 26 17:23	0° \mathcal{X}	
retrograde	16137 Dec 12 02:51	22° \mathcal{Z} 48'56		evening max el	16138 Nov 12 17:47	27° \mathcal{X} 57'39	19°44'12
evening set	16137 Dec 14 18:51	22° \mathcal{Z} 32'07			16138 Nov 15 00:53	0° \mathcal{Z}	
inferior conj	16137 Dec 23 13:13	18° \mathcal{Z} 41'01	-5°40'48	desc. node	16138 Nov 18 17:03	2° \mathcal{Z} 09'34	
minimum elong	16137 Dec 23 05:53	18° \mathcal{Z} 51'26	5°38'58	retrograde	16138 Nov 22 18:01	2° \mathcal{Z} 57'35	
min. Earth dist.	16137 Dec 24 08:46	18° \mathcal{Z} 13'13	0.54434 AU	evening set	16138 Nov 24 18:22	2° \mathcal{Z} 46'23	
morning rise	16137 Dec 31 17:03	14° \mathcal{Z} 48'37			16138 Dec 01 10:04	30° \mathcal{R} 8	
direct	16138 Jan 04 20:58	14° \mathcal{Z} 11'14		inferior conj	16138 Dec 03 11:26	28° \mathcal{X} 44'42	-4°25'55
morning max el	16138 Jan 17 23:11	20° \mathcal{Z} 34'18	22°59'10	minimum elong	16138 Dec 03 01:30	29° \mathcal{X} 00'11	4°22'12
	16138 Jan 25 19:27	0° \approx		min. Earth dist.	16138 Dec 05 16:08	27° \mathcal{X} 22'39	0.55209 AU
asc. node	16138 Jan 26 09:06	0° \approx 49'48		morning rise	16138 Dec 11 07:06	24° \mathcal{X} 29'38	
morning set	16138 Feb 09 16:34	27° \approx 18'31		direct	16138 Dec 16 11:31	23° \mathcal{X} 30'11	
	16138 Feb 10 22:44	0° \mathcal{H}			16138 Dec 29 20:49	0° \mathcal{Z}	
				morning max el	16138 Dec 30 07:29	0° \mathcal{Z} 25'04	24°48'57
superior conj	16138 Feb 16 14:57	12° \mathcal{H} 15'33	1°24'00	asc. node	16139 Jan 13 06:19	18° \mathcal{Z} 53'16	
minimum elong	16138 Feb 16 17:01	12° \mathcal{H} 26'37	1°24'04		16139 Jan 19 08:58	0° \approx	
max. Earth dist.	16138 Feb 19 23:06	19° \mathcal{H} 19'40	1.33407 AU	morning set	16139 Jan 25 04:31	12° \approx 00'00	
evening rise	16138 Feb 24 14:19	28° \mathcal{H} 43'24					
	16138 Feb 25 05:57	0° \mathcal{Y}		superior conj	16139 Jan 31 22:36	26° \approx 49'36	1°34'06
desc. node	16138 Feb 27 20:27	4° \mathcal{Y} 58'58		minimum elong	16139 Jan 31 23:48	26° \approx 56'13	1°34'29
	16138 Mar 14 18:01	0° \mathcal{B}			16139 Feb 02 09:20	0° \mathcal{H}	

max. Earth dist.	16139 Feb 02 23:20	1° H 16'13	1.32088 AU	evening rise	16140 Jan 23 08:21	26° \approx 41'56	
evening rise	16139 Feb 08 07:36	12° H 34'25			16140 Jan 24 22:22	0° H	
desc. node	16139 Feb 14 17:06	25° H 02'41		desc. node	16140 Feb 01 13:48	14° H 45'52	
	16139 Feb 17 10:52	0° Y			16140 Feb 10 21:09	0° Y	
	16139 Mar 10 03:02	0° B		evening max el	16140 Feb 23 23:36	16° Y 06'29	27°24'00
evening max el	16139 Mar 13 15:44	3° B 39'31	27°36'04	retrograde	16140 Mar 08 23:50	23° Y 28'31	
retrograde	16139 Mar 27 13:01	11° B 09'44		evening set	16140 Mar 15 17:56	21° Y 24'31	
evening set	16139 Apr 03 08:18	8° B 49'04		min. Earth dist.	16140 Mar 19 13:38	18° Y 36'17	0.60843 AU
min. Earth dist.	16139 Apr 07 02:42	5° B 39'48	0.63056 AU	inferior conj	16140 Mar 22 17:58	15° Y 49'40	-1°42'00
inferior conj	16139 Apr 09 23:49	2° B 48'10	-0°22'05	minimum elong	16140 Mar 22 21:42	15° Y 41'28	1°40'38
minimum elong	16139 Apr 10 00:33	2° B 46'22	0°22'08	asc. node	16140 Mar 28 00:56	11° Y 50'49	
asc. node	16139 Apr 11 03:36	1° B 39'52		morning rise	16140 Mar 30 04:50	10° Y 56'11	
	16139 Apr 12 23:36	30° R Y		direct	16140 Apr 01 07:29	10° Y 37'38	
morning rise	16139 Apr 16 19:29	27° Y 36'00		morning max el	16140 Apr 08 08:39	14° Y 09'31	17°54'19
direct	16139 Apr 19 04:35	27° Y 08'55			16140 Apr 19 05:24	0° B	
	16139 Apr 25 05:03	0° B		morning set	16140 Apr 23 23:23	8° B 31'39	
morning max el	16139 Apr 25 16:29	0° B 26'56	17°46'11	desc. node	16140 Apr 29 15:10	18° B 44'34	
morning set	16139 May 11 23:03	25° B 11'50					
desc. node	16139 May 13 18:23	28° B 18'52		superior conj	16140 May 04 15:53	27° B 35'13	-0°40'26
	16139 May 14 17:53	0° II		minimum elong	16140 May 04 12:19	27° B 19'45	0°40'26
					16140 May 06 01:33	0° II	
superior conj	16139 May 24 07:06	16° II 05'42	-1°18'18	max. Earth dist.	16140 May 12 01:57	10° II 04'50	1.42982 AU
minimum elong	16139 May 23 23:53	15° II 35'57	1°18'05	evening rise	16140 May 18 05:55	19° II 59'16	
max. Earth dist.	16139 May 30 11:27	26° II 06'08	1.44635 AU		16140 May 24 17:30	0° B	
	16139 Jun 01 22:28	0° B			16140 Jun 15 06:28	0° B	
evening rise	16139 Jun 08 09:13	10° B 01'35		evening max el	16140 Jun 19 12:36	4° B 41'36	21°58'21
	16139 Jun 21 17:36	0° B		asc. node	16140 Jun 23 23:11	8° B 25'26	
evening max el	16139 Jul 07 17:23	20° B 47'28	20°43'41	retrograde	16140 Jun 28 21:16	10° B 09'23	
asc. node	16139 Jul 08 02:16	21° B 09'19		evening set	16140 Jul 03 13:53	8° B 12'05	
retrograde	16139 Jul 15 23:05	25° B 30'56		inferior conj	16140 Jul 08 19:43	1° B 54'35	3°06'49
evening set	16139 Jul 20 04:25	23° B 50'38		minimum elong	16140 Jul 08 19:12	1° B 56'24	3°06'07
inferior conj	16139 Jul 25 10:07	17° B 43'11	3°07'29	min. Earth dist.	16140 Jul 08 20:33	1° B 51'41	0.69118 AU
minimum elong	16139 Jul 25 10:34	17° B 41'41	3°06'55		16140 Jul 10 04:53	30° R B	
min. Earth dist.	16139 Jul 26 00:16	16° B 54'21	0.68680 AU	morning rise	16140 Jul 14 00:21	25° B 38'59	
morning rise	16139 Jul 30 16:25	11° B 21'06		direct	16140 Jul 18 19:33	23° B 37'02	
direct	16139 Aug 04 23:54	9° B 02'21		desc. node	16140 Jul 26 14:23	27° B 33'27	
desc. node	16139 Aug 09 17:06	10° B 30'16		morning max el	16140 Jul 28 08:09	29° B 12'29	22°11'33
morning max el	16139 Aug 15 19:05	15° B 28'42	23°39'50		16140 Jul 29 02:42	0° B	
	16139 Aug 27 17:25	0° B			16140 Aug 20 09:53	0° B	
	16139 Sep 16 15:11	0° B		morning set	16140 Aug 30 08:18	15° B 27'37	
morning set	16139 Sep 19 17:45	5° B 10'24		max. Earth dist.	16140 Sep 04 17:11	24° B 15'27	1.41442 AU
max. Earth dist.	16139 Sep 23 15:09	11° B 51'44	1.39081 AU		16140 Sep 08 02:40	0° B	
superior conj	16139 Oct 01 06:39	25° B 43'13	-0°25'17	superior conj	16140 Sep 12 12:46	7° B 42'09	-1°02'07
minimum elong	16139 Oct 01 08:29	25° B 51'47	0°24'43	minimum elong	16140 Sep 12 17:48	8° B 04'25	1°01'19
	16139 Oct 03 12:58	0° B		asc. node	16140 Sep 20 00:07	21° B 16'20	
asc. node	16139 Oct 04 03:25	1° B 09'04		evening rise	16140 Sep 22 22:44	26° B 44'29	
evening rise	16139 Oct 10 09:18	13° B 16'41			16140 Sep 24 16:49	0° B	
	16139 Oct 19 10:18	0° B		evening max el	16140 Oct 08 20:41	22° B 10'50	18°15'09
evening max el	16139 Oct 26 14:03	9° B 42'06	18°48'49	retrograde	16140 Oct 16 05:20	25° B 56'20	
retrograde	16139 Nov 04 01:53	13° B 59'30		evening set	16140 Oct 18 07:21	25° B 38'52	
evening set	16139 Nov 05 23:33	13° B 47'24		desc. node	16140 Oct 22 11:29	23° B 32'18	
desc. node	16139 Nov 05 14:14	13° B 51'48		inferior conj	16140 Oct 25 18:40	20° B 56'12	-1°03'38
inferior conj	16139 Nov 14 04:05	9° B 26'12	-2°44'19	minimum elong	16140 Oct 25 16:19	21° B 01'11	1°02'09
minimum elong	16139 Nov 13 21:23	9° B 38'18	2°41'04	min. Earth dist.	16140 Oct 29 00:46	18° B 12'19	0.58846 AU
min. Earth dist.	16139 Nov 17 04:24	7° B 16'13	0.56770 AU	morning rise	16140 Nov 01 21:51	15° B 29'40	
morning rise	16139 Nov 21 16:14	4° B 36'00		direct	16140 Nov 08 08:31	13° B 38'03	
direct	16139 Nov 27 15:07	3° B 10'53		morning max el	16140 Nov 22 15:30	21° B 18'08	27°31'18
morning max el	16139 Dec 11 19:21	10° B 30'31	26°25'21		16140 Nov 30 05:56	0° B	
	16139 Dec 26 16:50	0° B		asc. node	16140 Dec 17 00:34	26° B 54'51	
asc. node	16139 Dec 31 03:28	7° B 38'37			16140 Dec 18 14:57	0° B	
morning set	16140 Jan 09 15:12	26° B 33'22		morning set	16140 Dec 23 22:49	10° B 54'12	
	16140 Jan 11 05:14	0° \approx					
				superior conj	16140 Dec 30 20:33	26° B 05'52	1°36'00
superior conj	16140 Jan 16 09:05	11° \approx 28'04	1°38'04	minimum elong	16140 Dec 30 19:40	26° B 00'58	1°36'40
minimum elong	16140 Jan 16 09:15	11° \approx 28'59	1°38'40	max. Earth dist.	16140 Dec 30 12:49	25° B 22'36	1.30986 AU
max. Earth dist.	16140 Jan 17 05:04	13° \approx 19'29	1.31271 AU		16141 Jan 01 14:21	0° \approx	

evening rise	16141 Jan 06 14:24	11° \approx 00'46		superior conj	16141 Dec 15 07:04	10° \approx 37'26	1°27'54
	16141 Jan 16 03:50	0° \mathbb{H}		minimum elong	16141 Dec 15 05:19	10° \approx 27'42	1°28'28
desc. node	16141 Jan 18 10:34	4° \mathbb{H} 00'44		evening rise	16141 Dec 21 23:42	25° \approx 25'50	
evening max el	16141 Feb 05 00:36	27° \mathbb{H} 42'37	26°36'46		16141 Dec 24 03:03	0° \approx	
	16141 Feb 07 15:04	0° \mathbb{Y}		desc. node	16142 Jan 05 07:25	22° \approx 36'32	
retrograde	16141 Feb 19 00:47	4° \mathbb{Y} 53'50			16142 Jan 10 08:58	0° \mathbb{H}	
evening set	16141 Feb 25 10:35	3° \mathbb{Y} 12'53		evening max el	16142 Jan 17 17:13	8° \mathbb{H} 25'57	25°17'37
min. Earth dist.	16141 Mar 01 14:12	0° \mathbb{Y} 34'58	0.58599 AU	retrograde	16142 Jan 31 13:59	15° \mathbb{H} 23'43	
	16141 Mar 02 09:04	30° \mathbb{R} \mathbb{H}		evening set	16142 Feb 06 06:37	14° \mathbb{H} 10'22	
inferior conj	16141 Mar 04 18:32	28° \mathbb{H} 10'22	-3°11'38	min. Earth dist.	16142 Feb 11 05:47	11° \mathbb{H} 27'48	0.56579 AU
minimum elong	16141 Mar 05 01:52	27° \mathbb{H} 56'26	3°08'53	inferior conj	16142 Feb 13 22:27	9° \mathbb{H} 41'26	-4°39'50
morning rise	16141 Mar 12 20:39	23° \mathbb{H} 38'09		minimum elong	16142 Feb 14 07:53	9° \mathbb{H} 25'54	4°36'56
direct	16141 Mar 14 19:45	23° \mathbb{H} 24'39		morning rise	16142 Feb 22 11:53	5° \mathbb{H} 30'31	
asc. node	16141 Mar 14 22:17	23° \mathbb{H} 24'41		direct	16142 Feb 24 13:17	5° \mathbb{H} 18'11	
morning max el	16141 Mar 22 19:42	27° \mathbb{H} 21'52	18°21'56	asc. node	16142 Mar 01 19:37	6° \mathbb{H} 44'24	
	16141 Mar 25 04:42	0° \mathbb{Y}		morning max el	16142 Mar 05 21:25	9° \mathbb{H} 51'47	19°11'03
morning set	16141 Apr 07 13:52	22° \mathbb{Y} 29'08			16142 Mar 19 01:58	0° \mathbb{Y}	
	16141 Apr 11 12:45	0° \mathbb{Z}		morning set	16142 Mar 22 14:07	6° \mathbb{Y} 51'23	
desc. node	16141 Apr 16 11:54	9° \mathbb{Z} 15'26					
				superior conj	16142 Mar 30 22:17	23° \mathbb{Y} 17'43	0°28'45
superior conj	16141 Apr 16 22:21	10° \mathbb{Z} 03'10	-0°03'39	minimum elong	16142 Mar 30 23:59	23° \mathbb{Y} 25'55	0°28'15
minimum elong	16141 Apr 16 22:03	10° \mathbb{Z} 01'49	0°04'00	desc. node	16142 Apr 03 08:38	29° \mathbb{Y} 47'54	
behind sun begin	16141 Apr 16 14:56	9° \mathbb{Z} 29'19			16142 Apr 03 11:13	0° \mathbb{Z}	
behind sun end	16141 Apr 17 05:09	10° \mathbb{Z} 34'14		max. Earth dist.	16142 Apr 06 17:38	5° \mathbb{Z} 58'49	1.38607 AU
max. Earth dist.	16141 Apr 24 11:27	23° \mathbb{Z} 23'10	1.40896 AU	evening rise	16142 Apr 10 11:36	12° \mathbb{Z} 35'30	
	16141 Apr 28 10:01	0° \mathbb{I}			16142 Apr 21 02:59	0° \mathbb{I}	
evening rise	16141 Apr 28 22:06	0° \mathbb{I} 49'43			16142 May 13 07:19	0° \mathbb{Z}	
	16141 May 18 03:06	0° \mathbb{Z}		evening max el	16142 May 15 17:26	2° \mathbb{Z} 31'05	24°39'57
evening max el	16141 Jun 02 03:49	18° \mathbb{Z} 35'40	23°19'13	retrograde	16142 May 27 09:41	9° \mathbb{Z} 20'17	
asc. node	16141 Jun 10 20:11	24° \mathbb{Z} 32'38		asc. node	16142 May 28 17:14	9° \mathbb{Z} 13'00	
retrograde	16141 Jun 12 17:14	24° \mathbb{Z} 47'46		evening set	16142 Jun 02 01:18	6° \mathbb{Z} 56'41	
evening set	16141 Jun 17 21:24	22° \mathbb{Z} 35'39		min. Earth dist.	16142 Jun 06 12:47	1° \mathbb{Z} 50'32	0.68526 AU
min. Earth dist.	16141 Jun 22 17:25	16° \mathbb{Z} 52'23	0.69063 AU	inferior conj	16142 Jun 07 13:56	0° \mathbb{Z} 26'37	2°33'56
inferior conj	16141 Jun 23 05:37	16° \mathbb{Z} 10'15	2°55'38	minimum elong	16142 Jun 07 11:58	0° \mathbb{Z} 33'12	2°32'47
minimum elong	16141 Jun 23 04:15	16° \mathbb{Z} 14'57	2°54'43		16142 Jun 07 21:55	30° \mathbb{R} \mathbb{I}	
morning rise	16141 Jun 28 11:04	10° \mathbb{Z} 02'35		morning rise	16142 Jun 12 22:48	24° \mathbb{I} 28'06	
direct	16141 Jul 02 18:06	8° \mathbb{Z} 19'45		direct	16142 Jun 16 18:15	23° \mathbb{I} 04'52	
morning max el	16141 Jul 11 02:02	13° \mathbb{Z} 05'44	20°50'09	morning max el	16142 Jun 24 02:44	27° \mathbb{I} 09'31	19°41'00
desc. node	16141 Jul 13 11:36	15° \mathbb{Z} 39'23			16142 Jun 26 17:54	0° \mathbb{Z}	
	16141 Jul 24 10:01	0° \mathbb{Q}		desc. node	16142 Jun 30 08:46	4° \mathbb{Z} 31'55	
morning set	16141 Aug 10 00:25	24° \mathbb{Q} 48'46		greatest brilliancy	16142 Jul 07 03:30	14° \mathbb{Z} 03'36	-0.6m
	16141 Aug 13 08:01	0° \mathbb{P}			16142 Jul 17 18:28	0° \mathbb{Q}	
max. Earth dist.	16141 Aug 18 01:09	7° \mathbb{P} 30'54	1.43493 AU	morning set	16142 Jul 20 04:38	3° \mathbb{Q} 42'31	
				max. Earth dist.	16142 Jul 31 15:08	21° \mathbb{Q} 29'12	1.45018 AU
superior conj	16141 Aug 24 21:09	18° \mathbb{P} 45'01	-1°37'06				
minimum elong	16141 Aug 25 04:46	19° \mathbb{P} 17'01	1°36'28	superior conj	16142 Aug 05 06:06	28° \mathbb{Q} 50'20	-2°03'39
	16141 Aug 31 11:10	0° \mathbb{Z}		minimum elong	16142 Aug 05 12:49	29° \mathbb{Q} 17'15	2°03'42
evening rise	16141 Sep 05 22:00	9° \mathbb{Z} 34'41			16142 Aug 05 23:28	0° \mathbb{P}	
asc. node	16141 Sep 06 20:49	11° \mathbb{Z} 15'35		evening rise	16142 Aug 19 01:49	21° \mathbb{P} 34'09	
	16141 Sep 18 02:54	0° \mathbb{M}			16142 Aug 24 02:26	0° \mathbb{Z}	
evening max el	16141 Sep 22 09:25	5° \mathbb{M} 13'33	18°01'39	asc. node	16142 Aug 24 17:31	1° \mathbb{Z} 02'42	
retrograde	16141 Sep 29 01:12	8° \mathbb{M} 39'54		evening max el	16142 Sep 06 00:22	18° \mathbb{Z} 40'49	18°06'54
evening set	16141 Oct 01 10:36	8° \mathbb{M} 13'04		retrograde	16142 Sep 12 09:12	22° \mathbb{Z} 01'18	
inferior conj	16141 Oct 08 05:10	3° \mathbb{M} 10'38	0°21'32	evening set	16142 Sep 15 03:10	21° \mathbb{Z} 21'39	
minimum elong	16141 Oct 08 05:50	3° \mathbb{M} 09'00	0°21'36	inferior conj	16142 Sep 21 07:42	16° \mathbb{Z} 01'40	1°27'09
desc. node	16141 Oct 09 08:48	2° \mathbb{M} 02'58		minimum elong	16142 Sep 21 09:47	15° \mathbb{Z} 55'57	1°26'35
min. Earth dist.	16141 Oct 11 06:50	0° \mathbb{M} 12'29	0.61138 AU	min. Earth dist.	16142 Sep 23 22:50	13° \mathbb{Z} 09'28	0.63381 AU
	16141 Oct 11 12:14	30° \mathbb{R} \mathbb{Z}		desc. node	16142 Sep 26 06:08	10° \mathbb{Z} 53'59	
morning rise	16141 Oct 14 22:06	27° \mathbb{Z} 15'18		morning rise	16142 Sep 27 14:20	9° \mathbb{Z} 47'41	
direct	16141 Oct 21 14:13	25° \mathbb{Z} 00'38		direct	16142 Oct 04 05:56	7° \mathbb{Z} 17'21	
	16141 Nov 01 14:17	0° \mathbb{M}		morning max el	16142 Oct 18 03:55	15° \mathbb{Z} 16'06	27°47'11
morning max el	16141 Nov 04 19:13	2° \mathbb{M} 54'55	27°58'29		16142 Oct 30 05:46	0° \mathbb{M}	
	16141 Nov 24 18:43	0° \mathbb{X}			16142 Nov 17 10:41	0° \mathbb{X}	
asc. node	16141 Dec 03 21:35	16° \mathbb{X} 33'06		asc. node	16142 Nov 20 18:32	6° \mathbb{X} 27'06	
morning set	16141 Dec 08 01:22	24° \mathbb{X} 57'08		morning set	16142 Nov 21 20:33	8° \mathbb{X} 37'09	
	16141 Dec 10 10:40	0° \mathbb{Z}		max. Earth dist.	16142 Nov 26 19:05	18° \mathbb{X} 52'47	1.32098 AU
max. Earth dist.	16141 Dec 13 18:44	7° \mathbb{Z} 16'08	1.31256 AU				

superior conj	16142 Nov 29 14:42	24° ♊ 57'54	1°13'42	superior conj	16143 Nov 13 17:13	9° ♊ 01'33	0°53'20
minimum elong	16142 Nov 29 12:24	24° ♊ 45'26	1°14'06	minimum elong	16143 Nov 13 14:56	8° ♊ 49'28	0°53'36
	16142 Dec 01 21:51	0° ♋		evening rise	16143 Nov 20 20:48	24° ♊ 18'49	
evening rise	16142 Dec 06 10:27	9° ♋ 53'18			16143 Nov 23 13:58	0° ♋	
	16142 Dec 16 14:21	0° ♌		desc. node	16143 Dec 10 01:17	26° ♋ 50'40	
desc. node	16142 Dec 23 04:19	10° ♌ 19'17		evening max el	16143 Dec 11 15:00	28° ♋ 28'24	21°55'23
evening max el	16142 Dec 30 03:31	18° ♌ 30'31	23°37'53		16143 Dec 13 06:59	0° ♌	
retrograde	16143 Jan 12 13:21	25° ♌ 08'54		retrograde	16143 Dec 24 01:19	4° ♌ 37'05	
evening set	16143 Jan 17 03:54	24° ♌ 23'01		evening set	16143 Dec 27 09:10	4° ♌ 12'22	
min. Earth dist.	16143 Jan 23 14:45	21° ♌ 17'56	0.55097 AU	inferior conj	16144 Jan 04 22:50	0° ♌ 21'49	-6°00'10
inferior conj	16143 Jan 25 05:44	20° ♌ 20'49	-5°44'53	minimum elong	16144 Jan 04 20:16	0° ♌ 25'24	5°59'23
minimum elong	16143 Jan 25 12:02	20° ♌ 11'34	5°43'32	min. Earth dist.	16144 Jan 04 20:07	0° ♌ 25'37	0.54412 AU
morning rise	16143 Feb 02 21:40	16° ♌ 26'50			16144 Jan 05 14:29	30° ♌ 3	
direct	16143 Feb 05 11:41	16° ♌ 10'23		morning rise	16144 Jan 13 08:07	26° ♋ 34'22	
morning max el	16143 Feb 16 09:37	21° ♌ 27'28	20°23'17	direct	16144 Jan 16 21:13	26° ♋ 06'42	
asc. node	16143 Feb 16 16:57	21° ♌ 45'30			16144 Jan 26 20:17	0° ♌	
	16143 Feb 23 05:31	0° ♍		morning max el	16144 Jan 29 06:45	2° ♌ 06'46	21°57'39
morning set	16143 Mar 06 20:40	21° ♍ 27'44		asc. node	16144 Feb 03 14:15	8° ♌ 11'49	
	16143 Mar 10 23:56	0° ♎			16144 Feb 16 07:22	0° ♍	
				morning set	16144 Feb 19 06:56	6° ♍ 10'55	
superior conj	16143 Mar 14 11:17	7° ♎ 05'56	0°55'14	superior conj	16144 Feb 26 09:47	21° ♍ 18'19	1°15'20
minimum elong	16143 Mar 14 13:47	7° ♎ 18'31	0°54'49	minimum elong	16144 Feb 26 12:10	21° ♍ 30'54	1°15'12
max. Earth dist.	16143 Mar 20 00:45	18° ♎ 02'17	1.36365 AU	max. Earth dist.	16144 Mar 01 13:25	29° ♍ 52'55	1.34378 AU
desc. node	16143 Mar 21 05:18	20° ♎ 17'32			16144 Mar 01 14:49	0° ♎	
evening rise	16143 Mar 23 19:58	25° ♎ 07'43		evening rise	16144 Mar 05 19:44	8° ♎ 17'00	
	16143 Mar 26 13:11	0° ♏		desc. node	16144 Mar 07 01:59	10° ♎ 40'43	
	16143 Apr 14 16:15	0° ♐			16144 Mar 18 03:42	0° ♏	
evening max el	16143 Apr 28 07:03	16° ♐ 24'24	25°53'21		16144 Apr 09 17:35	0° ♐	
retrograde	16143 May 10 21:26	23° ♐ 39'07		evening max el	16144 Apr 09 20:54	0° ♐ 08'04	26°51'48
asc. node	16143 May 15 14:21	22° ♐ 10'34		retrograde	16144 Apr 23 03:32	7° ♐ 36'34	
evening set	16143 May 16 23:50	21° ♐ 08'28		evening set	16144 Apr 29 15:07	5° ♐ 04'12	
min. Earth dist.	16143 May 21 04:25	16° ♐ 38'39	0.67521 AU	asc. node	16144 May 01 11:31	3° ♐ 24'55	
inferior conj	16143 May 22 18:36	14° ♐ 38'12	2°01'07	min. Earth dist.	16144 May 03 14:13	1° ♐ 08'54	0.66078 AU
minimum elong	16143 May 22 16:25	14° ♐ 45'07	1°59'49		16144 May 04 14:00	30° ♏ 8	
morning rise	16143 May 28 09:37	8° ♐ 50'16		inferior conj	16144 May 05 17:21	28° ♏ 39'36	1°16'09
direct	16143 May 31 18:15	7° ♐ 45'48		minimum elong	16144 May 05 15:34	28° ♏ 44'50	1°14'57
morning max el	16143 Jun 07 10:31	11° ♐ 20'58	18°47'08	morning rise	16144 May 11 17:20	23° ♏ 03'58	
desc. node	16143 Jun 17 05:50	23° ♐ 58'11		direct	16144 May 14 16:01	22° ♏ 16'20	
	16143 Jun 21 06:06	0° ♑		morning max el	16144 May 21 00:07	25° ♏ 35'04	18°09'55
greatest brilliancy	16143 Jun 21 07:18	0° ♑ 04'32	-0.8m		16144 May 24 20:12	0° ♐	
morning set	16143 Jun 29 16:26	13° ♑ 01'52		desc. node	16144 Jun 03 02:50	13° ♐ 49'06	
	16143 Jul 10 14:15	0° ♒		morning set	16144 Jun 09 03:42	23° ♐ 29'50	
max. Earth dist.	16143 Jul 14 09:47	5° ♒ 56'43	1.45867 AU		16144 Jun 13 05:01	0° ♑	
				superior conj	16144 Jun 24 05:48	17° ♑ 26'36	-2°04'54
superior conj	16143 Jul 15 20:23	8° ♒ 11'52	-2°14'18	minimum elong	16144 Jun 23 23:04	17° ♑ 00'14	2°05'16
minimum elong	16143 Jul 15 20:47	8° ♒ 13'26	2°14'55	max. Earth dist.	16144 Jun 26 06:35	20° ♑ 37'11	1.45964 AU
	16143 Jul 29 15:33	0° ♓			16144 Jul 02 07:17	0° ♒	
evening rise	16143 Jul 31 05:26	2° ♓ 31'34		evening rise	16144 Jul 10 08:46	12° ♒ 29'44	
asc. node	16143 Aug 11 14:13	20° ♓ 32'01			16144 Jul 21 18:34	0° ♓	
	16143 Aug 18 09:45	0° ♑		greatest brilliancy	16144 Jul 21 20:23	0° ♓ 06'46	-0.7m
evening max el	16143 Aug 20 14:10	2° ♑ 23'27	18°29'58	asc. node	16144 Jul 28 10:56	9° ♓ 36'56	
retrograde	16143 Aug 27 01:12	5° ♑ 51'26		evening max el	16144 Aug 03 00:06	16° ♓ 14'06	19°09'55
evening set	16143 Aug 30 04:19	4° ♑ 56'15		retrograde	16144 Aug 09 21:56	20° ♓ 02'41	
	16143 Sep 04 09:15	30° ♒ 7		evening set	16144 Aug 13 10:43	18° ♓ 50'21	
inferior conj	16143 Sep 04 22:18	29° ♓ 20'52	2°14'17	inferior conj	16144 Aug 18 21:31	13° ♓ 01'15	2°45'25
minimum elong	16143 Sep 05 00:36	29° ♓ 13'55	2°13'37	minimum elong	16144 Aug 18 23:20	12° ♓ 55'22	2°44'49
min. Earth dist.	16143 Sep 07 00:06	26° ♓ 51'07	0.65375 AU	min. Earth dist.	16144 Aug 20 09:15	11° ♓ 05'37	0.67003 AU
morning rise	16143 Sep 10 19:37	22° ♓ 57'05		morning rise	16144 Aug 24 11:16	6° ♓ 34'27	
desc. node	16143 Sep 13 03:29	21° ♓ 22'47		desc. node	16144 Aug 30 00:51	4° ♓ 00'12	
direct	16143 Sep 17 05:41	20° ♓ 20'09		direct	16144 Aug 30 12:24	3° ♓ 59'18	
morning max el	16143 Sep 30 14:59	28° ♓ 11'19	27°03'10	morning max el	16144 Sep 12 02:28	11° ♓ 29'03	25°54'37
	16143 Oct 02 08:40	0° ♒			16144 Sep 26 22:30	0° ♑	
	16143 Oct 24 00:10	0° ♓			16144 Oct 15 15:19	0° ♒	
morning set	16143 Nov 05 05:36	21° ♒ 48'03		morning set	16144 Oct 18 01:03	4° ♒ 21'28	
asc. node	16143 Nov 07 15:25	26° ♒ 31'32		max. Earth dist.	16144 Oct 21 17:17	11° ♒ 15'37	1.35412 AU
	16143 Nov 09 08:53	0° ♊					
max. Earth dist.	16143 Nov 09 10:57	0° ♊ 10'29	1.33502 AU				

asc. node	16144 Oct 24 12:12	16°♄41'18			16145 Oct 07 18:33	0°♄	
superior conj	16144 Oct 27 11:55	22°♄40'46	0°26'55	superior conj	16145 Oct 10 19:38	5°♄48'31	-0°05'00
minimum elong	16144 Oct 27 10:25	22°♄33'11	0°27'10	minimum elong	16145 Oct 10 19:56	5°♄50'01	0°04'34
	16144 Oct 31 01:21	0°♄		behind sun begin	16145 Oct 10 13:25	5°♄18'33	
evening rise	16144 Nov 04 04:43	8°♄36'27		behind sun end	16145 Oct 11 02:27	6°♄21'32	
	16144 Nov 15 14:33	0°♄		asc. node	16145 Oct 11 08:57	6°♄53'07	
evening max el	16144 Nov 22 12:55	8°♄55'03	20°26'04	evening rise	16145 Oct 19 07:54	22°♄40'53	
desc. node	16144 Nov 25 22:20	11°♄46'48			16145 Oct 23 00:58	0°♄	
retrograde	16144 Dec 03 12:00	14°♄22'12		evening max el	16145 Nov 05 01:28	20°♄10'56	19°17'50
evening set	16144 Dec 05 19:34	14°♄08'43		desc. node	16145 Nov 12 19:27	24°♄44'15	
inferior conj	16144 Dec 14 14:55	10°♄14'07	-5°14'19	retrograde	16145 Nov 14 09:42	24°♄52'11	
minimum elong	16144 Dec 14 05:31	10°♄27'53	5°11'30	evening set	16145 Nov 16 07:23	24°♄41'21	
min. Earth dist.	16144 Dec 16 01:38	9°♄23'16	0.54655 AU	inferior conj	16145 Nov 24 20:10	20°♄31'58	-3°44'12
morning rise	16144 Dec 22 15:06	6°♄14'31		minimum elong	16145 Nov 24 11:11	20°♄46'50	3°40'23
direct	16144 Dec 27 05:53	5°♄28'38		min. Earth dist.	16145 Nov 27 11:01	18°♄48'08	0.55791 AU
morning max el	16145 Jan 09 17:11	12°♄05'39	23°46'21	morning rise	16145 Dec 02 12:39	16°♄02'23	
asc. node	16145 Jan 20 11:30	25°♄44'11		direct	16145 Dec 08 01:28	14°♄52'22	
	16145 Jan 23 01:54	0°♄		morning max el	16145 Dec 22 02:19	21°♄59'07	25°32'44
morning set	16145 Feb 02 18:48	20°♄54'14			16145 Dec 29 03:14	0°♄	
	16145 Feb 06 23:19	0°♄		asc. node	16146 Jan 07 08:43	14°♄06'39	
					16146 Jan 15 15:40	0°♄	
superior conj	16145 Feb 09 14:47	5°♄46'07	1°29'03	morning set	16146 Jan 18 06:25	5°♄32'35	
minimum elong	16145 Feb 09 16:31	5°♄55'31	1°29'15				
max. Earth dist.	16145 Feb 12 09:26	11°♄44'22	1.32786 AU	superior conj	16146 Jan 24 23:55	20°♄22'39	1°36'31
evening rise	16145 Feb 17 07:27	21°♄54'15		minimum elong	16146 Jan 25 00:41	20°♄26'56	1°37'01
	16145 Feb 21 11:26	0°♄		max. Earth dist.	16146 Jan 26 12:09	23°♄42'52	1.31673 AU
desc. node	16145 Feb 21 22:39	0°♄52'38			16146 Jan 29 09:27	0°♄	
	16145 Mar 11 23:03	0°♄		evening rise	16146 Feb 01 04:12	5°♄52'32	
evening max el	16145 Mar 23 09:52	13°♄31'04	27°27'59	desc. node	16146 Feb 08 19:20	20°♄48'02	
retrograde	16145 Apr 06 03:12	21°♄03'33			16146 Feb 14 01:40	0°♄	
evening set	16145 Apr 12 21:00	18°♄36'10		evening max el	16146 Mar 05 20:12	26°♄21'41	27°35'07
min. Earth dist.	16145 Apr 16 16:16	15°♄11'52	0.64244 AU		16146 Mar 10 03:03	0°♄	
asc. node	16145 Apr 18 08:45	13°♄25'16		retrograde	16146 Mar 19 19:27	3°♄49'55	
inferior conj	16145 Apr 19 07:34	12°♄24'16	0°17'50	evening set	16146 Mar 26 14:55	1°♄35'12	
minimum elong	16145 Apr 19 07:03	12°♄25'38	0°17'12		16146 Mar 28 18:22	30°♄	
morning rise	16145 Apr 25 19:20	7°♄03'08		min. Earth dist.	16146 Mar 30 09:07	28°♄36'03	0.62124 AU
direct	16145 Apr 28 09:02	6°♄29'34		inferior conj	16146 Apr 02 10:04	25°♄44'11	-0°54'28
morning max el	16145 May 04 17:10	9°♄44'23	17°49'53	minimum elong	16146 Apr 02 11:57	25°♄39'45	0°53'58
	16145 May 18 15:07	0°♄		asc. node	16146 Apr 05 06:04	23°♄12'04	
desc. node	16145 May 20 23:46	3°♄57'50		morning rise	16146 Apr 09 12:05	20°♄39'54	
morning set	16145 May 21 18:15	5°♄15'33		direct	16146 Apr 11 18:04	20°♄17'01	
				morning max el	16146 Apr 18 10:40	23°♄39'43	17°47'25
superior conj	16145 Jun 04 03:13	27°♄18'38	-1°38'23		16146 Apr 23 13:02	0°♄	
minimum elong	16145 Jun 03 18:43	26°♄44'29	1°38'15	morning set	16146 May 04 07:59	18°♄05'56	
	16145 Jun 05 19:32	0°♄		desc. node	16146 May 07 20:37	24°♄18'34	
max. Earth dist.	16145 Jun 09 02:20	5°♄12'24	1.45309 AU		16146 May 11 03:05	0°♄	
evening rise	16145 Jun 19 20:52	21°♄54'57					
	16145 Jun 25 04:35	0°♄		superior conj	16146 May 15 22:27	8°♄11'14	-1°02'26
greatest brilliancy	16145 Jul 04 10:09	13°♄41'29	-0.6m	minimum elong	16146 May 15 16:41	7°♄47'03	1°02'16
asc. node	16145 Jul 15 07:43	28°♄09'16		max. Earth dist.	16146 May 22 18:44	19°♄26'29	1.43986 AU
evening max el	16145 Jul 17 04:27	0°♄08'02	20°05'31		16146 May 29 10:53	0°♄	
	16145 Jul 17 01:14	0°♄		evening rise	16146 May 30 10:01	1°♄29'41	
retrograde	16145 Jul 24 20:50	4°♄29'13			16146 Jun 18 17:50	0°♄	
evening set	16145 Jul 28 19:52	2°♄59'08		evening max el	16146 Jun 30 02:46	14°♄02'02	21°14'23
	16145 Jul 31 18:55	30°♄		asc. node	16146 Jul 02 04:35	15°♄57'04	
inferior conj	16145 Aug 03 02:37	26°♄57'52	3°02'54	retrograde	16146 Jul 08 19:46	19°♄04'26	
minimum elong	16145 Aug 03 03:36	26°♄54'31	3°02'21	evening set	16146 Jul 13 05:43	17°♄16'55	
min. Earth dist.	16145 Aug 04 00:31	25°♄43'26	0.68196 AU	inferior conj	16146 Jul 18 11:10	11°♄04'56	3°08'32
morning rise	16145 Aug 08 10:56	20°♄32'52		minimum elong	16146 Jul 18 11:12	11°♄04'50	3°07'55
direct	16145 Aug 14 01:06	18°♄06'31		min. Earth dist.	16146 Jul 18 19:40	10°♄35'22	0.68919 AU
desc. node	16145 Aug 16 22:11	18°♄39'20		morning rise	16146 Jul 23 16:26	4°♄45'06	
morning max el	16145 Aug 25 13:32	25°♄00'12	24°31'01	direct	16146 Jul 28 18:41	2°♄32'58	
	16145 Aug 30 02:13	0°♄		desc. node	16146 Aug 03 19:30	4°♄56'25	
	16145 Sep 20 09:26	0°♄		morning max el	16146 Aug 08 01:03	8°♄38'43	23°01'51
morning set	16145 Sep 30 02:59	16°♄09'12			16146 Aug 24 19:22	0°♄	
max. Earth dist.	16145 Oct 03 16:54	22°♄30'03	1.37690 AU	morning set	16146 Sep 11 07:13	27°♄00'52	

	16146 Sep 13 02:17	0°♄				16147 Aug 18 02:00	0°♄		
max. Earth dist.	16146 Sep 15 15:53	4°♄20'52	1.40105 AU	morning set		16147 Aug 22 11:35	6°♄52'01		
				max. Earth dist.		16147 Aug 28 20:04	17°♄06'11	1.42371 AU	
superior conj	16146 Sep 23 12:21	18°♄15'16	-0°40'49			16147 Sep 05 09:42	29°♄51'27	-1°17'31	
minimum elong	16146 Sep 23 15:29	18°♄29'37	0°40'07	superior conj		16147 Sep 05 16:02	0°♄18'52	1°16'43	
asc. node	16146 Sep 28 05:40	27°♄02'49		minimum elong		16147 Sep 05 11:41	0°♄		
	16146 Sep 29 19:00	0°♄				16147 Sep 15 02:22	17°♄07'01		
evening rise	16146 Oct 03 03:22	6°♄24'11		asc. node		16147 Sep 16 11:20	19°♄37'08		
	16146 Oct 17 02:05	0°♄		evening rise		16147 Sep 22 05:42	0°♄		
evening max el	16146 Oct 19 02:45	2°♄15'42	18°31'56			16147 Oct 02 12:34	15°♄00'27	18°07'04	
retrograde	16146 Oct 27 01:43	6°♄17'42		evening max el		16147 Oct 09 12:33	18°♄35'47		
evening set	16146 Oct 29 00:40	6°♄03'51		retrograde		16147 Oct 11 17:39	18°♄14'39		
desc. node	16146 Oct 30 16:39	5°♄31'35		evening set		16147 Oct 17 13:55	14°♄33'09		
inferior conj	16146 Nov 05 22:09	1°♄33'54	-2°00'19	desc. node		16147 Oct 18 21:35	13°♄23'16	-0°25'12	
minimum elong	16146 Nov 05 17:21	1°♄43'08	1°57'47	inferior conj		16147 Oct 18 20:43	13°♄25'12	0°24'25	
	16146 Nov 07 22:35	30°♄		minimum elong		16147 Oct 22 02:48	10°♄30'57	0.59817 AU	
min. Earth dist.	16146 Nov 09 02:41	29°♄07'01	0.57612 AU	min. Earth dist.		16147 Oct 25 20:32	7°♄43'42		
morning rise	16146 Nov 13 06:40	26°♄27'41		morning rise		16147 Nov 01 10:33	5°♄41'33		
direct	16146 Nov 19 11:34	24°♄50'44		direct		16147 Nov 15 16:47	13°♄27'47	27°47'44	
	16146 Dec 01 03:00	0°♄		morning max el		16147 Nov 28 22:09	0°♄		
morning max el	16146 Dec 03 17:26	2°♄20'14	26°57'43			16147 Dec 12 02:57	22°♄32'55		
	16146 Dec 23 12:58	0°♄		asc. node		16147 Dec 15 20:47	0°♄		
asc. node	16146 Dec 25 05:52	3°♄06'19				16147 Dec 17 21:46	4°♄14'59		
morning set	16147 Jan 02 16:03	20°♄01'18		morning set		16147 Dec 24 02:34	17°♄47'02	1.31035 AU	
	16147 Jan 07 05:08	0°♄		max. Earth dist.					
superior conj	16147 Jan 09 11:06	5°♄01'56	1°37'55	superior conj		16147 Dec 24 22:23	19°♄37'47	1°33'19	
minimum elong	16147 Jan 09 10:49	5°♄00'19	1°38'34	minimum elong		16147 Dec 24 21:07	19°♄30'39	1°33'57	
max. Earth dist.	16147 Jan 09 19:04	5°♄46'31	1.31080 AU			16147 Dec 29 14:02	0°♄		
evening rise	16147 Jan 16 07:32	20°♄05'56		evening rise		16147 Dec 31 15:12	4°♄28'19		
	16147 Jan 21 03:20	0°♄		desc. node		16148 Jan 13 12:52	29°♄20'08		
desc. node	16147 Jan 26 16:04	10°♄20'23				16148 Jan 13 22:30	0°♄		
	16147 Feb 08 12:35	0°♄		evening max el		16148 Jan 28 23:22	19°♄43'01	26°06'38	
evening max el	16147 Feb 16 01:36	8°♄28'51	27°08'18	retrograde		16148 Feb 11 22:29	26°♄48'00		
retrograde	16147 Mar 02 02:36	15°♄46'52		evening set		16148 Feb 18 02:07	25°♄18'47		
evening set	16147 Mar 08 17:50	13°♄52'15		min. Earth dist.		16148 Feb 22 12:32	22°♄40'51	0.57697 AU	
min. Earth dist.	16147 Mar 12 15:57	11°♄09'37	0.59870 AU	inferior conj		16148 Feb 25 13:23	20°♄31'06	-3°50'15	
inferior conj	16147 Mar 15 21:17	8°♄30'17	-2°19'17	minimum elong		16148 Feb 25 21:59	20°♄15'44	3°47'11	
minimum elong	16147 Mar 16 02:33	8°♄19'24	2°17'16	morning rise		16148 Mar 04 21:02	16°♄07'46		
asc. node	16147 Mar 23 03:24	3°♄53'35		direct		16148 Mar 06 20:18	15°♄55'11		
morning rise	16147 Mar 23 14:48	3°♄45'26		asc. node		16148 Mar 09 00:46	16°♄11'27		
direct	16147 Mar 25 15:18	3°♄29'34		morning max el		16148 Mar 15 08:43	20°♄06'44	18°40'01	
morning max el	16147 Apr 02 01:11	7°♄11'17	18°03'32			16148 Mar 22 18:05	0°♄		
	16147 Apr 16 16:31	0°♄		morning set		16148 Mar 31 10:10	15°♄53'42		
morning set	16147 Apr 17 15:02	1°♄44'06				16148 Apr 07 17:55	0°♄		
desc. node	16147 Apr 24 17:25	14°♄47'09							
superior conj	16147 Apr 27 16:56	20°♄07'00	-0°24'27	superior conj		16148 Apr 09 07:21	2°♄55'59	0°10'47	
minimum elong	16147 Apr 27 14:53	19°♄57'54	0°24'37	minimum elong		16148 Apr 09 08:04	2°♄59'19	0°10'19	
	16147 May 03 10:01	0°♄		behind sun begin		16148 Apr 09 02:43	2°♄34'19		
max. Earth dist.	16147 May 05 06:54	3°♄08'26	1.42134 AU	behind sun end		16148 Apr 09 13:25	3°♄24'16		
evening rise	16147 May 10 14:29	11°♄49'15		desc. node		16148 Apr 10 14:09	5°♄19'00		
	16147 May 22 10:27	0°♄		max. Earth dist.		16148 Apr 16 15:02	16°♄09'37	1.39940 AU	
evening max el	16147 Jun 12 20:09	27°♄56'28	22°32'24	evening rise		16148 Apr 20 15:52	23°♄03'46		
	16147 Jun 15 01:16	0°♄				16148 Apr 24 21:04	0°♄		
asc. node	16147 Jun 19 01:31	2°♄46'03		evening max el		16148 May 15 07:53	0°♄		
retrograde	16147 Jun 22 17:05	3°♄43'16		asc. node		16148 May 25 10:33	11°♄51'27	23°53'59	
evening set	16147 Jun 27 14:33	1°♄39'35		retrograde		16148 Jun 04 22:32	18°♄18'29		
	16147 Jun 29 06:39	30°♄		evening set		16148 Jun 05 11:31	18°♄19'44		
inferior conj	16147 Jul 02 21:09	25°♄18'36	3°03'20	min. Earth dist.		16148 Jun 10 20:42	16°♄02'16		
minimum elong	16147 Jul 02 20:15	25°♄21'44	3°02'34	inferior conj		16148 Jun 15 12:54	10°♄35'00	0.68900 AU	
min. Earth dist.	16147 Jul 02 16:31	25°♄34'46	0.69157 AU	minimum elong		16148 Jun 16 06:36	9°♄34'41	2°47'43	
morning rise	16147 Jul 08 01:48	19°♄06'05		morning rise		16148 Jun 16 04:56	9°♄40'21	2°46'43	
direct	16147 Jul 12 15:53	17°♄11'50		direct		16148 Jun 21 13:11	3°♄30'56		
morning max el	16147 Jul 21 15:39	22°♄25'28	21°35'39	morning max el		16148 Jun 25 15:18	1°♄56'21		
desc. node	16147 Jul 21 16:47	22°♄28'17		desc. node		16148 Jul 03 12:15	6°♄22'54	20°19'02	
	16147 Jul 28 04:54	0°♄				16148 Jul 07 13:59	10°♄55'29		
						16148 Jul 21 07:40	0°♄		

morning set	16148 Jul 31 20:42	15°♎56'11		morning max el	16149 Jun 16 16:06	20°♐30'34	19°16'08
	16148 Aug 09 20:22	0°♎		desc. node	16149 Jun 24 11:07	0°♐03'25	
max. Earth dist.	16148 Aug 10 07:18	0°♎43'35	1.44218 AU		16149 Jun 24 10:08	0°♐	
				greatest brilliancy	16149 Jun 29 09:32	7°♐10'39	-0.7m
superior conj	16148 Aug 16 08:03	10°♎29'24	-1°49'50	morning set	16149 Jul 11 01:36	24°♐53'50	
minimum elong	16148 Aug 16 15:55	11°♎01'45	1°49'26		16149 Jul 14 09:03	0°♎	
	16148 Aug 27 21:27	0°♎		max. Earth dist.	16149 Jul 23 23:46	14°♎56'56	1.45463 AU
evening rise	16148 Aug 29 02:59	2°♎07'38					
asc. node	16148 Aug 31 23:03	7°♎01'49		superior conj	16149 Jul 27 07:48	20°♎12'05	-2°10'30
evening max el	16148 Sep 15 02:41	28°♎14'53	18°01'39	minimum elong	16149 Jul 27 12:25	20°♎30'19	2°10'51
	16148 Sep 17 03:50	0°♎			16149 Aug 02 11:13	0°♎	
retrograde	16148 Sep 21 14:17	1°♎37'13		evening rise	16149 Aug 10 20:57	13°♎41'35	
evening set	16148 Sep 24 03:17	1°♎05'13		asc. node	16149 Aug 18 19:43	26°♎41'57	
	16148 Sep 26 02:15	30°♎			16149 Aug 20 21:43	0°♎	
inferior conj	16148 Sep 30 15:26	25°♎54'40	0°51'42	evening max el	16149 Aug 29 17:24	11°♎48'59	18°14'34
minimum elong	16148 Sep 30 16:53	25°♎50'57	0°51'26	retrograde	16149 Sep 05 02:15	15°♎11'27	
desc. node	16148 Oct 03 11:14	23°♎01'24		evening set	16149 Sep 07 23:57	14°♎25'33	
min. Earth dist.	16148 Oct 03 12:58	22°♎57'05	0.62108 AU	inferior conj	16149 Sep 13 23:33	8°♎58'39	1°49'15
morning rise	16148 Oct 07 03:55	19°♎50'16		minimum elong	16149 Sep 14 01:50	8°♎52'05	1°48'36
direct	16148 Oct 13 20:23	17°♎28'18		min. Earth dist.	16149 Sep 16 09:08	6°♎14'13	0.64258 AU
morning max el	16148 Oct 27 23:04	25°♎25'06	27°58'16	morning rise	16149 Sep 20 02:00	2°♎39'12	
	16148 Nov 01 04:42	0°♎		desc. node	16149 Sep 20 08:35	2°♎26'30	
	16148 Nov 21 10:10	0°♎		direct	16149 Sep 26 15:34	0°♎05'07	
asc. node	16148 Nov 27 23:56	12°♎18'57		morning max el	16149 Oct 10 09:18	8°♎02'55	27°32'08
morning set	16148 Nov 30 21:30	18°♎09'14			16149 Oct 27 10:09	0°♎	
	16148 Dec 06 11:15	0°♎			16149 Nov 13 16:53	0°♎	
max. Earth dist.	16148 Dec 06 06:51	29°♎35'58	1.31549 AU	morning set	16149 Nov 14 12:44	1°♎37'44	
				asc. node	16149 Nov 14 20:50	2°♎17'55	
superior conj	16148 Dec 08 07:55	4°♎05'27	1°22'39	max. Earth dist.	16149 Nov 19 03:57	11°♎04'42	1.32627 AU
minimum elong	16148 Dec 08 05:53	3°♎54'14	1°23'08				
evening rise	16148 Dec 15 01:22	18°♎55'24		superior conj	16149 Nov 22 13:37	18°♎19'09	1°05'50
	16148 Dec 20 08:56	0°♎		minimum elong	16149 Nov 22 11:15	18°♎06'23	1°06'09
desc. node	16148 Dec 30 09:42	17°♎35'33			16149 Nov 27 22:39	0°♎	
	16149 Jan 09 09:49	0°♎		evening rise	16149 Nov 29 12:08	3°♎22'15	
evening max el	16149 Jan 09 12:40	0°♎06'50	24°36'38		16149 Dec 13 18:31	0°♎	
retrograde	16149 Jan 23 05:32	6°♎57'03		desc. node	16149 Dec 17 06:37	4°♎50'32	
evening set	16149 Jan 28 12:25	5°♎55'26		evening max el	16149 Dec 21 22:00	10°♎02'54	22°53'29
min. Earth dist.	16149 Feb 03 00:33	3°♎05'55	0.55875 AU	retrograde	16150 Jan 03 23:49	16°♎31'03	
inferior conj	16149 Feb 05 08:10	1°♎39'27	-5°11'49	evening set	16150 Jan 08 01:16	15°♎55'11	
minimum elong	16149 Feb 05 17:07	1°♎25'32	5°09'26	min. Earth dist.	16150 Jan 15 07:32	12°♎34'28	0.54694 AU
	16149 Feb 08 02:20	30°♎		inferior conj	16150 Jan 16 08:07	11°♎59'31	-5°58'43
morning rise	16149 Feb 14 00:01	27°♎36'52		minimum elong	16150 Jan 16 11:03	11°♎55'19	5°57'58
direct	16149 Feb 16 05:31	27°♎23'28		morning rise	16150 Jan 24 22:06	8°♎10'15	
asc. node	16149 Feb 23 22:06	0°♎15'40		direct	16150 Jan 27 20:40	7°♎50'12	
	16149 Feb 23 13:35	0°♎		morning max el	16150 Feb 08 10:53	13°♎26'01	21°01'02
morning max el	16149 Feb 26 05:04	2°♎14'23	19°38'53	asc. node	16150 Feb 10 19:24	15°♎55'14	
	16149 Mar 15 08:52	0°♎			16150 Feb 20 06:03	0°♎	
morning set	16149 Mar 15 13:25	0°♎22'56		morning set	16150 Feb 27 21:49	15°♎03'04	
superior conj	16149 Mar 23 13:20	16°♎26'11	0°40'45	superior conj	16150 Mar 07 06:48	0°♎26'17	1°04'32
minimum elong	16149 Mar 23 15:30	16°♎36'51	0°40'15	minimum elong	16150 Mar 07 09:20	0°♎39'20	1°04'14
desc. node	16149 Mar 28 10:51	25°♎50'36			16150 Mar 07 01:42	0°♎	
max. Earth dist.	16149 Mar 29 21:16	28°♎30'32	1.37638 AU	max. Earth dist.	16150 Mar 12 05:59	10°♎25'08	1.35474 AU
	16149 Mar 30 16:46	0°♎		desc. node	16150 Mar 15 07:31	16°♎18'17	
evening rise	16149 Apr 02 13:43	5°♎09'53		evening rise	16150 Mar 16 05:04	17°♎59'14	
	16149 Apr 17 20:35	0°♎			16150 Mar 22 22:41	0°♎	
evening max el	16149 May 07 23:54	25°♎45'48	25°12'26		16150 Apr 12 01:56	0°♎	
	16149 May 12 22:31	0°♎		evening max el	16150 Apr 20 13:27	9°♎35'51	26°20'26
retrograde	16149 May 20 02:02	2°♎47'17		retrograde	16150 May 03 11:42	16°♎58'45	
asc. node	16149 May 22 19:36	2°♎16'22		evening set	16150 May 09 18:16	14°♎26'23	
evening set	16149 May 25 22:31	0°♎19'46		asc. node	16150 May 09 16:43	14°♎29'32	
	16149 May 26 07:29	30°♎		min. Earth dist.	16150 May 13 20:13	10°♎11'37	0.66954 AU
min. Earth dist.	16149 May 30 06:48	25°♎29'32	0.68158 AU	inferior conj	16150 May 15 16:02	7°♎57'30	1°43'37
inferior conj	16149 May 31 13:34	23°♎49'03	2°21'24	minimum elong	16150 May 15 13:55	8°♎03'57	1°42'19
minimum elong	16149 May 31 11:27	23°♎55'59	2°20'10	morning rise	16150 May 21 10:32	2°♎14'40	
morning rise	16149 Jun 06 00:45	17°♎55'09		direct	16150 May 24 14:42	1°♎17'51	
direct	16149 Jun 09 15:28	16°♎40'12		morning max el	16150 May 31 02:41	4°♎44'47	18°29'14

desc. node	16150 Jun 11 08:11	19° Π 41'35			16151 May 23 03:36	0° Π	
	16150 Jun 17 23:09	0° \mathfrak{D}		desc. node	16151 May 29 05:09	9° Π 41'04	
morning set	16150 Jun 20 22:08	4° \mathfrak{D} 39'14		morning set	16151 Jun 01 21:12	15° Π 41'08	
					16151 Jun 10 16:54	0° \mathfrak{D}	
superior conj	16150 Jul 06 18:02	29° \mathfrak{D} 26'04	-2°12'46	superior conj	16151 Jun 16 06:46	8° \mathfrak{D} 52'24	-1°55'21
minimum elong	16150 Jul 06 15:02	29° \mathfrak{D} 14'21	2°13'22	minimum elong	16151 Jun 15 22:31	8° \mathfrak{D} 19'50	1°55'28
max. Earth dist.	16150 Jul 06 19:09	29° \mathfrak{D} 30'26	1.45996 AU	max. Earth dist.	16151 Jun 19 15:30	14° \mathfrak{D} 09'35	1.45778 AU
	16150 Jul 07 02:45	0° \mathcal{O}			16151 Jun 29 20:39	0° \mathcal{O}	
evening rise	16150 Jul 22 13:51	24° \mathcal{O} 12'29		evening rise	16151 Jul 02 08:57	3° \mathcal{O} 51'43	
	16150 Jul 26 06:03	0° \mathfrak{P}		greatest brilliancy	16151 Jul 15 18:55	24° \mathcal{O} 09'35	-0.7m
greatest brilliancy	16150 Jul 31 01:49	7° \mathfrak{P} 33'21	-0.8m		16151 Jul 19 20:40	0° \mathfrak{P}	
asc. node	16150 Aug 05 16:25	16° \mathfrak{P} 02'05		asc. node	16151 Jul 23 13:10	4° \mathfrak{P} 54'28	
evening max el	16150 Aug 13 05:49	25° \mathfrak{P} 35'45	18°44'57	evening max el	16151 Jul 27 13:36	9° \mathfrak{P} 28'42	19°31'49
retrograde	16150 Aug 19 20:36	29° \mathfrak{P} 11'10		retrograde	16151 Aug 03 18:24	13° \mathfrak{P} 29'29	
evening set	16150 Aug 23 03:40	28° \mathfrak{P} 09'03		evening set	16151 Aug 07 11:29	12° \mathfrak{P} 09'43	
inferior conj	16150 Aug 28 18:12	22° \mathfrak{P} 27'47	2°29'17	inferior conj	16151 Aug 12 20:14	6° \mathfrak{P} 15'33	2°54'22
minimum elong	16150 Aug 28 20:22	22° \mathfrak{P} 21'04	2°28'38	minimum elong	16151 Aug 12 21:44	6° \mathfrak{P} 10'37	2°53'47
min. Earth dist.	16150 Aug 30 14:08	20° \mathfrak{P} 11'04	0.66116 AU	min. Earth dist.	16151 Aug 14 02:08	4° \mathfrak{P} 36'35	0.67573 AU
morning rise	16150 Sep 03 12:02	16° \mathfrak{P} 01'49		morning rise	16151 Aug 18 07:25	29° \mathcal{O} 49'08	
desc. node	16150 Sep 07 05:56	13° \mathfrak{P} 48'56			16151 Aug 18 02:34	30° \mathcal{R} \mathcal{O}	
direct	16150 Sep 09 18:39	13° \mathfrak{P} 24'21		direct	16151 Aug 24 04:12	27° \mathcal{O} 16'43	
morning max el	16150 Sep 22 20:44	21° \mathfrak{P} 09'03	26°36'22	desc. node	16151 Aug 25 03:18	27° \mathcal{O} 20'22	
	16150 Sep 30 13:23	0° \mathfrak{L}			16151 Aug 31 03:00	0° \mathfrak{P}	
	16150 Oct 20 14:12	0° \mathfrak{M}		morning max el	16151 Sep 05 07:49	4° \mathfrak{P} 32'34	25°20'12
morning set	16150 Oct 28 16:26	14° \mathfrak{M} 33'41			16151 Sep 24 21:59	0° \mathfrak{L}	
max. Earth dist.	16150 Nov 01 15:19	22° \mathfrak{M} 13'25	1.34253 AU	morning set	16151 Oct 11 04:56	26° \mathfrak{L} 48'42	
asc. node	16150 Nov 01 17:40	22° \mathfrak{M} 25'07			16151 Oct 12 23:07	0° \mathfrak{M}	
	16150 Nov 05 11:29	0° \mathfrak{X}		max. Earth dist.	16151 Oct 14 17:55	3° \mathfrak{M} 17'56	1.36347 AU
				asc. node	16151 Oct 19 14:28	12° \mathfrak{M} 36'26	
superior conj	16150 Nov 06 13:09	2° \mathfrak{X} 13'04	0°42'51	superior conj	16151 Oct 21 03:39	15° \mathfrak{M} 40'19	0°13'59
minimum elong	16150 Nov 06 11:06	2° \mathfrak{X} 02'22	0°43'05	minimum elong	16151 Oct 21 02:48	15° \mathfrak{M} 36'01	0°14'19
evening rise	16150 Nov 13 21:40	17° \mathfrak{X} 44'34		behind sun begin	16151 Oct 20 23:50	15° \mathfrak{M} 21'18	
	16150 Nov 19 22:56	0° \mathfrak{Z}		behind sun end	16151 Oct 21 05:45	15° \mathfrak{M} 50'44	
evening max el	16150 Dec 03 13:03	20° \mathfrak{Z} 09'30	21°15'12		16151 Oct 28 04:55	0° \mathfrak{X}	
desc. node	16150 Dec 04 03:37	20° \mathfrak{Z} 44'31		evening rise	16151 Oct 29 03:53	1° \mathfrak{X} 57'24	
retrograde	16150 Dec 15 09:46	26° \mathfrak{Z} 01'35			16151 Nov 14 19:27	0° \mathfrak{Z}	
evening set	16150 Dec 18 05:29	25° \mathfrak{Z} 43'06		evening max el	16151 Nov 15 17:16	0° \mathfrak{Z} 56'53	19°54'23
inferior conj	16150 Dec 26 22:57	21° \mathfrak{Z} 52'46	-5°47'52	desc. node	16151 Nov 21 00:41	4° \mathfrak{Z} 53'21	
minimum elong	16150 Dec 26 16:41	22° \mathfrak{Z} 01'36	5°46'22	retrograde	16151 Nov 25 23:19	6° \mathfrak{Z} 03'45	
min. Earth dist.	16150 Dec 27 12:55	21° \mathfrak{Z} 33'03	0.54395 AU	evening set	16151 Nov 28 01:09	5° \mathfrak{Z} 52'09	
morning rise	16151 Jan 04 04:09	18° \mathfrak{Z} 02'13		inferior conj	16151 Dec 06 19:12	1° \mathfrak{Z} 52'36	-4°39'43
direct	16151 Jan 08 04:18	17° \mathfrak{Z} 27'30		minimum elong	16151 Dec 06 09:11	2° \mathfrak{Z} 07'57	4°36'09
morning max el	16151 Jan 21 02:35	23° \mathfrak{Z} 45'06	22°42'54	min. Earth dist.	16151 Dec 08 19:38	0° \mathfrak{Z} 38'36	0.55038 AU
	16151 Jan 26 14:44	0° \approx			16151 Dec 09 21:44	30° \mathcal{R} \mathfrak{X}	
asc. node	16151 Jan 28 16:41	2° \approx 51'55		morning rise	16151 Dec 14 16:00	27° \mathfrak{X} 42'13	
morning set	16151 Feb 12 08:59	29° \approx 46'50		direct	16151 Dec 19 17:09	26° \mathfrak{X} 46'25	
	16151 Feb 12 11:27	0° \mathfrak{H}			16151 Dec 29 00:52	0° \mathfrak{Z}	
superior conj	16151 Feb 19 08:22	14° \mathfrak{H} 46'14	1°21'54	morning max el	16152 Jan 02 11:05	3° \mathfrak{Z} 36'41	24°33'01
minimum elong	16151 Feb 19 10:32	14° \mathfrak{H} 57'47	1°21'56	asc. node	16152 Jan 15 13:57	20° \mathfrak{Z} 47'55	
max. Earth dist.	16151 Feb 22 21:26	22° \mathfrak{H} 13'43	1.33644 AU		16152 Jan 20 18:21	0° \approx	
	16151 Feb 26 17:40	0° \mathfrak{Y}		morning set	16152 Jan 27 21:00	14° \approx 29'08	
evening rise	16151 Feb 27 10:19	1° \mathfrak{Y} 21'45		superior conj	16152 Feb 03 15:25	29° \approx 18'55	1°32'57
desc. node	16151 Mar 02 04:10	6° \mathfrak{Y} 37'24		minimum elong	16152 Feb 03 16:47	29° \approx 26'19	1°33'18
	16151 Mar 15 22:16	0° \mathfrak{B}			16152 Feb 03 22:55	0° \mathfrak{H}	
evening max el	16151 Apr 03 03:11	23° \mathfrak{B} 12'41	27°10'25	max. Earth dist.	16152 Feb 05 20:46	4° \mathfrak{H} 09'34	1.32255 AU
	16151 Apr 12 19:03	0° \mathfrak{I}		evening rise	16152 Feb 11 02:17	15° \mathfrak{H} 09'33	
retrograde	16151 Apr 16 15:23	0° \mathfrak{I} 44'25		desc. node	16152 Feb 17 00:51	26° \mathfrak{H} 43'34	
	16151 Apr 20 06:16	30° \mathcal{R} \mathfrak{B}			16152 Feb 18 19:48	0° \mathfrak{Y}	
evening set	16151 Apr 23 05:51	28° \mathfrak{B} 13'31			16152 Mar 09 17:42	0° \mathfrak{B}	
asc. node	16151 Apr 26 13:56	25° \mathfrak{B} 07'14		evening max el	16152 Mar 15 15:34	6° \mathfrak{B} 24'41	27°34'57
min. Earth dist.	16151 Apr 27 03:06	24° \mathfrak{B} 31'40	0.65335 AU	retrograde	16152 Mar 29 11:51	13° \mathfrak{B} 55'21	
inferior conj	16151 Apr 29 11:31	21° \mathfrak{B} 53'07	0°53'09	evening set	16152 Apr 05 06:57	11° \mathfrak{B} 32'46	
minimum elong	16151 Apr 29 10:09	21° \mathfrak{B} 56'58	0°52'07	min. Earth dist.	16152 Apr 09 01:32	8° \mathfrak{B} 19'47	0.63376 AU
morning rise	16151 May 05 16:10	16° \mathfrak{B} 23'08		inferior conj	16152 Apr 11 21:13	5° \mathfrak{B} 28'50	-0°11'05
direct	16151 May 08 10:50	15° \mathfrak{B} 41'55					
morning max el	16151 May 14 18:03	18° \mathfrak{B} 57'52	17°59'13				

minimum elong	16152 Apr 11 21:34	5°♄27'55	0°11'19	min. Earth dist.	16153 Mar 22 13:57	21°♃24'05	0.61177 AU
transit middle	16152 Apr 11 21:34	5°♄27'55	0°11'19	inferior conj	16153 Mar 25 17:39	18°♃35'29	-1°29'07
transit begin	16152 Apr 11 19:20	5°♄33'37		minimum elong	16153 Mar 25 20:52	18°♃28'17	1°27'59
transit end	16152 Apr 11 23:48	5°♄22'14		asc. node	16153 Mar 30 08:32	14°♃56'06	
asc. node	16152 Apr 12 11:12	4°♄53'31		morning rise	16153 Apr 02 02:13	13°♃39'14	
morning rise	16152 Apr 18 14:44	0°♄14'11		direct	16153 Apr 04 05:41	13°♃19'40	
	16152 Apr 19 07:42	30°♃♂		morning max el	16153 Apr 11 04:17	16°♃48'40	17°51'56
direct	16152 Apr 21 01:02	29°♃45'28			16153 Apr 20 12:47	0°♄	
	16152 Apr 22 18:10	0°♄		morning set	16153 Apr 26 20:06	11°♄09'46	
morning max el	16152 Apr 27 11:37	3°♄02'10	17°46'33	desc. node	16153 May 01 22:54	20°♄20'33	
morning set	16152 May 13 22:19	27°♄56'47			16153 May 07 11:23	0°♄	
desc. node	16152 May 15 02:03	29°♄55'42					
	16152 May 15 03:04	0°♄		superior conj	16153 May 07 18:05	0°♄28'42	-0°46'13
				minimum elong	16153 May 07 13:56	0°♄10'55	0°46'11
superior conj	16152 May 26 12:43	19°♄08'13	-1°23'48	max. Earth dist.	16153 May 15 01:34	12°♄42'40	1.43255 AU
minimum elong	16152 May 26 05:04	18°♄36'53	1°23'34	evening rise	16153 May 21 13:48	23°♄07'05	
max. Earth dist.	16152 Jun 01 10:26	28°♄39'01	1.44832 AU		16153 May 26 00:33	0°♄	
	16152 Jun 02 06:52	0°♄			16153 Jun 16 02:46	0°♄	
evening rise	16152 Jun 10 19:24	13°♄15'59		evening max el	16153 Jun 22 11:24	7°♄17'28	21°46'42
	16152 Jun 21 22:37	0°♄		asc. node	16153 Jun 26 06:53	10°♄34'48	
asc. node	16152 Jul 09 10:00	23°♄09'34		retrograde	16153 Jul 01 15:57	12°♄38'47	
evening max el	16152 Jul 09 15:26	23°♄23'14	20°33'24	evening set	16153 Jul 06 06:50	10°♄43'54	
retrograde	16152 Jul 17 17:27	28°♄00'37		inferior conj	16153 Jul 11 12:28	4°♄27'41	3°07'35
evening set	16152 Jul 21 21:11	26°♄22'50		minimum elong	16153 Jul 11 12:06	4°♄28'59	3°06'56
inferior conj	16152 Jul 27 03:04	20°♄16'55	3°06'38	min. Earth dist.	16153 Jul 11 15:15	4°♄17'57	0.69080 AU
minimum elong	16152 Jul 27 03:39	20°♄14'55	3°06'04		16153 Jul 14 22:03	30°♃♂	
min. Earth dist.	16152 Jul 27 19:10	19°♄21'29	0.68571 AU	morning rise	16153 Jul 16 17:11	28°♄10'53	
morning rise	16152 Aug 01 09:49	13°♄54'04		direct	16153 Jul 21 14:10	26°♄06'20	
direct	16152 Aug 06 19:03	11°♄33'18		desc. node	16153 Jul 28 21:58	29°♄36'15	
desc. node	16152 Aug 11 00:39	12°♄44'12			16153 Jul 29 08:57	0°♄	
morning max el	16152 Aug 17 18:46	18°♄06'49	23°53'11	morning max el	16153 Jul 31 07:25	1°♄49'47	22°24'26
	16152 Aug 27 18:19	0°♄			16153 Aug 21 15:50	0°♄	
	16152 Sep 16 23:28	0°♄		morning set	16153 Sep 02 16:13	18°♄39'57	
morning set	16152 Sep 21 22:02	8°♄13'11		max. Earth dist.	16153 Sep 07 18:01	27°♄01'52	1.41104 AU
max. Earth dist.	16152 Sep 25 16:49	14°♄46'21	1.38723 AU		16153 Sep 09 12:08	0°♄	
superior conj	16152 Oct 03 05:31	28°♄31'52	-0°19'51	superior conj	16153 Sep 15 14:33	10°♄38'36	-0°56'31
minimum elong	16152 Oct 03 06:55	28°♄38'28	0°19'18	minimum elong	16153 Sep 15 19:05	10°♄58'51	0°55'44
	16152 Oct 04 00:07	0°♄		asc. node	16153 Sep 22 07:55	22°♄56'04	
asc. node	16152 Oct 05 11:12	2°♄47'47		evening rise	16153 Sep 25 19:22	29°♄26'35	
evening rise	16152 Oct 12 04:12	15°♄54'01			16153 Sep 26 02:30	0°♄	
	16152 Oct 19 15:16	0°♄		evening max el	16153 Oct 11 16:59	24°♄56'46	18°18'47
evening max el	16152 Oct 28 11:37	12°♄33'49	18°55'35	retrograde	16153 Oct 19 05:05	28°♄46'13	
retrograde	16152 Nov 06 04:29	16°♄57'15		evening set	16153 Oct 21 06:08	28°♄29'51	
desc. node	16152 Nov 06 21:51	16°♄55'31		desc. node	16153 Oct 24 19:04	26°♄52'36	
evening set	16152 Nov 08 01:53	16°♄45'37		inferior conj	16153 Oct 28 20:06	23°♄50'29	-1°18'06
inferior conj	16152 Nov 16 08:43	12°♄27'27	-3°00'06	minimum elong	16153 Oct 28 17:09	23°♄56'35	1°16'20
minimum elong	16152 Nov 16 01:22	12°♄40'27	2°56'40	min. Earth dist.	16153 Nov 01 02:10	21°♄10'16	0.58521 AU
min. Earth dist.	16152 Nov 19 07:00	10°♄23'55	0.56498 AU	morning rise	16153 Nov 05 00:41	18°♄28'51	
morning rise	16152 Nov 23 22:02	7°♄42'42		direct	16153 Nov 11 10:03	16°♄40'54	
direct	16152 Nov 29 18:25	6°♄21'39		morning max el	16153 Nov 25 17:00	24°♄18'40	27°23'47
morning max el	16152 Dec 13 22:05	13°♄38'00	26°12'40		16153 Nov 30 21:56	0°♄	
	16152 Dec 26 19:38	0°♄		asc. node	16153 Dec 19 08:17	28°♄39'44	
asc. node	16153 Jan 01 11:09	9°♄27'34			16153 Dec 20 01:10	0°♄	
morning set	16153 Jan 11 08:00	29°♄03'58		morning set	16153 Dec 26 16:12	13°♄26'50	
	16153 Jan 11 18:23	0°♄					
				superior conj	16154 Jan 02 13:05	28°♄35'08	1°36'43
superior conj	16153 Jan 18 01:39	13°♄56'58	1°37'51	minimum elong	16154 Jan 02 12:22	28°♄31'05	1°37'22
minimum elong	16153 Jan 18 01:59	13°♄58'47	1°38'26	max. Earth dist.	16154 Jan 02 09:26	28°♄14'41	1.30991 AU
max. Earth dist.	16153 Jan 19 01:51	16°♄11'43	1.31358 AU		16154 Jan 03 04:14	0°♄	
evening rise	16153 Jan 25 02:06	29°♄14'42		evening rise	16154 Jan 09 07:28	13°♄31'57	
	16153 Jan 25 10:44	0°♄			16154 Jan 17 12:19	0°♄	
desc. node	16153 Feb 02 21:34	16°♄30'07		desc. node	16154 Jan 20 18:18	5°♄49'35	
	16153 Feb 10 23:24	0°♄			16154 Feb 07 08:57	0°♄	
evening max el	16153 Feb 26 00:08	18°♄57'59	27°27'58	evening max el	16154 Feb 08 02:15	0°♄41'53	26°46'02
retrograde	16153 Mar 12 00:08	26°♄21'48		retrograde	16154 Feb 22 02:53	7°♄55'18	
evening set	16153 Mar 18 18:51	24°♄14'43		evening set	16154 Feb 28 14:16	6°♄10'37	

min. Earth dist.	16154 Mar 04 16:05	3° Υ 31'56	0.58917 AU		16154 Dec 25 15:18	0° \approx	
inferior conj	16154 Mar 07 21:03	1° Υ 02'54	-2°57'51	desc. node	16155 Jan 07 15:06	24° \approx 32'20	
minimum elong	16154 Mar 08 03:52	0° Υ 49'39	2°55'15		16155 Jan 11 05:14	0° \mathcal{H}	
	16154 Mar 09 05:54	30° \mathcal{H}		evening max el	16155 Jan 20 20:14	11° \mathcal{H} 33'34	25°31'09
morning rise	16154 Mar 15 21:02	26° \mathcal{H} 27'30		retrograde	16155 Feb 03 17:55	18° \mathcal{H} 33'22	
asc. node	16154 Mar 17 05:54	26° \mathcal{H} 14'52		evening set	16155 Feb 09 13:35	17° \mathcal{H} 15'59	
direct	16154 Mar 17 20:17	26° \mathcal{H} 13'33		min. Earth dist.	16155 Feb 14 09:03	14° \mathcal{H} 35'05	0.56851 AU
morning max el	16154 Mar 25 16:23	0° Υ 06'30	18°16'34	inferior conj	16155 Feb 17 04:12	12° \mathcal{H} 42'19	-4°27'22
	16154 Mar 25 13:42	0° Υ		minimum elong	16155 Feb 17 13:33	12° \mathcal{H} 26'35	4°24'22
morning set	16154 Apr 10 08:49	25° Υ 02'42		morning rise	16155 Feb 25 16:23	8° \mathcal{H} 28'11	
	16154 Apr 12 23:44	0° \mathcal{B}		direct	16155 Feb 27 16:53	8° \mathcal{H} 15'58	
desc. node	16154 Apr 18 19:39	10° \mathcal{B} 51'05		asc. node	16155 Mar 04 03:15	9° \mathcal{H} 18'33	
				morning max el	16155 Mar 08 19:44	12° \mathcal{H} 43'46	19°02'16
superior conj	16154 Apr 19 21:34	12° \mathcal{B} 48'55	-0°09'00		16155 Mar 20 11:13	0° Υ	
minimum elong	16154 Apr 19 20:51	12° \mathcal{B} 45'38	0°09'19	morning set	16155 Mar 25 07:51	9° Υ 22'16	
behind sun begin	16154 Apr 19 14:46	12° \mathcal{B} 18'02					
behind sun end	16154 Apr 20 02:56	13° \mathcal{B} 13'11		superior conj	16155 Apr 02 19:10	25° Υ 57'21	0°24'12
max. Earth dist.	16154 Apr 27 11:36	26° \mathcal{B} 06'56	1.41220 AU	minimum elong	16155 Apr 02 20:39	26° Υ 04'26	0°23'41
	16154 Apr 29 19:06	0° Π			16155 Apr 04 22:27	0° \mathcal{B}	
evening rise	16154 May 02 02:50	3° Π 49'30		desc. node	16155 Apr 05 16:22	1° \mathcal{B} 23'39	
	16154 May 19 06:42	0° \mathcal{E}		max. Earth dist.	16155 Apr 09 18:03	8° \mathcal{B} 48'46	1.38953 AU
evening max el	16154 Jun 05 03:03	21° \mathcal{E} 11'36	23°07'03	evening rise	16155 Apr 13 13:17	15° \mathcal{B} 27'47	
asc. node	16154 Jun 13 03:50	26° \mathcal{E} 53'43			16155 Apr 22 10:01	0° Π	
retrograde	16154 Jun 15 12:19	27° \mathcal{E} 17'33			16155 May 13 23:30	0° \mathcal{E}	
evening set	16154 Jun 20 14:43	25° \mathcal{E} 07'33		evening max el	16155 May 18 16:50	5° \mathcal{E} 07'15	24°28'12
inferior conj	16154 Jun 25 22:26	18° \mathcal{E} 43'10	2°57'59	retrograde	16155 May 30 05:17	11° \mathcal{E} 51'14	
minimum elong	16154 Jun 25 21:12	18° \mathcal{E} 47'28	2°57'08	asc. node	16155 May 31 00:51	11° \mathcal{E} 48'25	
min. Earth dist.	16154 Jun 25 12:13	19° \mathcal{E} 18'36	0.69102 AU	evening set	16155 Jun 04 19:13	9° \mathcal{E} 29'13	
morning rise	16154 Jul 01 03:36	12° \mathcal{E} 34'05		min. Earth dist.	16155 Jun 09 07:55	4° \mathcal{E} 17'31	0.68642 AU
direct	16154 Jul 05 12:25	10° \mathcal{E} 48'15		inferior conj	16155 Jun 10 07:05	2° \mathcal{E} 59'41	2°37'56
morning max el	16154 Jul 14 00:22	15° \mathcal{E} 41'24	21°01'34	minimum elong	16155 Jun 10 05:11	3° \mathcal{E} 06'05	2°36'49
desc. node	16154 Jul 15 19:13	17° \mathcal{E} 33'52			16155 Jun 12 14:40	30° \mathcal{R} Π	
	16154 Jul 25 12:58	0° Ω		morning rise	16155 Jun 15 15:17	26° Π 59'42	
morning set	16154 Aug 13 11:15	28° Ω 08'14		direct	16155 Jun 19 12:27	25° Π 33'28	
	16154 Aug 14 15:51	0° \mathcal{M}		morning max el	16155 Jun 26 23:54	29° Π 43'22	19°50'19
max. Earth dist.	16154 Aug 21 00:43	10° \mathcal{M} 08'53	1.43218 AU		16155 Jun 27 06:35	0° \mathcal{E}	
				desc. node	16155 Jul 02 16:24	6° \mathcal{E} 20'14	
superior conj	16154 Aug 28 02:20	21° \mathcal{M} 50'16	-1°32'10		16155 Jul 19 01:11	0° Ω	
minimum elong	16154 Aug 28 09:43	22° \mathcal{M} 21'27	1°31'28	morning set	16155 Jul 23 16:02	7° Ω 02'41	
	16154 Sep 01 20:38	0° \mathcal{L}		max. Earth dist.	16155 Aug 03 13:55	24° Ω 01'48	1.44836 AU
evening rise	16154 Sep 08 21:00	12° \mathcal{L} 23'02			16155 Aug 07 07:52	0° \mathcal{M}	
asc. node	16154 Sep 09 04:34	12° \mathcal{L} 56'46					
	16154 Sep 19 03:15	0° \mathcal{M}		superior conj	16155 Aug 08 14:37	2° \mathcal{M} 03'36	-2°00'30
evening max el	16154 Sep 25 05:06	7° \mathcal{M} 55'27	18°02'28	minimum elong	16155 Aug 08 21:50	2° \mathcal{M} 32'40	2°00'24
retrograde	16154 Oct 01 22:41	11° \mathcal{M} 23'38		evening rise	16155 Aug 22 03:58	24° \mathcal{M} 30'34	
evening set	16154 Oct 04 06:56	10° \mathcal{M} 58'24			16155 Aug 25 09:50	0° \mathcal{L}	
inferior conj	16154 Oct 11 03:51	5° \mathcal{M} 58'52	0°09'48	asc. node	16155 Aug 27 01:13	2° \mathcal{L} 45'49	
minimum elong	16154 Oct 11 04:11	5° \mathcal{M} 58'06	0°10'03	evening max el	16155 Sep 08 19:55	21° \mathcal{L} 19'37	18°05'00
transit middle	16154 Oct 11 04:11	5° \mathcal{M} 58'06	0°10'03	retrograde	16155 Sep 15 05:07	24° \mathcal{L} 40'03	
transit begin	16154 Oct 11 01:37	6° \mathcal{M} 04'13		evening set	16155 Sep 17 21:49	24° \mathcal{L} 02'25	
transit end	16154 Oct 11 06:45	5° \mathcal{M} 51'58		inferior conj	16155 Sep 24 04:13	18° \mathcal{L} 44'49	1°18'25
desc. node	16154 Oct 11 16:21	5° \mathcal{M} 28'57		minimum elong	16155 Sep 24 06:10	18° \mathcal{L} 39'32	1°17'55
min. Earth dist.	16154 Oct 14 06:43	3° \mathcal{M} 01'31	0.60797 AU	min. Earth dist.	16155 Sep 26 21:07	15° \mathcal{L} 50'44	0.63058 AU
morning rise	16154 Oct 17 22:22	0° \mathcal{M} 07'20		desc. node	16155 Sep 28 13:41	14° \mathcal{L} 10'52	
	16154 Oct 18 02:54	30° \mathcal{R} \mathcal{L}		morning rise	16155 Sep 30 12:21	12° \mathcal{L} 33'09	
direct	16154 Oct 24 14:12	27° \mathcal{L} 55'33		direct	16155 Oct 07 04:23	10° \mathcal{L} 04'44	
	16154 Oct 31 11:43	0° \mathcal{M}		morning max el	16155 Oct 21 03:37	18° \mathcal{L} 03'01	27°51'10
morning max el	16154 Nov 07 19:37	5° \mathcal{M} 48'08	27°56'54		16155 Oct 31 05:00	0° \mathcal{M}	
	16154 Nov 26 00:20	0° \mathcal{J}			16155 Nov 18 20:47	0° \mathcal{J}	
asc. node	16154 Dec 06 05:19	18° \mathcal{J} 15'32		asc. node	16155 Nov 23 02:15	8° \mathcal{J} 07'41	
morning set	16154 Dec 10 19:38	27° \mathcal{J} 33'07		morning set	16155 Nov 24 16:01	11° \mathcal{J} 16'58	
	16154 Dec 11 23:31	0° \mathcal{Z}		max. Earth dist.	16155 Nov 29 17:16	21° \mathcal{J} 50'39	1.31937 AU
max. Earth dist.	16154 Dec 16 15:49	10° \mathcal{Z} 10'25	1.31178 AU				
				superior conj	16155 Dec 02 08:01	27° \mathcal{J} 31'07	1°16'16
superior conj	16154 Dec 17 23:52	13° \mathcal{Z} 08'30	1°29'33	minimum elong	16155 Dec 02 05:47	27° \mathcal{J} 18'53	1°16'42
minimum elong	16154 Dec 17 22:14	12° \mathcal{Z} 59'24	1°30'07		16155 Dec 03 11:10	0° \mathcal{Z}	
evening rise	16154 Dec 24 16:25	27° \mathcal{Z} 56'56		evening rise	16155 Dec 09 03:02	12° \mathcal{Z} 24'37	

	16155 Dec 17 20:47	0°♊			16156 Nov 24 01:20	0°♊	
desc. node	16155 Dec 25 11:58	12°♊24'21		desc. node	16156 Dec 11 08:55	29°♊07'57	
evening max el	16156 Jan 02 07:10	21°♊42'36	23°53'23		16156 Dec 12 03:33	0°♊	
retrograde	16156 Jan 15 19:05	28°♊24'04		evening max el	16156 Dec 13 17:43	1°♊38'36	22°10'05
evening set	16156 Jan 20 14:09	27°♊34'18		retrograde	16156 Dec 26 08:24	7°♊52'46	
min. Earth dist.	16156 Jan 26 18:39	24°♊33'55	0.55276 AU	evening set	16156 Dec 29 20:47	7°♊25'24	
inferior conj	16156 Jan 28 14:19	23°♊29'05	-5°37'37	inferior conj	16157 Jan 07 08:45	3°♊33'57	-6°01'51
minimum elong	16156 Jan 28 21:32	23°♊18'21	5°36'01	minimum elong	16157 Jan 07 07:38	3°♊35'30	6°01'10
morning rise	16156 Feb 06 06:34	19°♊33'07		min. Earth dist.	16157 Jan 07 00:09	3°♊45'58	0.54458 AU
direct	16156 Feb 08 18:06	19°♊17'37			16157 Jan 14 23:46	30°♊♊	
asc. node	16156 Feb 19 00:35	24°♊05'14		morning rise	16157 Jan 15 19:25	29°♊46'41	
morning max el	16156 Feb 19 10:05	24°♊27'51	20°11'00	direct	16157 Jan 19 04:35	29°♊21'15	
	16156 Feb 24 03:21	0°♊			16157 Jan 23 05:43	0°♊	
morning set	16156 Mar 08 13:36	23°♊57'05		morning max el	16157 Jan 31 09:21	5°♊14'58	21°42'26
	16156 Mar 11 12:19	0°♊		asc. node	16157 Feb 04 21:54	10°♊19'49	
					16157 Feb 16 17:58	0°♊	
superior conj	16156 Mar 16 06:26	9°♊41'09	0°51'37	morning set	16157 Feb 20 23:27	8°♊39'37	
minimum elong	16156 Mar 16 08:53	9°♊53'23	0°51'11				
max. Earth dist.	16156 Mar 22 00:55	20°♊56'45	1.36691 AU	superior conj	16157 Feb 28 03:43	23°♊50'29	1°12'41
desc. node	16156 Mar 22 13:02	21°♊53'52		minimum elong	16157 Feb 28 06:10	24°♊03'18	1°12'31
evening rise	16156 Mar 25 19:01	27°♊53'31			16157 Mar 03 03:16	0°♊	
	16156 Mar 26 23:11	0°♊		max. Earth dist.	16157 Mar 04 12:29	2°♊47'51	1.34651 AU
	16156 Apr 14 18:43	0°♊		evening rise	16157 Mar 08 16:41	10°♊57'39	
evening max el	16156 Apr 30 06:26	19°♊01'16	25°43'08	desc. node	16157 Mar 09 09:41	12°♊18'10	
retrograde	16156 May 12 17:42	26°♊12'38			16157 Mar 19 10:53	0°♊	
asc. node	16156 May 16 21:57	25°♊02'08			16157 Apr 10 03:27	0°♊	
evening set	16156 May 18 18:39	23°♊42'37		evening max el	16157 Apr 12 20:09	2°♊46'34	26°44'19
min. Earth dist.	16156 May 23 00:10	19°♊07'38	0.67704 AU	retrograde	16157 Apr 26 00:44	10°♊14'01	
inferior conj	16156 May 24 12:24	17°♊12'13	2°06'53	evening set	16157 May 02 11:09	7°♊41'20	
minimum elong	16156 May 24 10:13	17°♊19'11	2°05'35	asc. node	16157 May 03 19:09	6°♊31'10	
morning rise	16156 May 30 02:20	11°♊22'42		min. Earth dist.	16157 May 06 10:54	3°♊41'13	0.66317 AU
direct	16156 Jun 02 12:34	10°♊15'30		inferior conj	16157 May 08 12:12	1°♊15'28	1°23'50
morning max el	16156 Jun 09 06:41	13°♊54'04	18°54'08	minimum elong	16157 May 08 10:18	1°♊21'05	1°22'35
desc. node	16156 Jun 18 13:30	25°♊42'08			16157 May 09 13:59	30°♊♊	
	16156 Jun 21 11:13	0°♊		morning rise	16157 May 14 10:40	25°♊38'03	
greatest brilliancy	16156 Jun 22 16:19	1°♊49'38	-0.8m	direct	16157 May 17 10:46	24°♊48'07	
morning set	16156 Jul 02 01:32	16°♊15'24		morning max el	16157 May 23 19:36	28°♊08'30	18°14'26
	16156 Jul 10 22:05	0°♊			16157 May 25 13:45	0°♊	
max. Earth dist.	16156 Jul 16 08:23	8°♊27'35	1.45788 AU	desc. node	16157 Jun 05 10:31	15°♊29'56	
				morning set	16157 Jun 12 08:47	26°♊31'56	
superior conj	16156 Jul 18 07:02	11°♊30'04	-2°13'57		16157 Jun 14 12:55	0°♊	
minimum elong	16156 Jul 18 08:38	11°♊36'21	2°14'31				
	16156 Jul 29 23:18	0°♊		superior conj	16157 Jun 27 16:06	20°♊43'15	-2°07'34
evening rise	16156 Aug 02 11:26	5°♊38'14		minimum elong	16157 Jun 27 10:11	20°♊20'07	2°08'01
asc. node	16156 Aug 12 21:53	22°♊18'30		max. Earth dist.	16157 Jun 29 04:58	23°♊07'06	1.45993 AU
	16156 Aug 18 04:20	0°♊			16157 Jul 03 15:03	0°♊	
evening max el	16156 Aug 22 10:04	5°♊00'42	18°25'24	evening rise	16157 Jul 13 18:08	15°♊44'35	
retrograde	16156 Aug 28 20:12	8°♊26'49			16157 Jul 22 23:23	0°♊	
evening set	16156 Aug 31 21:56	7°♊34'03		greatest brilliancy	16157 Jul 24 12:11	2°♊19'53	-0.8m
inferior conj	16156 Sep 06 17:15	2°♊00'41	2°08'14	asc. node	16157 Jul 30 18:37	11°♊27'57	
minimum elong	16156 Sep 06 19:34	1°♊53'46	2°07'33	evening max el	16157 Aug 05 20:42	18°♊50'40	19°02'54
	16156 Sep 08 09:43	30°♊♊		retrograde	16157 Aug 12 16:30	22°♊35'35	
min. Earth dist.	16156 Sep 08 21:03	29°♊26'52	0.65097 AU	evening set	16157 Aug 16 03:45	21°♊25'58	
morning rise	16156 Sep 12 15:51	25°♊37'50		inferior conj	16157 Aug 21 15:25	15°♊38'46	2°41'38
desc. node	16156 Sep 14 11:02	24°♊21'56		minimum elong	16157 Aug 21 17:20	15°♊32'36	2°41'00
direct	16156 Sep 19 02:55	23°♊01'30		min. Earth dist.	16157 Aug 23 05:15	13°♊37'25	0.66786 AU
	16156 Oct 01 16:25	0°♊		morning rise	16157 Aug 27 06:09	9°♊11'55	
morning max el	16156 Oct 02 14:36	0°♊54'36	27°11'33	desc. node	16157 Sep 01 08:26	6°♊40'00	
	16156 Oct 24 06:39	0°♊		direct	16157 Sep 02 08:43	6°♊36'00	
morning set	16156 Nov 07 02:46	24°♊32'46		morning max el	16157 Sep 15 02:14	14°♊10'18	26°06'00
asc. node	16156 Nov 08 23:06	28°♊10'55			16157 Sep 28 00:28	0°♊	
	16156 Nov 09 20:54	0°♊			16157 Oct 17 00:49	0°♊	
max. Earth dist.	16156 Nov 11 10:39	3°♊11'43	1.33260 AU	morning set	16157 Oct 21 00:31	7°♊12'34	
				max. Earth dist.	16157 Oct 24 18:17	14°♊17'28	1.35100 AU
superior conj	16156 Nov 15 11:26	11°♊37'40	0°56'49	asc. node	16157 Oct 26 19:55	18°♊20'15	
minimum elong	16156 Nov 15 09:06	11°♊25'17	0°57'07				
evening rise	16156 Nov 22 13:33	26°♊50'49		superior conj	16157 Oct 30 07:30	25°♊20'59	0°31'17

minimum elong	16157 Oct 30 05:50	25° \mathbb{M} 12'26	0°31'32	minimum elong	16158 Oct 13 17:05	8° \mathbb{M} 33'58	0°00'33
	16157 Nov 01 13:38	0° \mathbb{A}		behind sun begin	16158 Oct 13 10:27	8° \mathbb{M} 01'42	
evening rise	16157 Nov 06 21:58	11° \mathbb{A} 09'57		behind sun end	16158 Oct 13 23:42	9° \mathbb{M} 06'18	
	16157 Nov 16 16:48	0° \mathbb{B}		asc. node	16158 Oct 13 16:41	8° \mathbb{M} 32'02	
evening max el	16157 Nov 25 13:36	11° \mathbb{B} 59'04	20°38'08	evening rise	16158 Oct 22 02:03	25° \mathbb{M} 16'43	
desc. node	16157 Nov 28 05:57	14° \mathbb{B} 20'06			16158 Oct 24 10:50	0° \mathbb{A}	
retrograde	16157 Dec 06 18:35	17° \mathbb{B} 33'06		evening max el	16158 Nov 08 00:04	23° \mathbb{A} 07'38	19°26'34
evening set	16157 Dec 09 04:46	17° \mathbb{B} 18'39		desc. node	16158 Nov 15 03:04	27° \mathbb{A} 36'56	
inferior conj	16157 Dec 18 00:02	13° \mathbb{B} 25'28	-5°24'46	retrograde	16158 Nov 17 13:48	27° \mathbb{A} 55'14	
minimum elong	16157 Dec 17 15:12	13° \mathbb{B} 38'16	5°22'18	evening set	16158 Nov 19 12:09	27° \mathbb{A} 44'24	
min. Earth dist.	16157 Dec 19 05:37	12° \mathbb{B} 42'39	0.54556 AU	inferior conj	16158 Nov 28 02:39	23° \mathbb{A} 37'58	-3°59'20
morning rise	16157 Dec 26 01:25	9° \mathbb{B} 28'45		minimum elong	16158 Nov 27 17:14	23° \mathbb{A} 53'13	3°55'32
direct	16157 Dec 30 12:24	8° \mathbb{B} 46'01		min. Earth dist.	16158 Nov 30 14:19	22° \mathbb{A} 01'28	0.55572 AU
morning max el	16158 Jan 12 20:57	15° \mathbb{B} 18'27	23°29'52	morning rise	16158 Dec 05 20:13	19° \mathbb{A} 13'36	
asc. node	16158 Jan 22 19:11	27° \mathbb{B} 43'29		direct	16158 Dec 11 06:16	18° \mathbb{A} 07'16	
	16158 Jan 24 05:46	0° \mathbb{A}		morning max el	16158 Dec 25 05:37	25° \mathbb{A} 10'14	25°17'51
morning set	16158 Feb 05 11:13	23° \mathbb{A} 23'32			16158 Dec 29 17:24	0° \mathbb{B}	
	16158 Feb 08 12:34	0° \mathbb{H}		asc. node	16159 Jan 09 16:24	15° \mathbb{B} 59'31	
					16159 Jan 17 03:00	0° \mathbb{A}	
superior conj	16158 Feb 12 07:57	8° \mathbb{H} 16'55	1°27'21	morning set	16159 Jan 20 23:00	8° \mathbb{A} 03'04	
minimum elong	16158 Feb 12 09:49	8° \mathbb{H} 26'58	1°27'32				
max. Earth dist.	16158 Feb 15 07:16	14° \mathbb{H} 38'16	1.32989 AU	superior conj	16159 Jan 27 16:37	22° \mathbb{A} 52'45	1°35'47
evening rise	16158 Feb 20 02:51	24° \mathbb{H} 31'37		minimum elong	16159 Jan 27 17:32	22° \mathbb{A} 57'53	1°36'14
	16158 Feb 22 22:09	0° \mathbb{Y}		max. Earth dist.	16159 Jan 29 09:08	26° \mathbb{A} 35'58	1.31804 AU
desc. node	16158 Feb 24 06:22	2° \mathbb{Y} 32'22			16159 Jan 30 22:35	0° \mathbb{H}	
	16158 Mar 12 23:30	0° \mathbb{B}		evening rise	16159 Feb 03 22:27	8° \mathbb{H} 27'34	
evening max el	16158 Mar 26 09:20	16° \mathbb{B} 13'47	27°24'20	desc. node	16159 Feb 11 03:02	22° \mathbb{H} 30'50	
retrograde	16158 Apr 09 01:36	23° \mathbb{B} 46'43			16159 Feb 15 08:22	0° \mathbb{Y}	
evening set	16158 Apr 15 18:39	21° \mathbb{B} 18'06		evening max el	16159 Mar 08 20:19	29° \mathbb{Y} 10'36	27°36'13
min. Earth dist.	16158 Apr 19 14:18	17° \mathbb{B} 49'28	0.64534 AU		16159 Mar 09 17:24	0° \mathbb{B}	
asc. node	16158 Apr 20 16:25	16° \mathbb{B} 40'01		retrograde	16159 Mar 22 19:05	6° \mathbb{B} 39'50	
inferior conj	16158 Apr 22 03:55	15° \mathbb{B} 03'39	0°27'37	evening set	16159 Mar 29 14:33	4° \mathbb{B} 22'56	
minimum elong	16158 Apr 22 03:09	15° \mathbb{B} 05'44	0°26'51	min. Earth dist.	16159 Apr 02 08:44	1° \mathbb{B} 20'21	0.62451 AU
morning rise	16158 Apr 28 13:46	9° \mathbb{B} 40'13			16159 Apr 03 18:36	30° \mathbb{R} \mathbb{Y}	
direct	16158 May 01 04:40	9° \mathbb{B} 04'49		inferior conj	16159 Apr 05 08:26	28° \mathbb{Y} 28'10	-0°42'38
morning max el	16158 May 07 12:22	12° \mathbb{B} 19'39	17°51'46	minimum elong	16159 Apr 05 09:52	28° \mathbb{Y} 24'42	0°42'19
	16158 May 19 22:27	0° \mathbb{II}		asc. node	16159 Apr 07 13:44	26° \mathbb{Y} 24'26	
desc. node	16158 May 23 07:28	5° \mathbb{II} 36'37		morning rise	16159 Apr 12 08:10	23° \mathbb{Y} 21'03	
morning set	16158 May 24 19:27	8° \mathbb{II} 06'49		direct	16159 Apr 14 15:11	22° \mathbb{Y} 56'48	
				morning max el	16159 Apr 21 06:00	26° \mathbb{Y} 17'43	17°46'35
					16159 Apr 24 11:07	0° \mathbb{B}	
superior conj	16158 Jun 07 10:55	0° \mathbb{B} 28'05	-1°43'14	morning set	16159 May 07 06:06	20° \mathbb{B} 48'49	
minimum elong	16158 Jun 07 02:19	29° \mathbb{II} 53'40	1°43'07	desc. node	16159 May 10 04:20	25° \mathbb{B} 55'54	
	16158 Jun 07 03:54	0° \mathbb{B}			16159 May 12 12:34	0° \mathbb{II}	
max. Earth dist.	16158 Jun 12 00:49	7° \mathbb{B} 43'32	1.45450 AU				
evening rise	16158 Jun 23 07:32	25° \mathbb{B} 12'09		superior conj	16159 May 19 02:36	11° \mathbb{II} 10'52	-1°08'10
	16158 Jun 26 11:04	0° \mathbb{O}		minimum elong	16159 May 18 20:18	10° \mathbb{II} 44'34	1°07'57
greatest brilliancy	16158 Jul 08 02:02	17° \mathbb{O} 19'46	-0.6m	max. Earth dist.	16159 May 25 17:48	22° \mathbb{II} 01'35	1.44224 AU
asc. node	16158 Jul 17 15:25	0° \mathbb{P} 06'12			16159 May 30 18:37	0° \mathbb{B}	
	16158 Jul 17 13:17	0° \mathbb{P}		evening rise	16159 Jun 02 19:26	4° \mathbb{B} 42'49	
evening max el	16158 Jul 20 01:59	2° \mathbb{P} 44'38	19°56'19		16159 Jun 19 20:24	0° \mathbb{O}	
retrograde	16158 Jul 27 15:13	7° \mathbb{P} 00'18		evening max el	16159 Jul 03 01:14	16° \mathbb{O} 38'54	21°03'28
evening set	16158 Jul 31 12:39	5° \mathbb{P} 32'58		asc. node	16159 Jul 04 12:18	18° \mathbb{O} 01'44	
	16158 Aug 05 12:00	30° \mathbb{R} \mathbb{O}		retrograde	16159 Jul 11 14:12	21° \mathbb{O} 34'33	
inferior conj	16158 Aug 05 19:50	29° \mathbb{O} 33'31	3°01'00	evening set	16159 Jul 15 22:31	19° \mathbb{O} 49'35	
minimum elong	16158 Aug 05 20:57	29° \mathbb{O} 29'44	3°00'27	inferior conj	16159 Jul 21 04:01	13° \mathbb{O} 39'13	3°08'19
min. Earth dist.	16158 Aug 06 19:50	28° \mathbb{O} 12'29	0.68050 AU	minimum elong	16159 Jul 21 04:11	13° \mathbb{O} 38'37	3°07'45
morning rise	16158 Aug 11 04:49	23° \mathbb{O} 07'56		min. Earth dist.	16159 Jul 21 14:30	13° \mathbb{O} 02'48	0.68846 AU
direct	16158 Aug 16 20:44	20° \mathbb{O} 39'47		morning rise	16159 Jul 26 09:35	7° \mathbb{O} 18'31	
desc. node	16158 Aug 19 05:48	21° \mathbb{O} 02'11		direct	16159 Jul 31 13:42	5° \mathbb{O} 03'56	
morning max el	16158 Aug 28 13:19	27° \mathbb{O} 39'50	24°43'57	desc. node	16159 Aug 06 03:07	7° \mathbb{O} 05'59	
	16158 Aug 30 18:15	0° \mathbb{P}		morning max el	16159 Aug 11 00:32	11° \mathbb{O} 17'03	23°15'05
	16158 Sep 21 16:09	0° \mathbb{A}			16159 Aug 25 22:48	0° \mathbb{P}	
morning set	16158 Oct 03 05:20	19° \mathbb{A} 07'49			16159 Sep 14 10:59	0° \mathbb{A}	
max. Earth dist.	16158 Oct 06 18:21	25° \mathbb{A} 27'48	1.37338 AU		16159 Sep 14 13:02	0° \mathbb{A} 08'32	
	16158 Oct 09 05:23	0° \mathbb{M}		morning set	16159 Sep 18 17:04	7° \mathbb{A} 12'13	1.39749 AU
				max. Earth dist.			
superior conj	16158 Oct 13 17:07	8° \mathbb{M} 34'09	0°00'10				

superior conj	16159 Sep 26 12:24	21° <u>♄</u> 08'13	-0°35'13		16160 Sep 05 21:05	0° <u>♄</u>	
minimum elong	16159 Sep 26 15:03	21° <u>♄</u> 20'28	0°34'34				
asc. node	16159 Sep 30 13:25	28° <u>♄</u> 42'41		superior conj	16160 Sep 07 12:53	2° <u>♄</u> 52'26	-1°12'05
	16159 Oct 01 05:40	0° <u>♄</u>		minimum elong	16160 Sep 07 18:46	3° <u>♄</u> 18'09	1°11'16
evening rise	16159 Oct 05 22:55	9° <u>♄</u> 04'14		asc. node	16160 Sep 16 10:05	18° <u>♄</u> 48'01	
	16159 Oct 17 19:43	0° <u>♄</u>		evening rise	16160 Sep 18 08:52	22° <u>♄</u> 22'32	
evening max el	16159 Oct 21 23:46	5° <u>♄</u> 06'15	18°37'23		16160 Sep 22 13:12	0° <u>♄</u>	
retrograde	16159 Oct 30 02:58	9° <u>♄</u> 13'17		evening max el	16160 Oct 04 08:32	17° <u>♄</u> 45'33	18°09'28
evening set	16159 Nov 01 01:23	9° <u>♄</u> 00'06		retrograde	16160 Oct 11 11:18	21° <u>♄</u> 24'11	
desc. node	16159 Nov 02 00:15	8° <u>♄</u> 44'24		evening set	16160 Oct 13 15:18	21° <u>♄</u> 04'24	
inferior conj	16159 Nov 09 01:24	4° <u>♄</u> 33'15	-2°15'52	desc. node	16160 Oct 18 21:30	17° <u>♄</u> 58'43	
minimum elong	16159 Nov 08 19:56	4° <u>♄</u> 43'33	2°13'03	inferior conj	16160 Oct 20 21:47	16° <u>♄</u> 15'56	-0°38'36
min. Earth dist.	16159 Nov 12 04:45	2° <u>♄</u> 11'58	0.57311 AU	minimum elong	16160 Oct 20 20:25	16° <u>♄</u> 18'56	0°37'34
	16159 Nov 15 14:21	30° <u>♄</u>		min. Earth dist.	16160 Oct 24 03:27	13° <u>♄</u> 26'15	0.59476 AU
morning rise	16159 Nov 16 11:13	29° <u>♄</u> 32'42		morning rise	16160 Oct 27 22:14	10° <u>♄</u> 40'48	
direct	16159 Nov 22 14:14	27° <u>♄</u> 59'48		direct	16160 Nov 03 11:11	8° <u>♄</u> 42'19	
	16159 Nov 29 16:59	0° <u>♄</u>		morning max el	16160 Nov 17 17:45	16° <u>♄</u> 26'16	27°42'48
morning max el	16159 Dec 06 19:31	5° <u>♄</u> 25'47	26°47'04		16160 Nov 28 21:53	0° <u>♄</u>	
	16159 Dec 24 19:34	0° <u>♄</u>		asc. node	16160 Dec 13 10:37	24° <u>♄</u> 17'41	
asc. node	16159 Dec 27 13:33	4° <u>♄</u> 54'36			16160 Dec 16 08:11	0° <u>♄</u>	
morning set	16160 Jan 05 09:03	22° <u>♄</u> 33'45		morning set	16160 Dec 19 15:27	6° <u>♄</u> 50'00	
	16160 Jan 08 18:38	0° <u>♄</u>		max. Earth dist.	16160 Dec 25 23:27	20° <u>♄</u> 41'45	1.31010 AU
superior conj	16160 Jan 12 03:37	7° <u>♄</u> 32'08	1°38'07	superior conj	16160 Dec 26 14:59	22° <u>♄</u> 08'40	1°34'25
minimum elong	16160 Jan 12 03:29	7° <u>♄</u> 31'26	1°38'44	minimum elong	16160 Dec 26 13:51	22° <u>♄</u> 02'19	1°35'03
max. Earth dist.	16160 Jan 12 15:43	8° <u>♄</u> 39'52	1.31138 AU		16160 Dec 30 03:20	0° <u>♄</u>	
evening rise	16160 Jan 19 00:57	22° <u>♄</u> 39'21		evening rise	16161 Jan 02 08:05	7° <u>♄</u> 00'33	
	16160 Jan 22 14:15	0° <u>♄</u>			16161 Jan 14 03:25	0° <u>♄</u>	
desc. node	16160 Jan 28 23:45	12° <u>♄</u> 07'17		desc. node	16161 Jan 14 20:30	1° <u>♄</u> 12'31	
	16160 Feb 09 08:16	0° <u>♄</u>		evening max el	16161 Jan 31 01:35	22° <u>♄</u> 46'43	26°17'44
evening max el	16160 Feb 19 02:41	11° <u>♄</u> 25'03	27°14'32	retrograde	16161 Feb 14 01:03	29° <u>♄</u> 53'45	
retrograde	16160 Mar 04 03:28	18° <u>♄</u> 44'22		evening set	16161 Feb 20 07:02	28° <u>♄</u> 20'23	
evening set	16160 Mar 10 19:50	16° <u>♄</u> 46'27		min. Earth dist.	16161 Feb 24 14:51	25° <u>♄</u> 42'48	0.58007 AU
min. Earth dist.	16160 Mar 14 17:00	14° <u>♄</u> 02'02	0.60211 AU	inferior conj	16161 Feb 27 17:11	23° <u>♄</u> 27'36	-3°36'35
inferior conj	16160 Mar 17 22:07	11° <u>♄</u> 19'51	-2°05'49	minimum elong	16161 Feb 28 01:23	23° <u>♄</u> 12'39	3°33'37
minimum elong	16160 Mar 18 02:50	11° <u>♄</u> 09'53	2°04'01	morning rise	16161 Mar 07 23:01	19° <u>♄</u> 01'11	
asc. node	16160 Mar 24 11:03	6° <u>♄</u> 53'47		direct	16161 Mar 09 22:07	18° <u>♄</u> 48'20	
morning rise	16160 Mar 25 13:19	6° <u>♄</u> 31'50		asc. node	16161 Mar 11 08:22	18° <u>♄</u> 55'25	
direct	16160 Mar 27 14:31	6° <u>♄</u> 15'05		morning max el	16161 Mar 18 05:56	22° <u>♄</u> 54'34	18°33'16
morning max el	16160 Apr 03 21:07	9° <u>♄</u> 53'08	17°59'52		16161 Mar 23 20:33	0° <u>♄</u>	
	16160 Apr 17 01:57	0° <u>♄</u>		morning set	16161 Apr 03 04:29	18° <u>♄</u> 26'30	
morning set	16160 Apr 19 10:53	4° <u>♄</u> 20'46			16161 Apr 09 05:03	0° <u>♄</u>	
desc. node	16160 Apr 26 01:08	16° <u>♄</u> 23'30		superior conj	16161 Apr 12 05:27	5° <u>♄</u> 39'24	0°05'45
superior conj	16160 Apr 29 17:43	22° <u>♄</u> 57'20	-0°30'06	minimum elong	16161 Apr 12 05:50	5° <u>♄</u> 41'08	0°05'18
minimum elong	16160 Apr 29 15:08	22° <u>♄</u> 46'01	0°30'13	behind sun begin	16161 Apr 11 23:07	5° <u>♄</u> 10'00	
	16160 May 03 19:33	0° <u>♄</u>		behind sun end	16161 Apr 12 12:33	6° <u>♄</u> 12'13	
max. Earth dist.	16160 May 07 06:48	5° <u>♄</u> 49'28	1.42440 AU	desc. node	16161 Apr 12 21:52	6° <u>♄</u> 55'11	
evening rise	16160 May 12 21:01	14° <u>♄</u> 54'13		max. Earth dist.	16161 Apr 19 15:31	18° <u>♄</u> 57'25	1.40275 AU
	16160 May 22 16:14	0° <u>♄</u>		evening rise	16161 Apr 23 19:11	26° <u>♄</u> 00'28	
	16160 Jun 14 06:08	0° <u>♄</u>			16161 Apr 26 05:20	0° <u>♄</u>	
evening max el	16160 Jun 14 19:13	0° <u>♄</u> 33'05	22°20'26		16161 May 16 08:25	0° <u>♄</u>	
asc. node	16160 Jun 20 09:13	5° <u>♄</u> 00'40		evening max el	16161 May 28 09:49	14° <u>♄</u> 27'51	23°41'52
retrograde	16160 Jun 24 11:47	6° <u>♄</u> 13'07		asc. node	16161 Jun 07 06:10	20° <u>♄</u> 46'06	
evening set	16160 Jun 29 07:35	4° <u>♄</u> 11'35		retrograde	16161 Jun 08 06:45	20° <u>♄</u> 50'35	
	16160 Jul 03 00:40	30° <u>♄</u>		evening set	16161 Jun 13 14:13	18° <u>♄</u> 34'49	
inferior conj	16160 Jul 04 13:52	27° <u>♄</u> 51'52	3°04'46	inferior conj	16161 Jun 18 23:29	12° <u>♄</u> 07'56	2°50'47
minimum elong	16160 Jul 04 13:06	27° <u>♄</u> 54'31	3°04'02	minimum elong	16161 Jun 18 21:56	12° <u>♄</u> 13'16	2°49'49
min. Earth dist.	16160 Jul 04 11:09	28° <u>♄</u> 01'21	0.69154 AU	min. Earth dist.	16161 Jun 18 07:41	13° <u>♄</u> 02'02	0.68967 AU
morning rise	16160 Jul 09 18:28	21° <u>♄</u> 38'16		morning rise	16161 Jun 24 05:38	6° <u>♄</u> 02'52	
direct	16160 Jul 14 10:21	19° <u>♄</u> 41'17		direct	16161 Jun 28 09:27	4° <u>♄</u> 25'25	
desc. node	16160 Jul 23 00:25	24° <u>♄</u> 27'46		morning max el	16161 Jul 06 10:07	8° <u>♄</u> 58'31	20°29'40
morning max el	16160 Jul 23 14:29	25° <u>♄</u> 02'19	21°48'02	desc. node	16161 Jul 09 21:38	12° <u>♄</u> 47'52	
	16160 Jul 28 01:25	0° <u>♄</u>			16161 Jul 22 12:34	0° <u>♄</u>	
	16160 Aug 18 08:46	0° <u>♄</u>		morning set	16161 Aug 04 08:10	19° <u>♄</u> 17'48	
morning set	16160 Aug 24 20:53	10° <u>♄</u> 08'25			16161 Aug 11 04:24	0° <u>♄</u>	
max. Earth dist.	16160 Aug 30 20:33	19° <u>♄</u> 50'22	1.42052 AU	max. Earth dist.	16161 Aug 13 06:44	3° <u>♄</u> 20'38	1.43976 AU

superior conj	16161 Aug 19 14:42	13° \mathbb{M} 38'51	-1°45'32	max. Earth dist.	16162 Jul 26 22:13	17° Ω 28'22	1.45322 AU
minimum elong	16161 Aug 19 22:35	14° \mathbb{M} 11'28	1°45'01				
	16161 Aug 29 06:13	0° $\underline{\mathbf{A}}$		superior conj	16162 Jul 30 17:29	23° Ω 28'47	-2°08'26
evening rise	16161 Sep 01 03:15	5° $\underline{\mathbf{A}}$ 00'06		minimum elong	16162 Jul 30 22:58	23° Ω 50'34	2°08'41
asc. node	16161 Sep 03 06:45	8° $\underline{\mathbf{A}}$ 44'27			16162 Aug 03 19:24	0° \mathbb{M}	
	16161 Sep 17 00:49	0° \mathbb{M}		evening rise	16162 Aug 14 00:43	16° \mathbb{M} 42'56	
evening max el	16161 Sep 17 22:12	0° \mathbb{M} 55'48	18°01'16	asc. node	16162 Aug 21 03:24	28° \mathbb{M} 26'59	
retrograde	16161 Sep 24 11:07	4° \mathbb{M} 19'22			16162 Aug 22 02:24	0° $\underline{\mathbf{A}}$	
evening set	16161 Sep 26 22:48	3° \mathbb{M} 49'17		evening max el	16162 Sep 01 13:02	14° $\underline{\mathbf{A}}$ 27'21	18°11'34
	16161 Oct 02 05:24	30° \mathbb{R} $\underline{\mathbf{A}}$		retrograde	16162 Sep 07 21:44	17° $\underline{\mathbf{A}}$ 48'56	
inferior conj	16161 Oct 03 13:08	28° $\underline{\mathbf{A}}$ 41'28	0°41'18	evening set	16162 Sep 10 18:05	17° $\underline{\mathbf{A}}$ 05'19	
minimum elong	16161 Oct 03 14:20	28° $\underline{\mathbf{A}}$ 38'26	0°41'08	inferior conj	16162 Sep 16 19:21	11° $\underline{\mathbf{A}}$ 40'50	1°41'42
desc. node	16161 Oct 05 18:49	26° $\underline{\mathbf{A}}$ 25'49		minimum elong	16162 Sep 16 21:35	11° $\underline{\mathbf{A}}$ 34'31	1°41'04
min. Earth dist.	16161 Oct 06 12:10	25° $\underline{\mathbf{A}}$ 43'19	0.61768 AU	min. Earth dist.	16162 Sep 19 06:57	8° $\underline{\mathbf{A}}$ 53'17	0.63955 AU
morning rise	16161 Oct 10 03:09	22° $\underline{\mathbf{A}}$ 39'58		morning rise	16162 Sep 22 23:14	5° $\underline{\mathbf{A}}$ 23'04	
direct	16161 Oct 16 19:34	20° $\underline{\mathbf{A}}$ 20'26		desc. node	16162 Sep 22 16:11	5° $\underline{\mathbf{A}}$ 37'04	
morning max el	16161 Oct 30 23:15	28° $\underline{\mathbf{A}}$ 16'39	27°59'08	direct	16162 Sep 29 13:36	2° $\underline{\mathbf{A}}$ 50'02	
	16161 Nov 01 15:29	0° \mathbb{M}		morning max el	16162 Oct 13 09:00	10° $\underline{\mathbf{A}}$ 48'41	27°38'04
	16161 Nov 22 17:57	0° \mathbb{A}			16162 Oct 28 13:19	0° \mathbb{M}	
asc. node	16161 Nov 30 07:37	14° \mathbb{A} 01'05			16162 Nov 15 03:54	0° \mathbb{A}	
morning set	16161 Dec 03 16:12	20° \mathbb{A} 47'23		morning set	16162 Nov 17 08:54	4° \mathbb{A} 20'09	
	16161 Dec 08 00:25	0° \mathbb{B}		asc. node	16162 Nov 17 04:31	3° \mathbb{A} 58'23	
max. Earth dist.	16161 Dec 09 04:23	2° \mathbb{B} 32'30	1.31435 AU	max. Earth dist.	16162 Nov 22 02:38	14° \mathbb{A} 03'55	1.32424 AU
superior conj	16161 Dec 11 00:52	6° \mathbb{B} 37'42	1°24'40	superior conj	16162 Nov 25 07:18	20° \mathbb{A} 54'00	1°08'46
minimum elong	16161 Dec 10 22:56	6° \mathbb{B} 26'58	1°25'11	minimum elong	16162 Nov 25 04:57	20° \mathbb{A} 41'16	1°09'09
evening rise	16161 Dec 17 17:57	21° \mathbb{B} 26'54			16162 Nov 29 11:28	0° \mathbb{B}	
	16161 Dec 21 19:24	0° \approx		evening rise	16162 Dec 02 04:45	5° \mathbb{B} 54'07	
desc. node	16162 Jan 01 17:20	19° \approx 35'29			16162 Dec 14 18:46	0° \approx	
	16162 Jan 09 12:25	0° \mathbb{H}		desc. node	16162 Dec 19 14:15	7° \approx 01'10	
evening max el	16162 Jan 12 15:55	3° \mathbb{H} 16'49	24°51'16	evening max el	16162 Dec 25 01:29	13° \approx 15'47	23°09'06
retrograde	16162 Jan 26 10:19	10° \mathbb{H} 09'56		retrograde	16163 Jan 07 06:30	19° \approx 47'54	
evening set	16162 Jan 31 20:49	9° \mathbb{H} 04'10		evening set	16163 Jan 11 12:34	19° \approx 08'42	
min. Earth dist.	16162 Feb 06 04:02	6° \mathbb{H} 17'27	0.56109 AU	min. Earth dist.	16163 Jan 18 11:48	15° \approx 53'51	0.54816 AU
inferior conj	16162 Feb 08 15:08	4° \mathbb{H} 43'49	-5°01'03	inferior conj	16163 Jan 19 17:36	15° \approx 11'03	-5°55'00
minimum elong	16162 Feb 09 00:23	4° \mathbb{H} 29'09	4°58'28	minimum elong	16163 Jan 19 21:51	15° \approx 04'56	5°54'05
morning rise	16162 Feb 17 06:22	0° \mathbb{H} 38'31		morning rise	16163 Jan 28 08:28	11° \approx 20'20	
direct	16162 Feb 19 10:10	0° \mathbb{H} 25'38		direct	16163 Jan 31 03:46	11° \approx 01'44	
asc. node	16162 Feb 26 05:43	2° \mathbb{H} 43'57		morning max el	16163 Feb 11 12:26	16° \approx 31'10	20°47'18
morning max el	16162 Mar 01 04:15	5° \mathbb{H} 10'19	19°28'41	asc. node	16163 Feb 13 03:04	18° \approx 10'42	
	16162 Mar 16 19:56	0° \mathbb{Y}			16163 Feb 21 11:50	0° \mathbb{H}	
morning set	16162 Mar 18 06:43	2° \mathbb{Y} 53'23		morning set	16163 Mar 02 14:33	17° \mathbb{H} 32'40	
					16163 Mar 08 14:12	0° \mathbb{Y}	
superior conj	16162 Mar 26 09:23	19° \mathbb{Y} 04'22	0°36'35	superior conj	16163 Mar 10 01:24	3° \mathbb{Y} 00'54	1°01'19
minimum elong	16162 Mar 26 11:25	19° \mathbb{Y} 14'15	0°36'04	minimum elong	16163 Mar 10 03:57	3° \mathbb{Y} 13'52	1°00'58
desc. node	16162 Mar 30 18:32	27° \mathbb{Y} 27'02		max. Earth dist.	16163 Mar 15 05:35	13° \mathbb{Y} 20'10	1.35783 AU
	16162 Apr 01 03:29	0° \mathbb{B}		desc. node	16163 Mar 17 15:12	17° \mathbb{Y} 55'34	
max. Earth dist.	16162 Apr 01 21:33	1° \mathbb{B} 22'51	1.37973 AU	evening rise	16163 Mar 19 03:13	20° \mathbb{Y} 43'38	
evening rise	16162 Apr 05 14:09	7° \mathbb{B} 59'36			16163 Mar 24 07:36	0° \mathbb{B}	
	16162 Apr 19 02:00	0° \mathbb{I}			16163 Apr 13 00:15	0° \mathbb{I}	
evening max el	16162 May 10 23:08	28° \mathbb{I} 22'22	25°01'15	evening max el	16163 Apr 23 12:47	12° \mathbb{I} 13'52	26°11'14
	16162 May 12 16:24	0° \mathbb{E}		retrograde	16163 May 06 08:29	19° \mathbb{I} 34'13	
retrograde	16162 May 22 21:59	5° \mathbb{E} 20'01		asc. node	16163 May 12 00:22	17° \mathbb{I} 28'29	
asc. node	16162 May 25 03:13	4° \mathbb{E} 59'30		evening set	16163 May 12 13:34	17° \mathbb{I} 02'22	
evening set	16162 May 28 16:48	2° \mathbb{E} 53'43		min. Earth dist.	16163 May 16 16:25	12° \mathbb{I} 42'18	0.67164 AU
	16162 May 31 11:24	30° \mathbb{R} \mathbb{I}		inferior conj	16163 May 18 10:15	10° \mathbb{I} 32'48	1°50'12
min. Earth dist.	16162 Jun 02 02:08	27° \mathbb{I} 57'57	0.68296 AU	minimum elong	16163 May 18 08:06	10° \mathbb{I} 39'28	1°48'52
inferior conj	16162 Jun 03 06:57	26° \mathbb{I} 23'04	2°26'11	morning rise	16163 May 24 03:28	4° \mathbb{I} 48'05	
minimum elong	16162 Jun 03 04:52	26° \mathbb{I} 29'55	2°24'57	direct	16163 May 27 09:11	3° \mathbb{I} 48'38	
morning rise	16162 Jun 08 17:16	20° \mathbb{I} 27'32		morning max el	16163 Jun 02 22:31	7° \mathbb{I} 18'16	18°35'06
direct	16162 Jun 12 09:36	19° \mathbb{I} 09'46		desc. node	16163 Jun 13 15:51	21° \mathbb{I} 24'35	
morning max el	16162 Jun 19 12:53	23° \mathbb{I} 04'56	19°24'31		16163 Jun 19 05:50	0° \mathbb{E}	
	16162 Jun 25 09:58	0° \mathbb{E}		morning set	16163 Jun 24 05:34	7° \mathbb{E} 48'10	
desc. node	16162 Jun 26 18:47	1° \mathbb{E} 50'32			16163 Jul 08 10:36	0° Ω	
greatest brilliancy	16162 Jul 02 05:03	9° \mathbb{E} 35'42	-0.7m	max. Earth dist.	16163 Jul 09 17:20	1° Ω 59'44	1.45970 AU
morning set	16162 Jul 14 12:21	28° \mathbb{E} 12'47					
	16162 Jul 15 16:15	0° Ω					

superior conj	16163 Jul 10 04:50	2°♎44'34	-2°13'44	superior conj	16164 Jun 18 16:07	12°♊06'03	-1°59'05
minimum elong	16163 Jul 10 03:01	2°♎37'28	2°14'22	minimum elong	16164 Jun 18 08:16	11°♊35'11	1°59'16
evening rise	16163 Jul 25 21:21	27°♎22'48		max. Earth dist.	16164 Jun 21 13:58	16°♊39'53	1.45860 AU
	16163 Jul 27 13:02	0°♎			16164 Jun 30 04:03	0°♎	
greatest brilliancy	16163 Aug 02 11:10	9°♎21'26	-0.8m	evening rise	16164 Jul 04 19:09	7°♎08'14	
asc. node	16163 Aug 08 00:06	17°♎50'23		greatest brilliancy	16164 Jul 17 13:44	26°♎33'05	-0.7m
evening max el	16163 Aug 16 02:00	28°♎12'41	18°39'22		16164 Jul 19 22:22	0°♎	
	16163 Aug 18 03:27	0°♎		asc. node	16164 Jul 24 20:53	6°♎47'43	
retrograde	16163 Aug 22 15:17	1°♎45'08		evening max el	16164 Jul 29 10:38	12°♎05'19	19°23'50
evening set	16163 Aug 25 20:58	0°♎45'29		retrograde	16164 Aug 05 12:47	16°♎01'29	
	16163 Aug 26 22:50	30°♎		evening set	16164 Aug 09 04:23	14°♎44'17	
inferior conj	16163 Aug 31 12:39	25°♎06'20	2°24'13	inferior conj	16164 Aug 14 13:47	8°♎51'53	2°51'23
minimum elong	16163 Aug 31 14:52	24°♎59'28	2°23'33	minimum elong	16164 Aug 14 15:24	8°♎46'34	2°50'48
min. Earth dist.	16163 Sep 02 10:40	22°♎44'46	0.65867 AU	min. Earth dist.	16164 Aug 15 21:42	7°♎07'01	0.67385 AU
morning rise	16163 Sep 06 07:40	18°♎40'59		morning rise	16164 Aug 20 01:50	2°♎25'18	
desc. node	16163 Sep 09 13:34	16°♎39'43			16164 Aug 24 14:16	30°♎	
direct	16163 Sep 12 15:36	16°♎03'29		direct	16164 Aug 26 00:12	29°♎51'49	
morning max el	16163 Sep 25 20:16	23°♎50'43	26°46'10	desc. node	16164 Aug 26 10:57	29°♎52'36	
	16163 Oct 01 08:49	0°♎			16164 Aug 27 11:14	0°♎	
	16163 Oct 21 22:17	0°♎		morning max el	16164 Sep 07 07:31	7°♎12'35	25°32'30
morning set	16163 Oct 31 14:32	17°♎20'59			16164 Sep 25 02:29	0°♎	
asc. node	16163 Nov 04 01:22	24°♎04'17		morning set	16164 Oct 13 05:34	29°♎42'38	
max. Earth dist.	16163 Nov 04 15:28	25°♎14'35	1.33976 AU		16164 Oct 13 09:24	0°♎	
	16163 Nov 06 23:48	0°♎		max. Earth dist.	16164 Oct 16 19:22	6°♎19'02	1.36016 AU
				asc. node	16164 Oct 20 22:10	14°♎15'04	
superior conj	16163 Nov 09 07:57	4°♎51'05	0°46'43	superior conj	16164 Oct 23 00:02	18°♎22'46	0°18'44
minimum elong	16163 Nov 09 05:47	4°♎39'47	0°46'59	minimum elong	16164 Oct 22 22:55	18°♎17'12	0°19'01
evening rise	16163 Nov 16 14:36	20°♎17'10			16164 Oct 28 16:40	0°♎	
	16163 Nov 21 08:05	0°♎		evening rise	16164 Oct 30 21:30	4°♎31'53	
desc. node	16163 Dec 06 11:15	23°♎08'43			16164 Nov 14 06:38	0°♎	
evening max el	16163 Dec 06 15:07	23°♎18'17	21°29'02	evening max el	16164 Nov 17 17:04	3°♎57'41	20°04'59
retrograde	16163 Dec 18 16:49	29°♎16'18		desc. node	16164 Nov 22 08:20	7°♎34'38	
evening set	16163 Dec 21 16:36	28°♎55'53		retrograde	16164 Nov 28 05:00	9°♎11'35	
inferior conj	16163 Dec 30 08:53	25°♎05'54	-5°53'34	evening set	16164 Nov 30 08:35	8°♎59'27	
minimum elong	16163 Dec 30 03:50	25°♎12'59	5°52'22	inferior conj	16164 Dec 09 03:21	5°♎01'48	-4°52'45
min. Earth dist.	16163 Dec 30 17:05	24°♎54'24	0.54378 AU	minimum elong	16164 Dec 08 17:23	5°♎16'47	4°49'26
morning rise	16164 Jan 07 15:31	21°♎16'50		min. Earth dist.	16164 Dec 10 23:13	3°♎55'50	0.54886 AU
direct	16164 Jan 11 11:50	20°♎44'41		morning rise	16164 Dec 17 01:17	0°♎55'38	
morning max el	16164 Jan 24 05:52	26°♎56'25	22°26'48	direct	16164 Dec 21 22:58	0°♎03'23	
	16164 Jan 27 03:33	0°♎		morning max el	16165 Jan 04 14:45	6°♎49'01	24°16'55
asc. node	16164 Jan 31 00:23	4°♎56'40		asc. node	16165 Jan 16 21:39	22°♎44'07	
	16164 Feb 13 23:37	0°♎			16165 Jan 21 02:32	0°♎	
morning set	16164 Feb 15 01:28	2°♎16'17		morning set	16165 Jan 29 13:29	16°♎58'44	
					16165 Feb 04 12:28	0°♎	
superior conj	16164 Feb 22 01:59	17°♎18'14	1°19'40	superior conj	16165 Feb 05 08:22	1°♎48'55	1°31'41
minimum elong	16164 Feb 22 04:15	17°♎30'13	1°19'38	minimum elong	16165 Feb 05 09:51	1°♎57'05	1°31'58
max. Earth dist.	16164 Feb 25 20:06	25°♎09'25	1.33895 AU	max. Earth dist.	16165 Feb 07 18:21	7°♎03'26	1.32429 AU
	16164 Feb 28 05:31	0°♎		evening rise	16165 Feb 12 21:09	17°♎45'32	
evening rise	16164 Mar 01 06:38	4°♎01'42		desc. node	16165 Feb 18 08:31	28°♎24'01	
desc. node	16164 Mar 03 11:51	8°♎16'02			16165 Feb 19 05:17	0°♎	
	16164 Mar 16 03:20	0°♎			16165 Mar 10 12:02	0°♎	
evening max el	16164 Apr 05 02:39	25°♎53'28	27°04'21	evening max el	16165 Mar 18 15:19	9°♎09'30	27°33'08
	16164 Apr 09 22:25	0°♎		retrograde	16165 Apr 01 10:35	16°♎40'48	
retrograde	16164 Apr 18 13:00	3°♎24'04		evening set	16165 Apr 08 05:22	14°♎16'23	
evening set	16164 Apr 25 02:31	0°♎52'35		min. Earth dist.	16165 Apr 12 00:07	10°♎59'39	0.63687 AU
	16164 Apr 26 03:44	30°♎		inferior conj	16165 Apr 14 18:21	8°♎09'33	-0°00'27
asc. node	16164 Apr 27 21:37	28°♎18'21		minimum elong	16165 Apr 14 18:22	8°♎09'29	0°00'49
min. Earth dist.	16164 Apr 29 00:25	27°♎06'02	0.65607 AU	transit middle	16165 Apr 14 18:22	8°♎09'29	0°00'49
inferior conj	16164 May 01 06:59	24°♎30'34	1°01'42	transit begin	16165 Apr 14 15:13	8°♎17'37	
minimum elong	16164 May 01 05:27	24°♎34'58	1°00'36	transit end	16165 Apr 14 21:31	8°♎01'23	
morning rise	16164 May 07 09:55	18°♎58'29		asc. node	16165 Apr 14 18:55	8°♎08'05	
direct	16164 May 10 05:59	18°♎15'03		morning rise	16165 Apr 21 09:49	2°♎52'35	
morning max el	16164 May 16 13:19	21°♎31'41	18°02'34	direct	16165 Apr 23 21:18	2°♎22'12	
	16164 May 23 06:38	0°♎		morning max el	16165 Apr 30 06:47	5°♎37'53	17°47'19
desc. node	16164 May 30 12:50	11°♎20'58			16165 May 16 11:48	0°♎	
morning set	16164 Jun 04 00:32	18°♎38'16					
	16164 Jun 11 01:12	0°♎					

morning set	16165 May 16 22:04	0° Π 43'42		16166 Apr 21 18:33	0° \mathcal{B}	
desc. node	16165 May 17 09:43	1° Π 33'22		morning set	16166 Apr 29 17:11	13° \mathcal{B} 49'25
				desc. node	16166 May 04 06:33	21° \mathcal{B} 56'53
superior conj	16165 May 29 18:54	22° Π 12'57 -1°29'09			16166 May 08 21:06	0° Π
minimum elong	16165 May 29 10:52	21° Π 40'20 1°28'56				
	16165 Jun 03 15:13	0° \mathcal{E}		superior conj	16166 May 10 20:47	3° Π 24'15 -0°52'02
max. Earth dist.	16165 Jun 04 09:22	1° \mathcal{E} 12'02 1.45014 AU		minimum elong	16166 May 10 16:04	3° Π 04'09 0°51'56
evening rise	16165 Jun 14 05:48	16° \mathcal{E} 31'39		max. Earth dist.	16166 May 18 01:03	15° Π 20'07 1.43522 AU
	16165 Jun 23 04:02	0° \mathcal{Q}		evening rise	16166 May 24 22:09	26° Π 16'44
asc. node	16165 Jul 11 17:42	25° \mathcal{Q} 09'07			16166 May 27 07:46	0° \mathcal{E}
evening max el	16165 Jul 12 13:21	25° \mathcal{Q} 59'27 20°23'23			16166 Jun 17 01:26	0° \mathcal{Q}
	16165 Jul 18 00:35	0° \mathcal{M}		evening max el	16166 Jun 25 10:04	9° \mathcal{Q} 53'31 21°35'09
retrograde	16165 Jul 20 11:51	0° \mathcal{M} 31'00		asc. node	16166 Jun 28 14:35	12° \mathcal{Q} 42'48
	16165 Jul 22 20:12	30° \mathcal{R} \mathcal{Q}		retrograde	16166 Jul 04 10:33	15° \mathcal{Q} 08'15
evening set	16165 Jul 24 13:56	28° \mathcal{Q} 55'51		evening set	16166 Jul 08 23:41	13° \mathcal{Q} 15'55
inferior conj	16165 Jul 29 20:04	22° \mathcal{Q} 51'28 3°05'29		inferior conj	16166 Jul 14 05:13	7° \mathcal{Q} 01'03 3°08'06
minimum elong	16165 Jul 29 20:47	22° \mathcal{Q} 48'58 3°04'57		minimum elong	16166 Jul 14 04:59	7° \mathcal{Q} 01'51 3°07'29
min. Earth dist.	16165 Jul 30 14:10	21° \mathcal{Q} 49'24 0.68450 AU		min. Earth dist.	16166 Jul 14 09:59	6° \mathcal{Q} 44'24 0.69037 AU
morning rise	16165 Aug 04 03:19	16° \mathcal{Q} 27'50		morning rise	16166 Jul 19 10:04	0° \mathcal{Q} 43'05
direct	16165 Aug 09 14:16	14° \mathcal{Q} 05'07			16166 Jul 20 07:53	30° \mathcal{R} \mathcal{E}
desc. node	16165 Aug 13 08:18	15° \mathcal{Q} 00'50		direct	16166 Jul 24 08:52	28° \mathcal{E} 35'53
morning max el	16165 Aug 20 18:31	20° \mathcal{Q} 45'50 24°06'29			16166 Jul 28 20:01	0° \mathcal{Q}
	16165 Aug 28 17:28	0° \mathcal{M}		desc. node	16166 Jul 31 05:35	1° \mathcal{Q} 40'44
	16165 Sep 18 07:15	0° \mathcal{A}		morning max el	16166 Aug 03 06:45	4° \mathcal{Q} 27'17 22°37'20
morning set	16165 Sep 25 01:49	11° \mathcal{A} 15'16			16166 Aug 22 21:15	0° \mathcal{M}
max. Earth dist.	16165 Sep 28 18:32	17° \mathcal{A} 42'32 1.38363 AU		morning set	16166 Sep 05 23:29	21° \mathcal{M} 50'33
	16165 Oct 05 11:10	0° \mathcal{M}			16166 Sep 10 21:25	0° \mathcal{A}
				max. Earth dist.	16166 Sep 10 18:43	29° \mathcal{M} 48'33 1.40761 AU
superior conj	16165 Oct 06 04:00	1° \mathcal{M} 19'59 -0°14'27				
minimum elong	16165 Oct 06 04:59	1° \mathcal{M} 24'41 0°13'58		superior conj	16166 Sep 18 15:45	13° \mathcal{A} 33'32 -0°50'55
behind sun begin	16165 Oct 06 01:27	1° \mathcal{M} 07'50		minimum elong	16166 Sep 18 19:47	13° \mathcal{A} 51'42 0°50'10
behind sun end	16165 Oct 06 08:31	1° \mathcal{M} 41'32		asc. node	16166 Sep 24 15:35	24° \mathcal{A} 35'09
asc. node	16165 Oct 07 18:53	4° \mathcal{M} 26'28			16166 Sep 27 12:36	0° \mathcal{M}
evening rise	16165 Oct 14 22:53	18° \mathcal{M} 31'18		evening rise	16166 Sep 28 15:36	2° \mathcal{M} 07'33
	16165 Oct 20 22:04	0° \mathcal{A}		evening max el	16166 Oct 14 13:24	27° \mathcal{M} 43'35 18°22'57
evening max el	16165 Oct 31 09:23	15° \mathcal{A} 26'56 19°02'50			16166 Oct 17 06:57	0° \mathcal{A}
retrograde	16165 Nov 09 07:29	19° \mathcal{A} 56'31		retrograde	16166 Oct 22 05:07	1° \mathcal{A} 37'10
desc. node	16165 Nov 09 05:30	19° \mathcal{A} 56'30		evening set	16166 Oct 24 05:19	1° \mathcal{A} 21'47
evening set	16165 Nov 11 04:47	19° \mathcal{A} 45'16		desc. node	16166 Oct 27 02:42	0° \mathcal{A} 10'40
inferior conj	16165 Nov 19 13:50	15° \mathcal{A} 30'10 -3°15'53			16166 Oct 27 10:13	30° \mathcal{R} \mathcal{M}
minimum elong	16165 Nov 19 05:51	15° \mathcal{A} 43'56 3°12'17		inferior conj	16166 Oct 31 21:57	26° \mathcal{M} 45'46 -1°32'51
min. Earth dist.	16165 Nov 22 09:48	13° \mathcal{A} 33'14 0.56239 AU		minimum elong	16166 Oct 31 18:22	26° \mathcal{M} 52'59 1°30'49
morning rise	16165 Nov 27 04:15	10° \mathcal{A} 50'44		min. Earth dist.	16166 Nov 04 03:44	24° \mathcal{M} 09'44 0.58197 AU
direct	16165 Dec 02 22:04	9° \mathcal{A} 33'37		morning rise	16166 Nov 08 03:54	21° \mathcal{M} 29'19
morning max el	16165 Dec 17 01:01	16° \mathcal{A} 46'45 25°59'20		direct	16166 Nov 14 11:53	19° \mathcal{M} 45'04
	16165 Dec 27 20:08	0° \mathcal{Z}		morning max el	16166 Nov 28 18:34	27° \mathcal{M} 20'16 27°15'28
asc. node	16166 Jan 03 18:49	11° \mathcal{Z} 17'29			16166 Dec 01 08:27	0° \mathcal{A}
	16166 Jan 13 07:06	0° \approx			16166 Dec 21 10:33	0° \mathcal{Z}
morning set	16166 Jan 14 00:44	1° \approx 34'39		asc. node	16166 Dec 21 15:54	0° \mathcal{Z} 25'05
				morning set	16166 Dec 29 09:25	15° \mathcal{Z} 59'22
superior conj	16166 Jan 20 18:14	16° \approx 26'16 1°37'31			16167 Jan 04 18:02	0° \approx
minimum elong	16166 Jan 20 18:43	16° \approx 28'59 1°38'03				
max. Earth dist.	16166 Jan 21 22:39	19° \approx 04'05 1.31451 AU		superior conj	16167 Jan 05 05:35	1° \approx 04'43 1°37'17
	16166 Jan 26 23:23	0° \mathcal{H}		minimum elong	16167 Jan 05 05:01	1° \approx 01'31 1°37'56
evening rise	16166 Jan 27 19:55	1° \mathcal{H} 48'02		max. Earth dist.	16167 Jan 05 05:58	1° \approx 06'51 1.31007 AU
desc. node	16166 Feb 05 05:14	18° \mathcal{H} 13'47		evening rise	16167 Jan 12 00:35	16° \approx 03'43
	16166 Feb 12 03:07	0° \mathcal{Y}			16167 Jan 18 21:36	0° \mathcal{H}
evening max el	16166 Mar 01 00:31	21° \mathcal{Y} 49'01 27°31'17		desc. node	16167 Jan 23 01:58	7° \mathcal{H} 37'49
retrograde	16166 Mar 15 00:18	29° \mathcal{Y} 14'41			16167 Feb 07 14:38	0° \mathcal{Y}
evening set	16166 Mar 21 19:27	27° \mathcal{Y} 04'41		evening max el	16167 Feb 11 03:44	3° \mathcal{Y} 40'35 26°54'37
min. Earth dist.	16166 Mar 25 14:04	24° \mathcal{Y} 11'23 0.61507 AU		retrograde	16167 Feb 25 04:40	10° \mathcal{Y} 55'58
inferior conj	16166 Mar 28 17:00	21° \mathcal{Y} 21'10 -1°16'28		evening set	16167 Mar 03 17:31	9° \mathcal{Y} 07'44
minimum elong	16166 Mar 28 19:43	21° \mathcal{Y} 14'58 1°15'33		min. Earth dist.	16167 Mar 07 17:50	6° \mathcal{Y} 27'54 0.59241 AU
asc. node	16166 Apr 01 16:13	18° \mathcal{Y} 03'46		inferior conj	16167 Mar 10 23:08	3° \mathcal{Y} 54'50 -2°44'01
morning rise	16166 Apr 04 23:15	16° \mathcal{Y} 22'10		minimum elong	16167 Mar 11 05:25	3° \mathcal{Y} 42'22 2°41'37
direct	16166 Apr 07 03:32	16° \mathcal{Y} 01'31			16167 Mar 16 19:21	30° \mathcal{R} \mathcal{H}
morning max el	16166 Apr 13 23:51	19° \mathcal{Y} 28'00 17°49'59		morning rise	16167 Mar 18 20:54	29° \mathcal{H} 16'10

asc. node	16167 Mar 19 13:32	29° Υ 07'51		inferior conj	16168 Feb 20 09:25	15° Υ 41'37	-4°14'27
direct	16167 Mar 20 20:27	29° Υ 01'39		minimum elong	16168 Feb 20 18:34	15° Υ 25'52	4°11'24
	16167 Mar 24 17:27	0° Υ		morning rise	16168 Feb 28 20:09	11° Υ 24'11	
morning max el	16167 Mar 28 12:50	2° Υ 50'33	18°11'37	direct	16168 Mar 01 20:01	11° Υ 11'55	
morning set	16167 Apr 13 03:59	27° Υ 37'09		asc. node	16168 Mar 05 10:51	11° Υ 54'38	
	16167 Apr 14 10:25	0° Υ		morning max el	16168 Mar 10 17:42	15° Υ 34'00	18°54'02
desc. node	16167 Apr 21 03:18	12° Υ 26'31			16168 Mar 20 19:19	0° Υ	
				morning set	16168 Mar 27 01:42	11° Υ 53'04	
superior conj	16167 Apr 22 21:11	15° Υ 35'54	-0°14'28				
minimum elong	16167 Apr 22 20:01	15° Υ 30'38	0°14'44	superior conj	16168 Apr 04 16:19	28° Υ 37'17	0°19'30
behind sun begin	16167 Apr 22 17:05	15° Υ 17'26		minimum elong	16168 Apr 04 17:33	28° Υ 43'07	0°19'00
behind sun end	16167 Apr 22 22:57	15° Υ 43'48			16168 Apr 05 09:50	0° Υ	
max. Earth dist.	16167 Apr 30 11:36	28° Υ 49'46	1.41545 AU	desc. node	16168 Apr 07 00:02	2° Υ 58'38	
	16167 May 01 04:19	0° Υ		max. Earth dist.	16168 Apr 11 18:31	11° Υ 37'44	1.39299 AU
evening rise	16167 May 05 08:05	6° Υ 50'52		evening rise	16168 Apr 15 15:22	18° Υ 20'36	
	16167 May 20 11:05	0° Υ			16168 Apr 22 17:36	0° Υ	
evening max el	16167 Jun 08 02:15	23° Υ 47'40	22°54'50		16168 May 13 19:10	0° Υ	
asc. node	16167 Jun 15 11:32	29° Υ 12'49		evening max el	16168 May 20 16:15	7° Υ 43'05	24°16'21
retrograde	16167 Jun 18 07:16	29° Υ 47'03		retrograde	16168 Jun 01 00:44	14° Υ 21'36	
evening set	16167 Jun 23 07:55	27° Υ 39'16		asc. node	16168 Jun 01 08:33	14° Υ 21'09	
inferior conj	16167 Jun 28 15:12	21° Υ 16'00	3°00'08	evening set	16168 Jun 06 13:01	12° Υ 01'09	
minimum elong	16167 Jun 28 14:05	21° Υ 19'53	2°59'18	min. Earth dist.	16168 Jun 11 02:56	6° Υ 44'01	0.68743 AU
min. Earth dist.	16167 Jun 28 06:58	21° Υ 44'38	0.69135 AU	inferior conj	16168 Jun 12 00:10	5° Υ 32'18	2°41'42
morning rise	16167 Jul 03 20:08	15° Υ 05'35		minimum elong	16168 Jun 11 22:21	5° Υ 38'27	2°40'37
direct	16167 Jul 08 06:47	13° Υ 16'46			16168 Jun 16 17:22	30° Υ	
morning max el	16167 Jul 16 22:47	18° Υ 17'00	21°13'11	morning rise	16168 Jun 17 07:44	29° Υ 30'55	
desc. node	16167 Jul 18 02:49	19° Υ 29'22		direct	16168 Jun 21 06:39	28° Υ 01'43	
	16167 Jul 26 14:44	0° Υ			16168 Jun 26 05:57	0° Υ	
	16167 Aug 15 23:31	0° Υ		morning max el	16168 Jun 28 21:14	2° Υ 17'08	20°00'04
morning set	16167 Aug 16 21:39	1° Υ 26'27		desc. node	16168 Jul 04 00:01	8° Υ 09'00	
max. Earth dist.	16167 Aug 24 00:21	12° Υ 47'26	1.42933 AU		16168 Jul 19 07:36	0° Υ	
				morning set	16168 Jul 26 03:38	10° Υ 23'23	
superior conj	16167 Aug 31 06:57	24° Υ 53'57	-1°27'05	max. Earth dist.	16168 Aug 05 13:03	26° Υ 35'49	1.44636 AU
minimum elong	16167 Aug 31 14:00	25° Υ 24'01	1°26'19		16168 Aug 07 16:19	0° Υ	
	16167 Sep 03 06:10	0° Υ					
evening rise	16167 Sep 11 19:32	15° Υ 10'00		superior conj	16168 Aug 10 22:45	5° Υ 15'51	-1°56'59
asc. node	16167 Sep 11 12:16	14° Υ 37'18		minimum elong	16168 Aug 11 06:19	5° Υ 46'33	1°56'47
	16167 Sep 20 06:42	0° Υ		evening rise	16168 Aug 24 05:40	27° Υ 25'47	
evening max el	16167 Sep 28 00:48	10° Υ 37'48	18°03'42		16168 Aug 25 17:50	0° Υ	
retrograde	16167 Oct 04 20:25	14° Υ 08'09		asc. node	16168 Aug 28 08:56	4° Υ 28'32	
evening set	16167 Oct 07 03:32	13° Υ 44'27		evening max el	16168 Sep 10 15:28	23° Υ 58'42	18°03'27
desc. node	16167 Oct 13 23:58	8° Υ 54'33		retrograde	16168 Sep 17 01:16	27° Υ 19'27	
inferior conj	16167 Oct 14 02:52	8° Υ 47'46	-0°02'18	evening set	16168 Sep 19 16:41	26° Υ 43'48	
minimum elong	16167 Oct 14 02:48	8° Υ 47'55	0°01'52	inferior conj	16168 Sep 26 01:02	21° Υ 28'37	1°09'16
transit middle	16167 Oct 14 02:48	8° Υ 47'55	0°01'52	minimum elong	16168 Sep 26 02:50	21° Υ 23'50	1°08'50
transit begin	16167 Oct 13 23:31	8° Υ 55'34		min. Earth dist.	16168 Sep 28 19:36	18° Υ 33'01	0.62731 AU
transit end	16167 Oct 14 06:05	8° Υ 40'14		desc. node	16168 Sep 29 21:19	17° Υ 29'35	
min. Earth dist.	16167 Oct 17 06:44	5° Υ 51'45	0.60454 AU	morning rise	16168 Oct 02 10:41	15° Υ 19'21	
morning rise	16167 Oct 20 22:56	3° Υ 00'19		direct	16168 Oct 09 02:59	12° Υ 53'05	
direct	16167 Oct 27 14:19	0° Υ 51'40		morning max el	16168 Oct 23 03:29	20° Υ 50'52	27°54'23
morning max el	16167 Nov 10 20:01	8° Υ 42'09	27°54'30		16168 Oct 31 02:06	0° Υ	
	16167 Nov 27 04:41	0° Υ			16168 Nov 19 06:25	0° Υ	
asc. node	16167 Dec 08 12:55	19° Υ 57'49		asc. node	16168 Nov 24 09:53	9° Υ 47'48	
morning set	16167 Dec 13 13:41	0° Υ 08'28		morning set	16168 Nov 26 11:17	13° Υ 55'51	
	16167 Dec 13 12:04	0° Υ		max. Earth dist.	16168 Dec 01 15:21	24° Υ 48'00	1.31791 AU
max. Earth dist.	16167 Dec 19 12:48	13° Υ 04'36	1.31117 AU				
				superior conj	16168 Dec 04 01:15	0° Υ 03'36	1°18'41
superior conj	16167 Dec 20 16:34	15° Υ 39'15	1°31'02	minimum elong	16168 Dec 03 23:04	29° Υ 51'40	1°19'08
minimum elong	16167 Dec 20 15:04	15° Υ 30'49	1°31'38		16168 Dec 04 00:35	0° Υ	
evening rise	16167 Dec 27 09:07	0° Υ 28'06		evening rise	16168 Dec 10 19:37	14° Υ 55'33	
	16167 Dec 27 03:56	0° Υ			16168 Dec 18 04:44	0° Υ	
desc. node	16168 Jan 09 22:46	26° Υ 26'55		desc. node	16168 Dec 26 19:39	14° Υ 27'32	
	16168 Jan 12 04:49	0° Υ		evening max el	16169 Jan 04 10:45	24° Υ 53'42	24°08'42
evening max el	16168 Jan 23 23:04	14° Υ 40'03	25°44'06		16169 Jan 11 10:24	0° Υ	
retrograde	16168 Feb 06 21:25	21° Υ 41'35		retrograde	16169 Jan 18 00:29	1° Υ 38'12	
evening set	16168 Feb 12 19:59	20° Υ 20'08		evening set	16169 Jan 22 23:55	0° Υ 44'20	
min. Earth dist.	16168 Feb 17 12:02	17° Υ 40'31	0.57137 AU		16169 Jan 24 19:56	30° Υ	

min. Earth dist.	16169 Jan 28 22:24	27° \approx 48'11	0.55472 AU	evening set	16170 Jan 02 08:26	10° \approx 37'54	
inferior conj	16169 Jan 30 22:29	26° \approx 35'44	-5°29'20	min. Earth dist.	16170 Jan 10 04:18	7° \approx 05'22	0.54521 AU
minimum elong	16169 Jan 31 06:29	26° \approx 23'41	5°27'27	inferior conj	16170 Jan 10 18:37	6° \approx 45'16	-6°02'03
morning rise	16169 Feb 08 14:50	22° \approx 37'35		minimum elong	16170 Jan 10 18:59	6° \approx 44'46	6°01'25
direct	16169 Feb 11 00:04	22° \approx 22'56		morning rise	16170 Jan 19 06:36	2° \approx 57'43	
asc. node	16169 Feb 20 08:11	26° \approx 26'17		direct	16170 Jan 22 11:53	2° \approx 34'23	
morning max el	16169 Feb 21 10:12	27° \approx 26'15	19°59'19	morning max el	16170 Feb 03 11:46	8° \approx 21'52	21°27'35
	16169 Feb 23 19:15	0° \times		asc. node	16170 Feb 07 05:31	12° \approx 28'47	
morning set	16169 Mar 11 06:39	26° \times 26'04			16170 Feb 18 03:48	0° \times	
	16169 Mar 13 00:36	0° γ		morning set	16170 Feb 23 16:02	11° \times 07'56	
superior conj	16169 Mar 19 01:49	12° γ 16'24	0°47'51	superior conj	16170 Mar 02 21:50	26° \times 22'43	1°09'54
minimum elong	16169 Mar 19 04:11	12° γ 28'10	0°47'23	minimum elong	16170 Mar 03 00:20	26° \times 35'42	1°09'40
desc. node	16169 Mar 24 20:43	23° γ 29'21			16170 Mar 04 15:55	0° γ	
max. Earth dist.	16169 Mar 25 01:11	23° γ 50'16	1.37017 AU	max. Earth dist.	16170 Mar 07 11:41	5° γ 42'11	1.34929 AU
	16169 Mar 28 09:37	0° δ		evening rise	16170 Mar 11 13:56	13° γ 38'36	
evening rise	16169 Mar 28 18:25	0° δ 39'33		desc. node	16170 Mar 11 17:23	13° γ 54'52	
	16169 Apr 15 22:21	0° Π			16170 Mar 20 18:49	0° δ	
evening max el	16169 May 03 05:47	21° Π 37'31	25°32'42		16170 Apr 10 18:36	0° Π	
retrograde	16169 May 15 13:55	28° Π 45'35		evening max el	16170 Apr 15 19:25	5° Π 24'24	26°36'24
asc. node	16169 May 19 05:39	27° Π 51'05		retrograde	16170 Apr 28 21:55	12° Π 50'39	
evening set	16169 May 21 13:22	26° Π 16'17		evening set	16170 May 05 07:04	10° Π 17'52	
min. Earth dist.	16169 May 25 19:48	21° Π 36'05	0.67870 AU	asc. node	16170 May 06 02:51	9° Π 35'25	
inferior conj	16169 May 27 06:08	19° Π 45'45	2°12'23	min. Earth dist.	16170 May 09 07:30	6° Π 12'47	0.66546 AU
minimum elong	16169 May 27 03:58	19° Π 52'45	2°11'06	inferior conj	16170 May 11 06:56	3° Π 50'46	1°31'13
morning rise	16169 Jun 01 19:02	13° Π 54'44		minimum elong	16170 May 11 04:56	3° Π 56'45	1°29'57
direct	16169 Jun 05 06:51	12° Π 44'49			16170 May 14 18:46	30° κ δ	
morning max el	16169 Jun 12 03:04	16° Π 27'11	19°01'34	morning rise	16170 May 17 03:57	28° δ 11'32	
desc. node	16169 Jun 20 21:08	27° Π 26'13		direct	16170 May 20 05:27	27° δ 19'16	
	16169 Jun 22 15:32	0° ϵ			16170 May 25 21:14	0° Π	
greatest brilliancy	16169 Jun 25 05:05	3° ϵ 48'40	-0.7m	morning max el	16170 May 26 15:14	0° Π 41'40	18°19'18
morning set	16169 Jul 05 11:14	19° ϵ 30'25		desc. node	16170 Jun 07 18:09	17° Π 10'29	
	16169 Jul 12 05:55	0° Ω		morning set	16170 Jun 15 14:33	29° Π 35'25	
max. Earth dist.	16169 Jul 19 07:06	10° Ω 58'37	1.45690 AU		16170 Jun 15 20:44	0° ϵ	
superior conj	16169 Jul 21 17:35	14° Ω 47'52	-2°13'08	superior conj	16170 Jul 01 02:41	24° ϵ 00'17	-2°09'51
minimum elong	16169 Jul 21 20:20	14° Ω 58'41	2°13'39	minimum elong	16170 Jun 30 21:42	23° ϵ 40'52	2°10'21
	16169 Jul 31 07:21	0° η		max. Earth dist.	16170 Jul 02 03:17	25° ϵ 36'11	1.46008 AU
evening rise	16169 Aug 05 16:58	8° η 43'24			16170 Jul 04 23:02	0° Ω	
asc. node	16169 Aug 15 05:39	24° η 04'20		evening rise	16170 Jul 17 03:08	18° Ω 58'01	
	16169 Aug 19 03:35	0° $\underline{\alpha}$			16170 Jul 24 05:08	0° η	
evening max el	16169 Aug 25 05:55	7° $\underline{\alpha}$ 37'47	18°21'12	greatest brilliancy	16170 Jul 27 03:07	4° η 29'09	-0.8m
retrograde	16169 Aug 31 15:26	11° $\underline{\alpha}$ 02'23		asc. node	16170 Aug 02 02:24	13° η 17'56	
evening set	16169 Sep 03 15:43	10° $\underline{\alpha}$ 12'04		evening max el	16170 Aug 08 17:14	21° η 26'47	18°56'14
inferior conj	16169 Sep 09 12:28	4° $\underline{\alpha}$ 40'48	2°01'44	retrograde	16170 Aug 15 11:09	25° η 08'12	
minimum elong	16169 Sep 09 14:48	4° $\underline{\alpha}$ 33'57	2°01'04	evening set	16170 Aug 18 20:53	24° η 01'16	
min. Earth dist.	16169 Sep 11 18:17	2° $\underline{\alpha}$ 03'05	0.64813 AU	inferior conj	16170 Aug 24 09:30	18° η 16'06	2°37'25
	16169 Sep 13 15:55	30° κ η		minimum elong	16170 Aug 24 11:31	18° η 09'41	2°36'48
morning rise	16169 Sep 15 12:24	28° η 18'58		min. Earth dist.	16170 Aug 26 01:28	16° η 09'09	0.66561 AU
desc. node	16169 Sep 16 18:41	27° η 23'45		morning rise	16170 Aug 30 01:16	11° η 49'19	
direct	16169 Sep 22 00:23	25° η 43'19		desc. node	16170 Sep 03 16:03	9° η 22'04	
	16169 Oct 01 14:11	0° $\underline{\alpha}$		direct	16170 Sep 05 05:16	9° η 12'44	
morning max el	16169 Oct 05 14:20	3° $\underline{\alpha}$ 38'13	27°19'16	morning max el	16170 Sep 18 02:00	16° η 51'08	26°16'58
	16169 Oct 25 12:34	0° \mathbb{L}			16170 Sep 29 01:19	0° $\underline{\alpha}$	
morning set	16169 Nov 09 23:41	27° \mathbb{L} 16'10			16170 Oct 18 10:09	0° \mathbb{L}	
asc. node	16169 Nov 11 06:48	29° \mathbb{L} 49'39		morning set	16170 Oct 23 23:39	10° \mathbb{L} 02'05	
	16169 Nov 11 08:52	0° Z		max. Earth dist.	16170 Oct 27 19:04	17° \mathbb{L} 18'21	1.34794 AU
max. Earth dist.	16169 Nov 14 10:07	6° Z 11'45	1.33030 AU	asc. node	16170 Oct 29 03:38	19° \mathbb{L} 58'29	
superior conj	16169 Nov 18 05:32	14° Z 12'36	1°00'11	superior conj	16170 Nov 02 02:55	28° \mathbb{L} 00'00	0°35'33
minimum elong	16169 Nov 18 03:10	14° Z 00'00	1°00'29	minimum elong	16170 Nov 02 01:05	27° \mathbb{L} 50'35	0°35'48
evening rise	16169 Nov 25 06:17	29° Z 22'00			16170 Nov 03 02:09	0° Z	
	16169 Nov 25 13:25	0° Z		evening rise	16170 Nov 09 15:11	13° Z 42'32	
	16169 Dec 12 13:43	0° \approx			16170 Nov 17 21:53	0° Z	
desc. node	16169 Dec 13 16:36	1° \approx 22'39		evening max el	16170 Nov 28 14:42	15° Z 03'57	20°50'42
evening max el	16169 Dec 16 20:38	4° \approx 48'37	22°25'03	desc. node	16170 Nov 30 13:37	16° Z 50'27	
retrograde	16169 Dec 29 15:29	11° \approx 08'05		retrograde	16170 Dec 10 01:28	20° Z 44'34	

evening set	16170 Dec 12 14:37	20° S 28'56			16171 Nov 16 07:59	0° S	
inferior conj	16170 Dec 21 09:29	16° S 37'04 -5°34'07	desc. node		16171 Nov 17 10:44	0° S 26'15	
minimum elong	16170 Dec 21 01:24	16° S 48'38 5°32'01	retrograde		16171 Nov 20 18:20	0° S 59'11	
min. Earth dist.	16170 Dec 22 09:46	16° S 02'17 0.54477 AU	evening set		16171 Nov 22 17:38	0° S 48'13	
morning rise	16170 Dec 29 12:09	12° S 42'52			16171 Nov 25 11:00	30° R A	
direct	16171 Jan 02 19:21	12° S 03'06	inferior conj		16171 Dec 01 09:37	26° A 44'27 -4°14'12	
morning max el	16171 Jan 16 00:42	18° S 30'46 23°13'21	minimum elong		16171 Nov 30 23:52	26° A 59'55 4°10'24	
asc. node	16171 Jan 25 02:49	29° S 43'29	min. Earth dist.		16171 Dec 03 17:43	25° A 15'36 0.55370 AU	
	16171 Jan 25 07:11	0° \approx	morning rise		16171 Dec 09 04:17	22° A 25'14	
morning set	16171 Feb 08 03:40	25° \approx 52'20	direct		16171 Dec 14 11:25	21° A 22'34	
	16171 Feb 10 01:44	0° H	morning max el		16171 Dec 28 09:01	28° A 21'20 25°02'31	
					16171 Dec 30 00:31	0° S	
superior conj	16171 Feb 15 01:14	10° H 47'34 1°25'32	asc. node		16172 Jan 12 00:02	17° S 52'30	
minimum elong	16171 Feb 15 03:13	10° H 58'12 1°25'38			16172 Jan 18 13:46	0° \approx	
max. Earth dist.	16171 Feb 18 05:19	17° H 32'07 1.33208 AU	morning set		16172 Jan 23 15:33	10° \approx 32'46	
evening rise	16171 Feb 22 22:29	27° H 09'13					
	16171 Feb 24 09:22	0° Y	superior conj		16172 Jan 30 09:22	25° \approx 22'16 1°34'53	
desc. node	16171 Feb 26 14:03	4° Y 11'09	minimum elong		16172 Jan 30 10:27	25° \approx 28'15 1°35'18	
	16171 Mar 14 01:44	0° B			16172 Feb 01 12:00	0° H	
evening max el	16171 Mar 29 08:48	18° B 55'18 27°20'00	max. Earth dist.		16172 Feb 01 06:16	29° \approx 28'46 1.31951 AU	
retrograde	16171 Apr 11 23:51	26° B 28'13	evening rise		16172 Feb 06 16:51	11° H 02'23	
evening set	16171 Apr 18 16:02	23° B 58'36	desc. node		16172 Feb 13 10:43	24° H 12'25	
min. Earth dist.	16171 Apr 22 12:11	20° B 25'25 0.64823 AU			16172 Feb 16 16:07	0° Y	
asc. node	16171 Apr 23 00:05	19° B 53'32			16172 Mar 08 21:22	0° B	
inferior conj	16171 Apr 25 00:02	17° B 41'48 0°37'03	evening max el		16172 Mar 10 20:19	1° B 57'43 27°36'28	
minimum elong	16171 Apr 24 23:02	17° B 44'34 0°36'12	retrograde		16172 Mar 24 18:22	9° B 27'35	
morning rise	16171 May 01 08:00	12° B 16'01	evening set		16172 Mar 31 13:46	7° B 08'39	
direct	16171 May 04 00:10	11° B 38'41	min. Earth dist.		16172 Apr 04 08:03	4° B 02'30 0.62780 AU	
morning max el	16171 May 10 07:34	14° B 53'44 17°53'58	inferior conj		16172 Apr 07 06:24	1° B 10'25 -0°31'03	
	16171 May 21 05:12	0° II	minimum elong		16172 Apr 07 07:26	1° B 07'54 0°30'56	
desc. node	16171 May 25 15:06	7° II 14'38			16172 Apr 08 11:31	30° R Y	
morning set	16171 May 27 21:09	10° II 58'34	asc. node		16172 Apr 08 21:21	29° Y 36'58	
	16171 Jun 08 12:31	0° E	morning rise		16172 Apr 14 03:55	26° Y 00'33	
			direct		16172 Apr 16 12:03	25° Y 34'49	
superior conj	16171 Jun 10 19:03	3° E 37'41 -1°47'48	morning max el		16172 Apr 23 01:12	28° Y 54'02 17°46'09	
minimum elong	16171 Jun 10 10:27	3° E 03'28 1°47'46			16172 Apr 24 02:40	0° B	
max. Earth dist.	16171 Jun 14 23:09	10° E 12'57 1.45579 AU	morning set		16172 May 09 04:34	23° B 31'44	
evening rise	16171 Jun 26 18:08	28° E 28'16	desc. node		16172 May 11 11:58	27° B 32'18	
	16171 Jun 27 18:07	0° Ω			16172 May 12 22:07	0° II	
greatest brilliancy	16171 Jul 11 04:23	20° Ω 08'46 -0.6m					
	16171 Jul 18 07:55	0° P	superior conj		16172 May 21 07:13	14° II 10'44 -1°13'49	
asc. node	16171 Jul 19 23:11	2° P 01'22	minimum elong		16172 May 21 00:23	13° II 42'28 1°13'36	
evening max el	16171 Jul 22 23:24	5° P 20'14 19°47'27	max. Earth dist.		16172 May 27 16:45	24° II 35'00 1.44450 AU	
retrograde	16171 Jul 30 09:35	9° P 30'31			16172 May 31 02:45	0° E	
evening set	16171 Aug 03 05:27	8° P 05'54	evening rise		16172 Jun 05 05:08	7° E 55'46	
inferior conj	16171 Aug 08 13:07	2° P 08'19 2°58'50			16172 Jun 20 00:12	0° Ω	
minimum elong	16171 Aug 08 14:22	2° P 04'05 2°58'17	evening max el		16172 Jul 04 23:32	19° Ω 14'48 20°52'46	
min. Earth dist.	16171 Aug 09 15:11	0° P 40'49 0.67892 AU	asc. node		16172 Jul 05 20:01	20° Ω 04'16	
	16171 Aug 10 03:32	30° R Ω	retrograde		16172 Jul 13 08:32	24° Ω 03'49	
morning rise	16171 Aug 13 22:49	25° Ω 42'19	evening set		16172 Jul 17 15:16	22° Ω 21'20	
direct	16171 Aug 19 16:29	23° Ω 12'27	inferior conj		16172 Jul 22 20:51	16° Ω 12'36 3°07'56	
desc. node	16171 Aug 21 13:24	23° Ω 26'20	minimum elong		16172 Jul 22 21:10	16° Ω 11'29 3°07'22	
	16171 Aug 31 05:40	0° P	min. Earth dist.		16172 Jul 23 09:19	15° Ω 29'25 0.68758 AU	
morning max el	16171 Aug 31 13:02	0° P 18'28 24°56'47	morning rise		16172 Jul 28 02:47	9° Ω 51'08	
	16171 Sep 22 22:35	0° E	direct		16172 Aug 02 08:43	7° Ω 34'16	
morning set	16171 Oct 06 07:15	22° E 04'33	desc. node		16172 Aug 07 10:43	9° Ω 16'27	
max. Earth dist.	16171 Oct 09 19:47	28° E 25'36 1.36986 AU	morning max el		16172 Aug 13 00:02	13° Ω 54'33 23°28'26	
	16171 Oct 10 16:15	0° M			16172 Aug 26 01:32	0° P	
asc. node	16171 Oct 16 00:25	10° M 10'16			16172 Sep 14 19:39	0° E	
			morning set		16172 Sep 16 18:17	3° E 13'56	
superior conj	16171 Oct 16 14:19	11° M 18'23 0°05'14	max. Earth dist.		16172 Sep 20 18:28	10° E 04'25 1.39390 AU	
minimum elong	16171 Oct 16 13:58	11° M 16'37 0°05'35					
behind sun begin	16171 Oct 16 07:47	10° M 46'21	superior conj		16172 Sep 28 12:00	23° E 59'08 -0°29'40	
behind sun end	16171 Oct 16 20:08	11° M 46'58	minimum elong		16172 Sep 28 14:11	24° E 09'19 0°29'03	
evening rise	16171 Oct 24 20:03	27° M 51'35	asc. node		16172 Oct 01 21:07	0° M 21'31	
	16171 Oct 25 21:32	0° A			16172 Oct 01 16:37	0° M	
evening max el	16171 Nov 10 23:00	26° A 05'05 19°35'48	evening rise		16172 Oct 07 18:11	11° M 42'43	

	16172 Oct 17 19:28	0°♊		evening max el	16173 Oct 07 04:33	20°♌30'11	18°12'20
evening max el	16172 Oct 23 20:55	7°♊56'38	18°43'17	retrograde	16173 Oct 14 10:23	24°♌12'27	
retrograde	16172 Nov 01 04:39	12°♊09'05		evening set	16173 Oct 16 13:18	23°♌53'56	
evening set	16172 Nov 03 02:38	11°♊56'30		desc. node	16173 Oct 21 05:09	21°♌21'56	
desc. node	16172 Nov 03 07:54	11°♊53'30		inferior conj	16173 Oct 23 22:23	19°♌08'31	-0°52'19
inferior conj	16172 Nov 11 05:06	7°♊32'39	-2°31'32	minimum elong	16173 Oct 23 20:29	19°♌12'36	0°51'03
minimum elong	16172 Nov 10 22:57	7°♊43'59	2°28'29	min. Earth dist.	16173 Oct 27 04:20	16°♌21'49	0.59137 AU
min. Earth dist.	16172 Nov 14 06:57	5°♊17'20	0.57021 AU	morning rise	16173 Oct 31 00:17	13°♌37'56	
morning rise	16172 Nov 18 16:10	2°♊37'43		direct	16173 Nov 06 12:05	11°♌43'07	
direct	16172 Nov 24 17:05	1°♊08'57		morning max el	16173 Nov 20 18:55	19°♌24'57	27°36'58
morning max el	16172 Dec 08 21:47	8°♊31'23	26°35'39		16173 Nov 29 19:30	0°♊	
	16172 Dec 25 01:02	0°♊		asc. node	16173 Dec 15 18:14	26°♊01'44	
asc. node	16172 Dec 28 21:10	6°♊42'19			16173 Dec 17 19:15	0°♊	
morning set	16173 Jan 07 01:56	25°♊04'49		morning set	16173 Dec 22 09:00	9°♊23'39	
	16173 Jan 09 08:08	0°♊					
superior conj	16173 Jan 13 20:06	10°♋01'06	1°38'08	superior conj	16173 Dec 29 07:31	24°♊38'24	1°35'22
minimum elong	16173 Jan 13 20:08	10°♋01'19	1°38'45	minimum elong	16173 Dec 29 06:32	24°♊32'51	1°36'00
max. Earth dist.	16173 Jan 14 12:24	11°♋32'13	1.31206 AU	max. Earth dist.	16173 Dec 28 20:13	23°♊35'04	1.30992 AU
evening rise	16173 Jan 20 18:26	25°♋11'49			16173 Dec 31 16:58	0°♋	
	16173 Jan 23 01:52	0°♋		evening rise	16174 Jan 05 01:00	9°♋31'52	
desc. node	16173 Jan 30 07:26	13°♋52'37			16174 Jan 15 09:57	0°♋	
	16173 Feb 09 07:07	0°♋		desc. node	16174 Jan 17 04:14	3°♋03'32	
evening max el	16173 Feb 21 03:33	14°♋18'58	27°19'58	evening max el	16174 Feb 03 03:37	25°♋48'38	26°28'18
retrograde	16173 Mar 07 04:04	21°♋39'43			16174 Feb 08 08:46	0°♋	
evening set	16173 Mar 13 21:23	19°♋38'32		retrograde	16174 Feb 17 03:27	2°♋57'59	
min. Earth dist.	16173 Mar 17 17:44	16°♋52'11	0.60549 AU	evening set	16174 Feb 23 11:35	1°♋20'31	
inferior conj	16173 Mar 20 22:30	14°♋07'28	-1°52'31		16174 Feb 25 19:47	30°♋	
minimum elong	16173 Mar 21 02:40	13°♋58'28	1°50'57	min. Earth dist.	16174 Feb 27 17:02	28°♋42'56	0.58319 AU
asc. node	16173 Mar 26 18:40	9°♋55'22		inferior conj	16174 Mar 02 20:34	26°♋22'32	-3°22'50
morning rise	16173 Mar 28 11:22	9°♋16'27		minimum elong	16174 Mar 03 04:18	26°♋08'06	3°19'59
direct	16173 Mar 30 13:19	8°♋58'46		morning rise	16174 Mar 11 00:26	21°♋53'04	
morning max el	16173 Apr 06 16:54	12°♋33'24	17°56'41	direct	16174 Mar 12 23:28	21°♋39'55	
	16173 Apr 18 10:50	0°♋		asc. node	16174 Mar 13 15:58	21°♋41'35	
morning set	16173 Apr 22 07:00	6°♋57'28		morning max el	16174 Mar 21 02:58	25°♋41'10	18°27'01
desc. node	16173 Apr 28 08:45	17°♋58'57			16174 Mar 24 19:06	0°♋	
				morning set	16174 Apr 05 23:00	20°♋59'24	
superior conj	16173 May 02 18:57	25°♋48'17	-0°35'50		16174 Apr 10 16:12	0°♋	
minimum elong	16173 May 02 15:49	25°♋34'41	0°35'52	superior conj	16174 Apr 15 03:58	8°♋23'35	0°00'32
	16173 May 05 05:18	0°♋		minimum elong	16174 Apr 15 03:58	8°♋23'37	0°00'09
max. Earth dist.	16173 May 10 06:41	8°♋29'25	1.42735 AU	behind sun begin	16174 Apr 14 20:48	7°♋50'38	
evening rise	16173 May 16 04:00	17°♋59'45		behind sun end	16174 Apr 15 11:08	8°♋56'31	
	16173 May 23 22:37	0°♋		desc. node	16174 Apr 15 05:31	8°♋30'43	
evening max el	16173 Jun 14 19:40	0°♋		max. Earth dist.	16174 Apr 22 15:56	21°♋43'50	1.40609 AU
asc. node	16173 Jun 17 18:09	3°♋08'56	22°08'31	evening rise	16174 Apr 26 23:02	28°♋58'14	
retrograde	16173 Jun 22 16:54	7°♋12'55			16174 Apr 27 14:01	0°♋	
evening set	16173 Jun 27 06:25	8°♋42'18			16174 May 17 10:22	0°♋	
inferior conj	16173 Jul 02 00:32	6°♋42'59		evening max el	16174 May 31 09:03	17°♋03'43	23°29'37
minimum elong	16173 Jul 07 06:33	0°♋24'28	3°06'01	asc. node	16174 Jun 09 13:52	23°♋11'07	
min. Earth dist.	16173 Jul 07 05:55	0°♋26'38	3°05'18	retrograde	16174 Jun 11 01:56	23°♋20'48	
	16173 Jul 07 05:44	0°♋27'18	0.69139 AU	evening set	16174 Jun 16 07:39	21°♋06'55	
morning rise	16173 Jul 07 13:33	30°♋		min. Earth dist.	16174 Jun 21 02:28	15°♋28'29	0.69028 AU
direct	16173 Jul 12 11:08	24°♋09'48		inferior conj	16174 Jun 21 16:20	14°♋40'47	2°53'36
desc. node	16173 Jul 17 04:49	22°♋10'09		minimum elong	16174 Jun 21 14:53	14°♋45'46	2°52'40
morning max el	16173 Jul 25 08:00	26°♋27'56		morning rise	16174 Jun 26 22:06	8°♋34'18	
	16173 Jul 26 13:27	27°♋38'52	22°00'36	direct	16174 Jul 01 03:38	6°♋53'59	
	16173 Jul 28 18:38	0°♋		morning max el	16174 Jul 09 08:10	11°♋33'55	20°40'32
morning set	16173 Aug 19 15:20	0°♋		desc. node	16174 Jul 12 05:13	14°♋40'32	
	16173 Aug 28 05:38	13°♋22'42			16174 Jul 23 16:58	0°♋	
max. Earth dist.	16173 Sep 02 21:11	22°♋34'56	1.41728 AU	morning set	16174 Aug 07 19:24	22°♋38'12	
	16173 Sep 07 06:38	0°♋			16174 Aug 12 12:27	0°♋	
superior conj	16173 Sep 10 15:28	5°♋51'01	-1°06'35	max. Earth dist.	16174 Aug 16 06:06	5°♋57'05	1.43725 AU
minimum elong	16173 Sep 10 20:54	6°♋14'53	1°05'46	superior conj	16174 Aug 22 20:47	16°♋46'08	-1°40'58
asc. node	16173 Sep 18 17:47	20°♋27'56		minimum elong	16174 Aug 23 04:34	17°♋18'35	1°40'23
evening rise	16173 Sep 21 06:00	25°♋06'00			16174 Aug 30 15:24	0°♋	
	16173 Sep 23 21:46	0°♋		evening rise	16174 Sep 04 03:02	7°♋50'25	

asc. node	16174 Sep 05 14:29	10°♄26'05			16175 Aug 05 03:44	0°♍	
	16174 Sep 17 15:27	0°♍		evening rise	16175 Aug 17 03:59	19°♍42'28	
evening max el	16174 Sep 20 17:43	3°♍36'17	18°01'19	asc. node	16175 Aug 23 11:11	0°♄11'28	
retrograde	16174 Sep 27 08:09	7°♍01'18			16175 Aug 23 08:24	0°♄	
evening set	16174 Sep 29 18:33	6°♍33'02		evening max el	16175 Sep 04 08:39	17°♄05'44	18°08'54
inferior conj	16174 Oct 06 11:08	1°♍28'04	0°30'28	retrograde	16175 Sep 10 17:21	20°♄26'38	
minimum elong	16174 Oct 06 12:04	1°♍25'47	0°30'25	evening set	16175 Sep 13 12:24	19°♄45'12	
	16174 Oct 07 22:31	30°♋♄		inferior conj	16175 Sep 19 15:25	14°♄23'09	1°33'42
desc. node	16174 Oct 08 02:27	29°♄50'14		minimum elong	16175 Sep 19 17:34	14°♄17'09	1°33'07
min. Earth dist.	16174 Oct 09 11:38	28°♄29'44	0.61429 AU	min. Earth dist.	16175 Sep 22 04:57	11°♄32'55	0.63646 AU
morning rise	16174 Oct 13 02:42	25°♄29'47		desc. node	16175 Sep 24 23:47	8°♄49'56	
direct	16174 Oct 19 19:01	23°♄12'46		morning rise	16175 Sep 25 20:45	8°♄07'21	
	16174 Nov 01 19:08	0°♍		direct	16175 Oct 02 11:49	5°♄35'40	
morning max el	16174 Nov 02 23:29	1°♍08'06	27°59'11	morning max el	16175 Oct 16 08:42	13°♄34'36	27°43'19
	16174 Nov 24 01:08	0°♌			16175 Oct 29 15:15	0°♍	
asc. node	16174 Dec 02 15:15	15°♌42'36			16175 Nov 16 14:40	0°♌	
morning set	16174 Dec 06 10:46	23°♌24'22		asc. node	16175 Nov 19 12:13	5°♌38'30	
	16174 Dec 09 13:33	0°♎		morning set	16175 Nov 20 04:51	7°♌01'26	
max. Earth dist.	16174 Dec 12 01:43	5°♎27'43	1.31330 AU	max. Earth dist.	16175 Nov 25 01:08	17°♌02'14	1.32238 AU
superior conj	16174 Dec 13 17:46	9°♎09'10	1°26'33	superior conj	16175 Nov 28 00:54	23°♌28'06	1°11'37
minimum elong	16174 Dec 13 15:56	8°♎58'58	1°27'06	minimum elong	16175 Nov 27 22:34	23°♌15'28	1°11'59
evening rise	16174 Dec 20 10:35	23°♎57'51			16175 Dec 01 00:36	0°♎	
	16174 Dec 23 06:44	0°♏		evening rise	16175 Dec 04 21:23	8°♎25'31	
desc. node	16175 Jan 04 01:04	21°♏34'03			16175 Dec 15 22:00	0°♏	
	16175 Jan 10 00:11	0°♐		desc. node	16175 Dec 21 21:59	9°♏09'41	
evening max el	16175 Jan 15 19:08	6°♐25'59	25°05'40	evening max el	16175 Dec 28 05:04	16°♏28'09	23°24'41
retrograde	16175 Jan 29 14:55	13°♐21'46		retrograde	16176 Jan 10 12:52	23°♏03'44	
evening set	16175 Feb 04 04:47	12°♐11'56		evening set	16176 Jan 14 23:31	22°♏21'02	
min. Earth dist.	16175 Feb 09 07:30	9°♐27'36	0.56354 AU	min. Earth dist.	16176 Jan 21 15:56	19°♏11'37	0.54958 AU
inferior conj	16175 Feb 11 21:44	7°♐46'59	-4°49'39	inferior conj	16176 Jan 23 02:47	18°♏21'04	-5°49'55
minimum elong	16175 Feb 12 07:09	7°♐31'46	4°46'52	minimum elong	16176 Jan 23 08:13	18°♏13'10	5°48'48
morning rise	16175 Feb 20 12:07	3°♐38'45		morning rise	16176 Jan 31 18:20	14°♏28'39	
direct	16175 Feb 22 14:30	3°♐26'14		direct	16176 Feb 03 10:39	14°♏11'18	
asc. node	16175 Feb 28 13:20	5°♐14'14		morning max el	16176 Feb 14 13:35	19°♏34'11	20°34'06
morning max el	16175 Mar 04 03:11	8°♐04'56	19°18'59	asc. node	16176 Feb 15 10:40	20°♏27'06	
	16175 Mar 18 06:31	0°♑			16176 Feb 22 15:26	0°♐	
morning set	16175 Mar 21 00:12	5°♑23'54		morning set	16176 Mar 04 07:22	20°♐01'50	
					16176 Mar 09 02:49	0°♑	
superior conj	16175 Mar 29 05:47	21°♑43'03	0°32'15	superior conj	16176 Mar 11 20:13	5°♑35'19	0°57'58
minimum elong	16175 Mar 29 07:38	21°♑52'02	0°31'44	minimum elong	16176 Mar 11 22:44	5°♑48'07	0°57'34
desc. node	16175 Apr 02 02:14	29°♑02'58		max. Earth dist.	16176 Mar 17 05:23	16°♑14'43	1.36097 AU
	16175 Apr 02 14:29	0°♒		desc. node	16176 Mar 18 22:56	19°♑32'20	
max. Earth dist.	16175 Apr 04 21:53	4°♒14'08	1.38313 AU	evening rise	16176 Mar 21 01:40	23°♑28'10	
evening rise	16175 Apr 08 15:05	10°♒50'14			16176 Mar 24 17:03	0°♒	
	16175 Apr 20 08:12	0°♓			16176 Apr 13 00:32	0°♓	
	16175 May 12 23:14	0°♓		evening max el	16176 Apr 25 12:10	14°♓51'17	26°01'45
evening max el	16175 May 13 22:30	0°♓58'43	24°49'49	retrograde	16176 May 08 05:05	22°♓08'41	
retrograde	16175 May 25 17:53	7°♓52'00		asc. node	16176 May 13 08:04	20°♓24'32	
asc. node	16175 May 27 10:56	7°♓39'44		evening set	16176 May 14 08:43	19°♓37'27	
evening set	16175 May 31 10:58	5°♓27'07		min. Earth dist.	16176 May 18 12:30	15°♓12'07	0.67362 AU
min. Earth dist.	16175 Jun 04 21:26	0°♓25'46	0.68428 AU	inferior conj	16176 May 20 04:21	13°♓07'26	1°56'25
	16175 Jun 05 05:14	30°♋♓		minimum elong	16176 May 20 02:11	13°♓14'15	1°55'07
inferior conj	16175 Jun 06 00:17	28°♓56'42	2°30'37	morning rise	16176 May 25 20:21	7°♓20'57	
minimum elong	16175 Jun 05 22:16	29°♓03'25	2°29'27	direct	16176 May 29 03:38	6°♓18'48	
morning rise	16175 Jun 11 09:48	22°♓59'32		morning max el	16176 Jun 04 18:28	9°♓51'19	18°41'23
direct	16175 Jun 15 03:47	21°♓38'51		desc. node	16176 Jun 14 23:27	23°♓07'26	
morning max el	16175 Jun 22 09:49	25°♓39'02	19°33'12		16176 Jun 19 12:04	0°♓	
	16175 Jun 26 07:04	0°♓		morning set	16176 Jun 26 13:37	10°♓58'40	
desc. node	16175 Jun 29 02:22	3°♓37'41			16176 Jul 08 18:30	0°♓	
greatest brilliancy	16175 Jul 05 03:43	12°♓11'39	-0.6m	max. Earth dist.	16176 Jul 11 15:41	4°♓29'37	1.45923 AU
	16175 Jul 16 23:23	0°♓					
morning set	16175 Jul 17 23:27	1°♓32'12		superior conj	16176 Jul 12 15:39	6°♓03'07	-2°14'15
max. Earth dist.	16175 Jul 29 20:44	19°♓59'47	1.45168 AU	minimum elong	16176 Jul 12 15:03	6°♓00'46	2°14'52
					16176 Jul 27 20:21	0°♍	
superior conj	16175 Aug 03 02:52	26°♓44'23	-2°05'58	evening rise	16176 Jul 28 04:24	0°♍32'01	
minimum elong	16175 Aug 03 09:05	27°♓09'12	2°06'06				

greatest brilliancy	16176 Aug 03 13:36	10° \mathbb{M} 41'51	-0.9m	minimum elong	16177 Jun 21 18:31	14° \mathbb{S} 52'28	2°02'44
asc. node	16176 Aug 09 07:54	19° \mathbb{M} 38'29		max. Earth dist.	16177 Jun 24 12:30	19° \mathbb{S} 10'41	1.45923 AU
	16176 Aug 17 02:40	0° \mathbb{L}			16177 Jul 01 11:33	0° \mathbb{Q}	
evening max el	16176 Aug 17 22:07	0° \mathbb{L} 50'00	18°34'08	evening rise	16177 Jul 08 05:07	10° \mathbb{Q} 24'36	
retrograde	16176 Aug 24 10:06	4° \mathbb{L} 19'52		greatest brilliancy	16177 Jul 20 07:24	28° \mathbb{Q} 52'52	-0.7m
evening set	16176 Aug 27 14:24	3° \mathbb{L} 22'39			16177 Jul 21 01:29	0° \mathbb{M}	
	16176 Aug 31 09:44	30° \mathbb{R} \mathbb{M}		asc. node	16177 Jul 27 04:39	8° \mathbb{M} 40'36	
inferior conj	16176 Sep 02 07:17	27° \mathbb{M} 45'30	2°18'45	evening max el	16177 Aug 01 07:31	14° \mathbb{M} 42'11	19°16'09
minimum elong	16176 Sep 02 09:33	27° \mathbb{M} 38'35	2°18'06	retrograde	16177 Aug 08 07:15	18° \mathbb{M} 34'07	
min. Earth dist.	16176 Sep 04 07:21	25° \mathbb{M} 19'28	0.65608 AU	evening set	16177 Aug 11 21:20	17° \mathbb{M} 19'31	
morning rise	16176 Sep 08 03:32	21° \mathbb{M} 20'58		inferior conj	16177 Aug 17 07:28	11° \mathbb{M} 28'52	2°48'06
desc. node	16176 Sep 10 21:08	19° \mathbb{M} 33'54		minimum elong	16177 Aug 17 09:11	11° \mathbb{M} 23'14	2°47'31
direct	16176 Sep 14 12:41	18° \mathbb{M} 43'42		min. Earth dist.	16177 Aug 18 17:25	9° \mathbb{M} 38'11	0.67187 AU
morning max el	16176 Sep 27 19:51	26° \mathbb{M} 33'08	26°55'30	morning rise	16177 Aug 22 20:25	5° \mathbb{M} 02'08	
	16176 Oct 01 01:01	0° \mathbb{L}		direct	16177 Aug 28 20:15	2° \mathbb{M} 27'45	
	16176 Oct 22 05:47	0° \mathbb{M}		desc. node	16177 Aug 28 18:29	2° \mathbb{M} 27'46	
morning set	16176 Nov 02 12:18	20° \mathbb{M} 07'27		morning max el	16177 Sep 10 07:14	9° \mathbb{M} 53'19	25°44'29
asc. node	16176 Nov 05 09:05	25° \mathbb{M} 43'37			16177 Sep 26 06:03	0° \mathbb{L}	
max. Earth dist.	16176 Nov 06 15:31	28° \mathbb{M} 16'01	1.33716 AU		16177 Oct 14 19:20	0° \mathbb{M}	
	16176 Nov 07 12:01	0° \mathbb{X}		morning set	16177 Oct 16 05:44	2° \mathbb{M} 35'41	
				max. Earth dist.	16177 Oct 19 20:45	9° \mathbb{M} 21'05	1.35693 AU
superior conj	16176 Nov 11 02:33	7° \mathbb{X} 28'33	0°50'29	asc. node	16177 Oct 23 05:54	15° \mathbb{M} 54'12	
minimum elong	16176 Nov 11 00:19	7° \mathbb{X} 16'47	0°50'44				
evening rise	16176 Nov 18 07:30	22° \mathbb{X} 49'41		superior conj	16177 Oct 25 20:04	21° \mathbb{M} 04'33	0°23'21
	16176 Nov 21 18:16	0° \mathbb{Z}		minimum elong	16177 Oct 25 18:44	20° \mathbb{M} 57'48	0°23'37
desc. node	16176 Dec 07 18:58	25° \mathbb{Z} 30'24			16177 Oct 30 04:37	0° \mathbb{X}	
evening max el	16176 Dec 08 17:25	26° \mathbb{Z} 27'26	21°43'06	evening rise	16177 Nov 02 14:58	7° \mathbb{X} 06'11	
	16176 Dec 13 02:09	0° \mathbb{Z}			16177 Nov 15 01:50	0° \mathbb{Z}	
retrograde	16176 Dec 20 23:50	2° \mathbb{Z} 31'13		evening max el	16177 Nov 20 17:07	6° \mathbb{Z} 59'34	20°16'03
evening set	16176 Dec 24 03:55	2° \mathbb{Z} 08'34		desc. node	16177 Nov 24 15:59	10° \mathbb{Z} 13'05	
	16176 Dec 29 16:01	30° \mathbb{R} \mathbb{Z}		retrograde	16177 Dec 01 11:00	12° \mathbb{Z} 20'36	
inferior conj	16177 Jan 01 18:50	28° \mathbb{Z} 18'31	-5°57'48	evening set	16177 Dec 03 16:38	12° \mathbb{Z} 07'48	
minimum elong	16177 Jan 01 15:06	28° \mathbb{Z} 23'43	5°56'52	inferior conj	16177 Dec 12 11:48	8° \mathbb{Z} 11'52	-5°04'59
min. Earth dist.	16177 Jan 01 21:12	28° \mathbb{Z} 15'11	0.54385 AU	minimum elong	16177 Dec 12 02:04	8° \mathbb{Z} 26'17	5°01'55
morning rise	16177 Jan 10 02:54	24° \mathbb{Z} 30'30		min. Earth dist.	16177 Dec 14 02:54	7° \mathbb{Z} 13'56	0.54754 AU
direct	16177 Jan 13 19:20	24° \mathbb{Z} 00'50		morning rise	16177 Dec 20 10:54	4° \mathbb{Z} 09'24	
	16177 Jan 26 06:13	0° \mathbb{Z}		direct	16177 Dec 25 04:57	3° \mathbb{Z} 20'38	
morning max el	16177 Jan 26 08:54	0° \mathbb{Z} 06'23	22°11'01	morning max el	16178 Jan 07 18:28	10° \mathbb{Z} 01'43	24°00'37
asc. node	16177 Feb 01 07:59	7° \mathbb{Z} 02'05		asc. node	16178 Jan 19 05:14	24° \mathbb{Z} 41'10	
	16177 Feb 14 11:19	0° \mathbb{X}			16178 Jan 22 09:18	0° \mathbb{Z}	
morning set	16177 Feb 16 17:58	4° \mathbb{X} 45'18		morning set	16178 Feb 01 05:54	19° \mathbb{Z} 28'16	
					16178 Feb 06 01:54	0° \mathbb{X}	
superior conj	16177 Feb 23 19:41	19° \mathbb{X} 50'02	1°17'17				
minimum elong	16177 Feb 23 22:01	20° \mathbb{X} 02'23	1°17'12	superior conj	16178 Feb 08 01:20	4° \mathbb{X} 19'12	1°30'15
max. Earth dist.	16177 Feb 27 18:54	28° \mathbb{X} 04'41	1.34150 AU	minimum elong	16178 Feb 08 02:58	4° \mathbb{X} 28'05	1°30'30
	16177 Feb 28 17:40	0° \mathbb{Y}		max. Earth dist.	16178 Feb 10 15:58	9° \mathbb{X} 57'23	1.32612 AU
evening rise	16177 Mar 04 03:08	6° \mathbb{Y} 41'38		evening rise	16178 Feb 15 16:09	20° \mathbb{X} 21'58	
desc. node	16177 Mar 05 19:36	9° \mathbb{Y} 54'29		desc. node	16178 Feb 20 16:16	0° \mathbb{Y} 04'45	
	16177 Mar 17 09:18	0° \mathbb{X}			16178 Feb 20 15:15	0° \mathbb{Y}	
evening max el	16177 Apr 08 02:04	28° \mathbb{X} 33'38	26°57'52		16178 Mar 11 09:07	0° \mathbb{X}	
	16177 Apr 09 14:57	0° \mathbb{I}		evening max el	16178 Mar 21 14:55	11° \mathbb{X} 53'45	27°30'43
retrograde	16177 Apr 21 10:28	6° \mathbb{I} 03'10		retrograde	16178 Apr 04 09:10	19° \mathbb{X} 25'47	
evening set	16177 Apr 27 22:59	3° \mathbb{I} 31'11		evening set	16178 Apr 11 03:29	16° \mathbb{X} 59'41	
asc. node	16177 Apr 30 05:16	1° \mathbb{I} 28'15		min. Earth dist.	16178 Apr 14 22:27	13° \mathbb{X} 39'01	0.63988 AU
	16177 May 01 14:21	30° \mathbb{R} \mathbb{X}		asc. node	16178 Apr 17 02:30	11° \mathbb{X} 23'24	
min. Earth dist.	16177 May 01 21:31	29° \mathbb{X} 39'59	0.65863 AU	inferior conj	16178 Apr 17 15:10	10° \mathbb{X} 50'03	0°09'56
inferior conj	16177 May 04 02:14	27° \mathbb{X} 07'43	1°09'56	minimum elong	16178 Apr 17 14:53	10° \mathbb{X} 50'48	0°09'24
minimum elong	16177 May 04 00:33	27° \mathbb{X} 12'36	1°08'47	transit middle	16178 Apr 17 14:53	10° \mathbb{X} 50'48	0°09'24
morning rise	16177 May 10 03:33	21° \mathbb{X} 33'42		transit begin	16178 Apr 17 12:21	10° \mathbb{X} 57'26	
direct	16177 May 13 01:02	20° \mathbb{X} 48'00		transit end	16178 Apr 17 17:24	10° \mathbb{X} 44'11	
morning max el	16177 May 19 08:40	24° \mathbb{X} 05'36	18°06'21	morning rise	16178 Apr 24 04:36	5° \mathbb{X} 30'51	
	16177 May 24 07:12	0° \mathbb{I}		direct	16178 Apr 26 17:18	4° \mathbb{X} 58'46	
desc. node	16177 Jun 01 20:27	13° \mathbb{I} 01'11		morning max el	16178 May 03 01:57	8° \mathbb{X} 13'49	17°48'32
morning set	16177 Jun 07 04:28	21° \mathbb{I} 37'25			16178 May 17 20:01	0° \mathbb{I}	
	16177 Jun 12 09:19	0° \mathbb{S}		morning set	16178 May 19 22:18	3° \mathbb{I} 32'33	
				desc. node	16178 May 19 17:22	3° \mathbb{I} 11'46	
superior conj	16177 Jun 22 01:49	15° \mathbb{S} 21'04	-2°02'27				

superior conj	16178 Jun 02 01:38	25° Π 19'55	-1°34'21	morning set	16179 May 02 14:34	16° \mathcal{B} 30'21	
minimum elong	16178 Jun 01 17:19	24° Π 46'19	1°34'10	desc. node	16179 May 06 14:14	23° \mathcal{B} 34'00	
	16178 Jun 04 23:28	0° \mathcal{E}			16179 May 10 06:41	0° Π	
max. Earth dist.	16178 Jun 07 08:12	3° \mathcal{E} 45'04	1.45181 AU				
evening rise	16178 Jun 17 16:21	19° \mathcal{E} 48'32		superior conj	16179 May 13 23:59	6° Π 21'28	-0°57'50
	16178 Jun 24 09:47	0° Ω		minimum elong	16179 May 13 18:41	5° Π 59'05	0°57'41
asc. node	16178 Jul 14 01:26	27° Ω 08'08		max. Earth dist.	16179 May 21 00:12	17° Π 56'19	1.43780 AU
evening max el	16178 Jul 15 11:05	28° Ω 36'06	20°13'36	evening rise	16179 May 28 06:51	29° Π 27'51	
	16178 Jul 16 23:02	0° \mathcal{M}			16179 May 28 15:08	0° \mathcal{E}	
retrograde	16178 Jul 23 06:14	3° \mathcal{M} 01'57			16179 Jun 18 01:48	0° Ω	
evening set	16178 Jul 27 06:40	1° \mathcal{M} 29'31		evening max el	16179 Jun 28 08:37	12° Ω 30'03	21°23'51
	16178 Jul 28 21:49	30° \mathcal{R} Ω		asc. node	16179 Jun 30 22:16	14° Ω 49'46	
inferior conj	16178 Aug 01 13:06	25° Ω 26'46	3°04'06	retrograde	16179 Jul 07 05:03	17° Ω 38'09	
minimum elong	16178 Aug 01 13:59	25° Ω 23'47	3°03'33	evening set	16179 Jul 11 16:29	15° Ω 48'23	
min. Earth dist.	16178 Aug 02 09:15	24° Ω 18'02	0.68321 AU	inferior conj	16179 Jul 16 21:57	9° Ω 35'02	3°08'25
morning rise	16178 Aug 06 20:56	19° Ω 02'19		minimum elong	16179 Jul 16 21:52	9° Ω 35'20	3°07'48
direct	16178 Aug 12 09:35	16° Ω 37'41		min. Earth dist.	16179 Jul 17 04:44	9° Ω 11'24	0.68982 AU
desc. node	16178 Aug 15 15:49	17° Ω 19'48		morning rise	16179 Jul 22 03:00	3° Ω 15'59	
morning max el	16178 Aug 23 18:18	23° Ω 25'29	24°19'39	direct	16179 Jul 27 03:39	1° Ω 06'06	
	16178 Aug 29 14:23	0° \mathcal{M}		desc. node	16179 Aug 02 13:09	3° Ω 47'09	
	16178 Sep 19 14:33	0° \mathcal{L}		morning max el	16179 Aug 06 06:06	7° Ω 05'18	22°50'24
morning set	16178 Sep 28 05:03	14° \mathcal{L} 16'26			16179 Aug 24 01:55	0° \mathcal{M}	
max. Earth dist.	16178 Oct 01 20:05	20° \mathcal{L} 39'27	1.38003 AU	morning set	16179 Sep 09 06:15	25° \mathcal{M} 00'33	
	16178 Oct 06 22:03	0° \mathcal{M}			16179 Sep 12 06:23	0° \mathcal{L}	
				max. Earth dist.	16179 Sep 13 19:28	2° \mathcal{L} 36'48	1.40410 AU
superior conj	16178 Oct 09 02:04	4° \mathcal{M} 07'28	-0°09'10				
minimum elong	16178 Oct 09 02:40	4° \mathcal{M} 10'20	0°08'42	superior conj	16179 Sep 21 16:31	16° \mathcal{L} 28'09	-0°45'19
behind sun begin	16178 Oct 08 20:51	3° \mathcal{M} 42'24		minimum elong	16179 Sep 21 20:03	16° \mathcal{L} 44'13	0°44'35
behind sun end	16178 Oct 09 08:29	4° \mathcal{M} 38'19		asc. node	16179 Sep 26 23:20	26° \mathcal{L} 15'16	
asc. node	16178 Oct 10 02:39	6° \mathcal{M} 05'57			16179 Sep 28 22:52	0° \mathcal{M}	
evening rise	16178 Oct 17 17:20	21° \mathcal{M} 08'24		evening rise	16179 Oct 01 11:33	4° \mathcal{M} 48'33	
	16178 Oct 22 06:11	0° \mathcal{J}			16179 Oct 16 21:29	0° \mathcal{J}	
evening max el	16178 Nov 03 07:25	18° \mathcal{J} 21'47	19°10'39	evening max el	16179 Oct 17 10:01	0° \mathcal{J} 32'19	18°27'36
desc. node	16178 Nov 11 13:05	22° \mathcal{J} 54'58		retrograde	16179 Oct 25 05:33	4° \mathcal{J} 30'20	
retrograde	16178 Nov 12 10:55	22° \mathcal{J} 57'36		evening set	16179 Oct 27 05:02	4° \mathcal{J} 15'49	
evening set	16178 Nov 14 08:19	22° \mathcal{J} 46'38		desc. node	16179 Oct 29 10:18	3° \mathcal{J} 27'37	
inferior conj	16178 Nov 22 19:25	18° \mathcal{J} 34'40	-3°31'34		16179 Nov 03 15:40	30° \mathcal{R} \mathcal{M}	
minimum elong	16178 Nov 22 10:52	18° \mathcal{J} 49'06	3°27'49	inferior conj	16179 Nov 04 00:16	29° \mathcal{M} 43'06	-1°47'55
min. Earth dist.	16178 Nov 25 12:46	16° \mathcal{J} 44'39	0.55990 AU	minimum elong	16179 Nov 03 20:02	29° \mathcal{M} 51'26	1°45'37
morning rise	16178 Nov 30 10:55	14° \mathcal{J} 00'34		min. Earth dist.	16179 Nov 07 05:31	27° \mathcal{M} 11'47	0.57879 AU
direct	16178 Dec 06 02:08	12° \mathcal{J} 47'16		morning rise	16179 Nov 11 07:36	24° \mathcal{M} 32'08	
morning max el	16178 Dec 20 04:05	19° \mathcal{J} 57'10	25°45'22	direct	16179 Nov 17 14:01	22° \mathcal{M} 51'42	
	16178 Dec 28 17:25	0° \mathcal{Z}			16179 Dec 01 10:18	0° \mathcal{J}	
asc. node	16179 Jan 06 02:25	13° \mathcal{Z} 08'52		morning max el	16179 Dec 01 20:18	0° \mathcal{J} 23'57	27°06'17
	16179 Jan 14 19:12	0° \approx			16179 Dec 22 18:51	0° \mathcal{Z}	
morning set	16179 Jan 16 17:22	4° \approx 05'52		asc. node	16179 Dec 23 23:33	2° \mathcal{Z} 12'14	
				morning set	16180 Jan 01 02:33	18° \mathcal{Z} 32'36	
					16180 Jan 06 07:37	0° \approx	
superior conj	16179 Jan 23 10:49	18° \approx 56'29	1°37'01				
minimum elong	16179 Jan 23 11:28	19° \approx 00'05	1°37'32	superior conj	16180 Jan 07 22:04	3° \approx 35'17	1°37'42
max. Earth dist.	16179 Jan 24 19:27	21° \approx 57'16	1.31561 AU	minimum elong	16180 Jan 07 21:39	3° \approx 32'59	1°38'21
	16179 Jan 28 12:08	0° \mathcal{H}		max. Earth dist.	16180 Jan 08 02:31	4° \approx 00'10	1.31040 AU
evening rise	16179 Jan 30 13:52	4° \mathcal{H} 22'33		evening rise	16180 Jan 14 17:48	18° \approx 36'51	
desc. node	16179 Feb 07 12:57	19° \mathcal{H} 57'52			16180 Jan 20 07:28	0° \mathcal{H}	
	16179 Feb 13 08:00	0° \mathcal{Y}		desc. node	16180 Jan 25 09:41	9° \mathcal{H} 26'21	
evening max el	16179 Mar 04 00:42	24° \mathcal{Y} 39'27	27°33'43		16180 Feb 08 03:08	0° \mathcal{Y}	
	16179 Mar 10 22:34	0° \mathcal{B}		evening max el	16180 Feb 14 05:04	6° \mathcal{Y} 39'03	27°02'19
retrograde	16179 Mar 18 00:15	2° \mathcal{B} 06'44		retrograde	16180 Feb 28 06:09	13° \mathcal{Y} 55'58	
evening set	16179 Mar 24 19:38	29° \mathcal{Y} 54'06		evening set	16180 Mar 05 20:17	12° \mathcal{Y} 04'20	
	16179 Mar 24 15:56	30° \mathcal{R} \mathcal{Y}		min. Earth dist.	16180 Mar 09 19:21	9° \mathcal{Y} 23'04	0.59577 AU
min. Earth dist.	16179 Mar 28 13:58	26° \mathcal{Y} 57'46	0.61838 AU	inferior conj	16180 Mar 13 00:46	6° \mathcal{Y} 46'26	-2°30'17
inferior conj	16179 Mar 31 15:55	24° \mathcal{Y} 06'25	-1°04'04	minimum elong	16180 Mar 13 06:29	6° \mathcal{Y} 34'49	2°28'05
minimum elong	16179 Mar 31 18:09	24° \mathcal{Y} 01'13	1°03'24	morning rise	16180 Mar 20 20:16	2° \mathcal{Y} 04'26	
asc. node	16179 Apr 03 23:46	21° \mathcal{Y} 13'32		asc. node	16180 Mar 20 21:06	2° \mathcal{Y} 03'54	
morning rise	16179 Apr 07 19:52	19° \mathcal{Y} 04'36		direct	16180 Mar 22 20:16	1° \mathcal{Y} 49'13	
direct	16179 Apr 10 01:02	18° \mathcal{Y} 42'47		morning max el	16180 Mar 30 09:05	5° \mathcal{Y} 34'13	18°07'06
morning max el	16179 Apr 16 19:17	22° \mathcal{Y} 07'06	17°48'26	morning set	16180 Apr 14 23:22	0° \mathcal{B} 12'44	
	16179 Apr 22 22:09	0° \mathcal{B}					

	16180 Apr 14 20:38	0°♄		morning max el	16181 Mar 13 15:24	18°♄23'50	18°46'18
desc. node	16180 Apr 22 11:02	14°♄02'51			16181 Mar 22 01:41	0°♄	
				morning set	16181 Mar 29 19:42	14°♄25'05	
superior conj	16180 Apr 24 21:12	18°♄24'20	-0°20'00		16181 Apr 06 21:05	0°♄	
minimum elong	16180 Apr 24 19:32	18°♄16'58	0°20'12				
	16180 May 01 13:36	0°♄		superior conj	16181 Apr 07 13:48	1°♄18'52	0°14'42
max. Earth dist.	16180 May 02 11:30	1°♄32'03	1.41865 AU	minimum elong	16181 Apr 07 14:45	1°♄23'21	0°14'12
evening rise	16180 May 07 13:46	9°♄53'51		behind sun begin	16181 Apr 07 11:38	1°♄08'39	
	16180 May 20 15:59	0°♄		behind sun end	16181 Apr 07 17:53	1°♄38'03	
evening max el	16180 Jun 10 01:27	26°♄24'33	22°42'45	desc. node	16181 Apr 09 07:45	4°♄34'40	
	16180 Jun 14 05:11	0°♄		max. Earth dist.	16181 Apr 14 19:06	14°♄27'09	1.39642 AU
asc. node	16180 Jun 16 19:12	1°♄30'41		evening rise	16181 Apr 18 17:52	21°♄15'16	
retrograde	16180 Jun 20 02:08	2°♄17'09			16181 Apr 24 01:22	0°♄	
evening set	16180 Jun 25 01:04	0°♄11'35			16181 May 14 17:00	0°♄	
	16180 Jun 25 06:21	30°♄		evening max el	16181 May 23 15:40	10°♄19'49	24°04'23
inferior conj	16180 Jun 30 07:58	23°♄49'33	3°02'01	retrograde	16181 Jun 03 20:07	16°♄52'51	
minimum elong	16180 Jun 30 06:58	23°♄53'01	3°01'14	asc. node	16181 Jun 03 16:13	16°♄52'44	
min. Earth dist.	16180 Jun 30 01:40	24°♄11'26	0.69151 AU	evening set	16181 Jun 09 06:46	14°♄33'56	
morning rise	16180 Jul 05 12:43	17°♄37'58		min. Earth dist.	16181 Jun 13 21:53	9°♄11'23	0.68832 AU
direct	16180 Jul 10 01:14	15°♄46'11		inferior conj	16181 Jun 14 17:12	8°♄05'47	2°45'10
morning max el	16180 Jul 18 21:21	20°♄53'35	21°25'10	minimum elong	16181 Jun 14 15:29	8°♄11'40	2°44'09
desc. node	16180 Jul 19 10:26	21°♄26'45		morning rise	16181 Jun 20 00:14	2°♄03'08	
	16180 Jul 26 14:46	0°♄		direct	16181 Jun 24 00:53	0°♄30'59	
	16180 Aug 16 06:43	0°♄		morning max el	16181 Jul 01 18:48	4°♄52'16	20°10'09
morning set	16180 Aug 19 07:46	4°♄44'58		desc. node	16181 Jul 06 07:39	9°♄59'33	
max. Earth dist.	16180 Aug 26 00:25	15°♄29'02	1.42635 AU		16181 Jul 20 13:21	0°♄	
				morning set	16181 Jul 29 15:18	13°♄45'25	
superior conj	16180 Sep 02 11:06	27°♄57'32	-1°21'50	max. Earth dist.	16181 Aug 08 12:26	29°♄11'59	1.44421 AU
minimum elong	16180 Sep 02 17:47	28°♄26'14	1°21'03		16181 Aug 09 00:29	0°♄	
	16180 Sep 03 15:32	0°♄					
asc. node	16180 Sep 12 20:01	16°♄18'47		superior conj	16181 Aug 14 06:26	8°♄28'00	-1°53'09
evening rise	16180 Sep 13 17:44	17°♄57'04		minimum elong	16181 Aug 14 14:13	8°♄59'49	1°52'50
	16180 Sep 20 12:01	0°♄		evening rise	16181 Aug 27 06:55	0°♄20'52	
evening max el	16180 Sep 29 20:39	13°♄21'50	18°05'20		16181 Aug 27 02:04	0°♄	
retrograde	16180 Oct 06 18:30	16°♄54'43		asc. node	16181 Aug 30 16:42	6°♄11'57	
evening set	16180 Oct 09 00:31	16°♄32'25		evening max el	16181 Sep 13 11:03	26°♄39'07	18°02'17
desc. node	16180 Oct 15 07:35	12°♄21'04		retrograde	16181 Sep 19 21:43	0°♄00'33	
inferior conj	16180 Oct 16 02:20	11°♄38'34	-0°14'52		16181 Sep 19 13:49	0°♄	
minimum elong	16180 Oct 16 01:50	11°♄39'42	0°14'15		16181 Sep 20 05:36	30°♄	
transit middle	16180 Oct 16 01:50	11°♄39'42	0°14'15	evening set	16181 Sep 22 11:49	29°♄26'54	
transit begin	16180 Oct 16 00:15	11°♄43'19		inferior conj	16181 Sep 28 22:12	24°♄14'07	0°59'38
transit end	16180 Oct 16 03:25	11°♄36'04		minimum elong	16181 Sep 28 23:48	24°♄09'54	0°59'17
min. Earth dist.	16180 Oct 19 06:59	8°♄44'23	0.60113 AU	min. Earth dist.	16181 Oct 01 18:22	21°♄17'22	0.62401 AU
morning rise	16180 Oct 22 23:56	5°♄55'20		desc. node	16181 Oct 02 04:54	20°♄51'21	
direct	16180 Oct 29 14:41	3°♄50'06		morning rise	16181 Oct 05 09:22	18°♄07'24	
morning max el	16180 Nov 12 20:39	11°♄38'15	27°51'12	direct	16181 Oct 12 01:49	15°♄43'24	
	16180 Nov 27 07:26	0°♄		morning max el	16181 Oct 26 03:30	23°♄40'35	27°56'47
asc. node	16180 Dec 09 20:37	21°♄41'42			16181 Oct 31 20:07	0°♄	
	16180 Dec 14 00:10	0°♄			16181 Nov 20 15:20	0°♄	
morning set	16180 Dec 15 07:37	2°♄44'08		asc. node	16181 Nov 26 17:37	11°♄29'21	
max. Earth dist.	16180 Dec 21 09:46	15°♄59'29	1.31069 AU	morning set	16181 Nov 29 06:24	16°♄34'57	
				max. Earth dist.	16181 Dec 04 13:16	27°♄45'32	1.31655 AU
superior conj	16180 Dec 22 09:15	18°♄10'30	1°32'23		16181 Dec 05 13:56	0°♄	
minimum elong	16180 Dec 22 07:52	18°♄02'47	1°32'59				
	16180 Dec 27 16:48	0°♄		superior conj	16181 Dec 06 18:25	2°♄36'26	1°20'58
evening rise	16180 Dec 29 01:54	3°♄00'07		minimum elong	16181 Dec 06 16:19	2°♄24'52	1°21'26
desc. node	16181 Jan 11 06:29	28°♄21'14		evening rise	16181 Dec 13 12:14	17°♄27'11	
	16181 Jan 12 06:46	0°♄			16181 Dec 19 13:45	0°♄	
evening max el	16181 Jan 26 01:46	17°♄46'14	25°56'27	desc. node	16181 Dec 29 03:21	16°♄30'03	
retrograde	16181 Feb 09 00:33	24°♄49'31		evening max el	16182 Jan 07 14:17	28°♄05'07	24°23'52
evening set	16181 Feb 15 01:53	23°♄23'55			16182 Jan 09 17:57	0°♄	
min. Earth dist.	16181 Feb 19 14:50	20°♄45'19	0.57434 AU	retrograde	16182 Jan 21 05:44	4°♄52'45	
inferior conj	16181 Feb 22 14:10	18°♄40'32	-4°01'15	evening set	16182 Jan 26 09:18	3°♄54'44	
minimum elong	16181 Feb 22 23:03	18°♄24'56	3°58'10	min. Earth dist.	16182 Feb 01 02:04	1°♄02'22	0.55678 AU
morning rise	16181 Mar 02 23:19	14°♄19'52			16182 Feb 02 18:51	30°♄	
direct	16181 Mar 04 22:46	14°♄07'29		inferior conj	16182 Feb 03 06:20	29°♄42'21	-5°20'04
asc. node	16181 Mar 07 18:28	14°♄34'03		minimum elong	16182 Feb 03 14:54	29°♄29'12	5°17'56

morning rise	16182 Feb 11 22:32	25° \approx 41'56		min. Earth dist.	16183 Jan 13 08:30	10° \approx 25'18	0.54601 AU
direct	16182 Feb 14 05:38	25° \approx 28'02		inferior conj	16183 Jan 14 04:24	9° \approx 57'11	-6°00'51
asc. node	16182 Feb 22 15:49	28° \approx 50'39		minimum elong	16183 Jan 14 06:12	9° \approx 54'38	6°00'11
	16182 Feb 23 23:42	0° \mathbb{X}		morning rise	16183 Jan 22 17:33	6° \approx 08'56	
morning max el	16182 Feb 24 10:02	0° \mathbb{X} 24'38	19°48'08	direct	16183 Jan 25 19:07	5° \approx 47'28	
morning set	16182 Mar 13 23:48	28° \mathbb{X} 56'25		morning max el	16183 Feb 06 13:55	11° \approx 28'49	21°13'09
	16182 Mar 14 12:21	0° \mathbb{Y}		asc. node	16183 Feb 09 13:10	14° \approx 40'32	
					16183 Feb 19 12:16	0° \mathbb{X}	
superior conj	16182 Mar 21 21:28	14° \mathbb{Y} 53'32	0°43'56	morning set	16183 Feb 26 08:41	13° \mathbb{X} 37'17	
minimum elong	16182 Mar 21 23:44	15° \mathbb{Y} 04'43	0°43'26				
desc. node	16182 Mar 27 04:27	25° \mathbb{Y} 06'01		superior conj	16183 Mar 05 16:08	28° \mathbb{X} 56'27	1°06'56
max. Earth dist.	16182 Mar 28 01:33	26° \mathbb{Y} 44'30	1.37347 AU	minimum elong	16183 Mar 05 18:40	29° \mathbb{X} 09'31	1°06'40
	16182 Mar 29 20:04	0° \mathbb{B}			16183 Mar 06 04:27	0° \mathbb{Y}	
evening rise	16182 Mar 31 18:12	3° \mathbb{B} 27'40		max. Earth dist.	16183 Mar 10 11:03	8° \mathbb{Y} 37'29	1.35217 AU
	16182 Apr 17 02:36	0° \mathbb{I}		evening rise	16183 Mar 14 11:30	16° \mathbb{Y} 21'20	
evening max el	16182 May 06 05:06	24° \mathbb{I} 14'25	25°21'53	desc. node	16183 Mar 14 01:06	15° \mathbb{Y} 32'29	
	16182 May 13 15:02	0° \mathbb{G}			16183 Mar 22 03:04	0° \mathbb{B}	
retrograde	16182 May 18 10:03	1° \mathbb{G} 19'05			16183 Apr 11 13:01	0° \mathbb{I}	
asc. node	16182 May 21 13:19	0° \mathbb{G} 38'37		evening max el	16183 Apr 18 18:40	8° \mathbb{I} 02'39	26°27'59
	16182 May 22 18:23	30° \mathbb{R} \mathbb{I}		retrograde	16183 May 01 18:57	15° \mathbb{I} 27'17	
evening set	16182 May 24 07:56	28° \mathbb{I} 50'39		evening set	16183 May 08 02:44	12° \mathbb{I} 54'36	
min. Earth dist.	16182 May 28 15:20	24° \mathbb{I} 05'05	0.68031 AU	asc. node	16183 May 08 10:28	12° \mathbb{I} 38'24	
inferior conj	16182 May 29 23:45	22° \mathbb{I} 19'59	2°17'34	min. Earth dist.	16183 May 12 03:57	8° \mathbb{I} 44'23	0.66772 AU
minimum elong	16182 May 29 21:36	22° \mathbb{I} 26'57	2°16'19	inferior conj	16183 May 14 01:27	6° \mathbb{I} 26'27	1°38'17
morning rise	16182 Jun 04 11:42	16° \mathbb{I} 27'26		minimum elong	16183 May 13 23:23	6° \mathbb{I} 32'43	1°37'00
direct	16182 Jun 08 01:05	15° \mathbb{I} 14'48		morning rise	16183 May 19 21:05	0° \mathbb{I} 45'17	
morning max el	16182 Jun 14 23:36	19° \mathbb{I} 01'19	19°09'17		16183 May 21 16:57	30° \mathbb{R} \mathbb{B}	
desc. node	16182 Jun 23 04:46	29° \mathbb{I} 11'44		direct	16183 May 23 00:01	29° \mathbb{B} 50'36	
	16182 Jun 23 18:23	0° \mathbb{G}			16183 May 24 07:28	0° \mathbb{I}	
greatest brilliancy	16182 Jun 27 20:06	5° \mathbb{G} 57'00	-0.7m	morning max el	16183 May 29 10:55	3° \mathbb{I} 15'20	18°24'27
morning set	16182 Jul 08 21:20	22° \mathbb{G} 47'16		desc. node	16183 Jun 10 01:47	18° \mathbb{I} 52'14	
	16182 Jul 13 13:26	0° \mathbb{Q}			16183 Jun 17 04:07	0° \mathbb{G}	
max. Earth dist.	16182 Jul 22 05:42	13° \mathbb{Q} 30'03	1.45579 AU	morning set	16183 Jun 18 20:49	2° \mathbb{G} 40'53	
superior conj	16182 Jul 25 03:52	18° \mathbb{Q} 05'43	-2°11'52	superior conj	16183 Jul 04 13:21	27° \mathbb{G} 18'04	-2°11'39
minimum elong	16182 Jul 25 07:42	18° \mathbb{Q} 20'47	2°12'17	minimum elong	16183 Jul 04 09:25	27° \mathbb{G} 02'47	2°12'12
	16182 Aug 01 15:25	0° \mathbb{P}		max. Earth dist.	16183 Jul 05 01:24	28° \mathbb{G} 05'03	1.46010 AU
evening rise	16182 Aug 08 21:53	11° \mathbb{P} 47'37			16183 Jul 06 06:55	0° \mathbb{Q}	
asc. node	16182 Aug 17 13:25	25° \mathbb{P} 50'20		evening rise	16183 Jul 20 11:35	22° \mathbb{Q} 10'28	
	16182 Aug 20 05:30	0° \mathbb{L}			16183 Jul 25 11:22	0° \mathbb{P}	
evening max el	16182 Aug 28 01:41	10° \mathbb{L} 15'32	18°17'24	greatest brilliancy	16183 Jul 29 16:46	6° \mathbb{P} 34'04	-0.8m
retrograde	16182 Sep 03 10:45	13° \mathbb{L} 38'53		asc. node	16183 Aug 04 10:08	15° \mathbb{P} 07'33	
evening set	16182 Sep 06 09:37	12° \mathbb{L} 50'59		evening max el	16183 Aug 11 13:35	24° \mathbb{P} 03'19	18°50'00
inferior conj	16182 Sep 12 07:53	7° \mathbb{L} 21'58	1°54'53	retrograde	16183 Aug 18 05:46	27° \mathbb{P} 41'25	
minimum elong	16182 Sep 12 10:12	7° \mathbb{L} 15'16	1°54'13	evening set	16183 Aug 21 14:02	26° \mathbb{P} 37'07	
min. Earth dist.	16182 Sep 14 15:44	4° \mathbb{L} 40'31	0.64522 AU	inferior conj	16183 Aug 27 03:40	20° \mathbb{P} 54'04	2°32'58
morning rise	16182 Sep 18 09:09	1° \mathbb{L} 01'18		minimum elong	16183 Aug 27 05:46	20° \mathbb{P} 47'27	2°32'19
desc. node	16182 Sep 19 02:15	0° \mathbb{L} 29'04		min. Earth dist.	16183 Aug 28 21:47	18° \mathbb{P} 41'44	0.66324 AU
	16182 Sep 19 19:39	30° \mathbb{R} \mathbb{P}		morning rise	16183 Sep 01 20:32	14° \mathbb{P} 27'36	
direct	16182 Sep 24 22:01	28° \mathbb{P} 26'26		desc. node	16183 Sep 05 23:35	12° \mathbb{P} 07'29	
	16182 Sep 30 11:40	0° \mathbb{L}		direct	16183 Sep 08 01:57	11° \mathbb{P} 50'29	
morning max el	16182 Oct 08 14:05	6° \mathbb{L} 22'57	27°26'25	morning max el	16183 Sep 21 01:40	19° \mathbb{P} 32'33	26°27'36
	16182 Oct 26 17:29	0° \mathbb{M}			16183 Sep 30 00:19	0° \mathbb{L}	
morning set	16182 Nov 12 20:22	29° \mathbb{M} 59'39			16183 Oct 19 18:55	0° \mathbb{M}	
	16182 Nov 12 20:26	0° \mathbb{X}		morning set	16183 Oct 26 22:24	12° \mathbb{M} 51'22	
asc. node	16182 Nov 13 14:32	1° \mathbb{X} 29'35		max. Earth dist.	16183 Oct 30 19:36	20° \mathbb{M} 19'46	1.34498 AU
max. Earth dist.	16182 Nov 17 09:20	9° \mathbb{X} 11'54	1.32806 AU	asc. node	16183 Oct 31 11:23	21° \mathbb{M} 37'44	
superior conj	16182 Nov 20 23:30	16° \mathbb{X} 47'52	1°03'24	superior conj	16183 Nov 04 22:05	0° \mathbb{X} 39'09	0°39'41
minimum elong	16182 Nov 20 21:07	16° \mathbb{X} 35'09	1°03'42	minimum elong	16183 Nov 04 20:07	0° \mathbb{X} 28'57	0°39'56
	16182 Nov 27 01:49	0° \mathbb{Z}			16183 Nov 04 14:31	0° \mathbb{X}	
evening rise	16182 Nov 27 22:59	1° \mathbb{Z} 53'47		evening rise	16183 Nov 12 08:16	16° \mathbb{X} 15'32	
	16182 Dec 13 07:00	0° \approx			16183 Nov 19 04:48	0° \mathbb{Z}	
desc. node	16182 Dec 16 00:16	3° \approx 36'14		evening max el	16183 Dec 01 16:09	18° \mathbb{Z} 10'38	21°03'42
evening max el	16182 Dec 19 23:45	8° \approx 00'04	22°40'18	desc. node	16183 Dec 02 21:15	19° \mathbb{Z} 18'54	
retrograde	16183 Jan 01 22:31	14° \approx 24'27		retrograde	16183 Dec 13 08:24	23° \mathbb{Z} 57'28	
evening set	16183 Jan 05 20:02	13° \approx 51'17		evening set	16183 Dec 16 00:56	23° \mathbb{Z} 40'25	

inferior conj	16183 Dec 24 19:07	19° Z 49'31	-5°42'14	desc. node	16184 Nov 18 18:20	3° Z 13'02	
minimum elong	16183 Dec 24 11:58	19° Z 59'40	5°40'29	retrograde	16184 Nov 22 23:15	4° Z 04'53	
min. Earth dist.	16183 Dec 25 13:56	19° Z 22'48	0.54422 AU	evening set	16184 Nov 24 23:50	3° Z 53'37	
morning rise	16184 Jan 01 23:08	15° Z 57'26		inferior conj	16184 Dec 03 17:01	29° Z 52'13	-4°28'26
direct	16184 Jan 06 02:33	15° Z 20'26		minimum elong	16184 Dec 03 07:04	0° Z 07'42	4°24'47
morning max el	16184 Jan 19 04:16	21° Z 42'54	22°56'55		16184 Dec 03 12:01	30° R Z	
	16184 Jan 26 05:04	0° \approx		min. Earth dist.	16184 Dec 05 21:10	28° Z 31'14	0.55187 AU
asc. node	16184 Jan 27 10:26	1° \approx 45'17		morning rise	16184 Dec 11 12:48	25° Z 37'51	
morning set	16184 Feb 10 20:05	28° \approx 21'17		direct	16184 Dec 16 16:50	24° Z 38'51	
	16184 Feb 11 14:33	0° H			16184 Dec 28 19:13	0° Z	
				morning max el	16184 Dec 30 12:31	1° Z 33'03	24°46'46
superior conj	16184 Feb 17 18:35	13° H 18'37	1°23'32	asc. node	16185 Jan 13 07:40	19° Z 46'46	
minimum elong	16184 Feb 17 20:40	13° H 29'47	1°23'36		16185 Jan 18 23:40	0° \approx	
max. Earth dist.	16184 Feb 21 03:28	20° H 26'17	1.33438 AU	morning set	16185 Jan 25 08:02	13° \approx 02'15	
evening rise	16184 Feb 25 18:19	29° H 47'35					
	16184 Feb 25 20:50	0° Y		superior conj	16185 Feb 01 02:08	27° \approx 51'48	1°33'52
desc. node	16184 Feb 28 21:46	5° Y 50'16		minimum elong	16185 Feb 01 03:22	27° \approx 58'36	1°34'14
	16184 Mar 14 05:11	0° Z			16185 Feb 02 01:30	0° H	
evening max el	16184 Mar 31 08:12	21° Z 36'30	27°15'05	max. Earth dist.	16185 Feb 03 03:30	2° H 21'46	1.32109 AU
retrograde	16184 Apr 13 21:49	29° Z 08'57		evening rise	16185 Feb 08 11:23	13° H 37'29	
evening set	16184 Apr 20 13:06	26° Z 38'35		desc. node	16185 Feb 14 18:27	25° H 53'56	
asc. node	16184 Apr 24 07:41	23° Z 06'33			16185 Feb 17 00:36	0° Y	
min. Earth dist.	16184 Apr 24 09:50	23° Z 00'45	0.65103 AU		16185 Mar 09 08:40	0° Z	
inferior conj	16184 Apr 26 19:52	20° Z 19'41	0°46'12	evening max el	16185 Mar 13 20:16	4° Z 44'08	27°36'01
minimum elong	16184 Apr 26 18:38	20° Z 23'05	0°45'14	retrograde	16185 Mar 27 17:26	12° Z 14'29	
morning rise	16184 May 03 02:00	14° Z 51'37		evening set	16185 Apr 03 12:41	9° Z 53'36	
direct	16184 May 05 19:30	14° Z 12'14		min. Earth dist.	16185 Apr 07 07:05	6° Z 43'51	0.63099 AU
morning max el	16184 May 12 02:43	17° Z 27'38	17°56'34	inferior conj	16185 Apr 10 04:03	3° Z 52'12	-0°19'46
	16184 May 21 10:46	0° II		minimum elong	16185 Apr 10 04:42	3° Z 50'36	0°19'52
desc. node	16184 May 26 22:45	8° II 53'31		asc. node	16185 Apr 11 04:56	2° Z 50'45	
morning set	16184 May 29 23:20	13° II 52'09			16185 Apr 14 12:39	30° R Y	
	16184 Jun 08 21:00	0° E		morning rise	16185 Apr 16 23:23	28° Y 39'43	
				direct	16185 Apr 19 08:41	28° Y 12'23	
superior conj	16184 Jun 13 03:33	6° E 48'41	-1°52'06		16185 Apr 24 02:20	0° Z	
minimum elong	16184 Jun 12 19:05	6° E 15'10	1°52'07	morning max el	16185 Apr 25 20:21	1° Z 30'09	17°46'12
max. Earth dist.	16184 Jun 16 21:22	12° E 42'23	1.45692 AU	morning set	16185 May 12 03:29	26° Z 16'21	
	16184 Jun 28 01:16	0° O		desc. node	16185 May 13 19:40	29° Z 09'39	
evening rise	16184 Jun 29 04:33	1° O 44'37			16185 May 14 07:22	0° II	
greatest brilliancy	16184 Jul 13 02:49	22° O 44'33	-0.6m				
	16184 Jul 18 06:03	0° P		superior conj	16185 May 24 12:24	17° II 12'40	-1°19'24
asc. node	16184 Jul 21 06:52	3° P 55'53		minimum elong	16185 May 24 05:06	16° II 42'38	1°19'09
evening max el	16184 Jul 24 20:37	7° P 56'20	19°38'57	max. Earth dist.	16185 May 30 15:51	27° II 09'06	1.44661 AU
retrograde	16184 Aug 01 03:51	12° P 01'25			16185 Jun 01 10:56	0° E	
evening set	16184 Aug 04 22:13	10° P 39'25		evening rise	16185 Jun 08 15:09	11° E 10'15	
inferior conj	16184 Aug 10 06:26	4° P 43'42	2°56'24		16185 Jun 21 04:41	0° O	
minimum elong	16184 Aug 10 07:50	4° P 39'04	2°55'50	evening max el	16185 Jul 07 21:42	21° O 51'01	20°42'14
min. Earth dist.	16184 Aug 11 10:34	3° P 09'57	0.67723 AU	asc. node	16185 Jul 08 03:40	22° O 05'44	
	16184 Aug 14 00:03	30° R O		retrograde	16185 Jul 16 02:51	26° O 33'36	
morning rise	16184 Aug 15 16:55	28° O 17'27		evening set	16185 Jul 20 07:59	24° O 53'38	
direct	16184 Aug 21 12:17	25° O 46'07		inferior conj	16185 Jul 25 13:42	18° O 46'27	3°07'16
desc. node	16184 Aug 22 20:57	25° O 53'27		minimum elong	16185 Jul 25 14:10	18° O 44'49	3°06'43
	16184 Aug 30 08:28	0° P		min. Earth dist.	16185 Jul 26 04:08	17° O 56'38	0.68663 AU
morning max el	16184 Sep 02 12:39	2° P 57'35	25°09'29	morning rise	16185 Jul 30 20:04	12° O 24'13	
	16184 Sep 23 04:15	0° Q		direct	16185 Aug 05 03:47	10° O 05'14	
morning set	16184 Oct 08 08:38	25° Q 00'27		desc. node	16185 Aug 09 18:17	11° O 29'08	
	16184 Oct 11 02:48	0° M		morning max el	16185 Aug 15 23:36	16° O 32'37	23°41'45
max. Earth dist.	16184 Oct 11 21:13	1° M 24'59	1.36641 AU		16185 Aug 27 03:08	0° P	
asc. node	16184 Oct 17 08:08	11° M 49'07			16185 Sep 16 04:01	0° Q	
				morning set	16185 Sep 19 22:57	6° Q 17'50	
superior conj	16184 Oct 18 11:10	14° M 02'13	0°10'10	max. Earth dist.	16185 Sep 23 20:01	12° Q 58'10	1.39034 AU
minimum elong	16184 Oct 18 10:31	13° M 59'00	0°10'30				
behind sun begin	16184 Oct 18 05:35	13° M 34'39		superior conj	16185 Oct 01 11:07	26° Q 48'45	-0°24'10
behind sun end	16184 Oct 18 15:27	14° M 23'24		minimum elong	16185 Oct 01 12:52	26° Q 56'55	0°23'35
	16184 Oct 26 08:39	0° Z			16185 Oct 03 03:37	0° M	
evening rise	16184 Oct 26 13:52	0° Z 26'30		asc. node	16185 Oct 04 04:51	2° M 00'25	
evening max el	16184 Nov 12 22:15	29° Z 04'04	19°45'33	evening rise	16185 Oct 10 13:12	14° M 20'31	
	16184 Nov 13 21:43	0° Z			16185 Oct 18 22:48	0° Z	

evening max el	16185 Oct 26 18:16	10° ♊ 47'43	18°49'41	retrograde	16186 Oct 17 09:51	27° ♍ 01'21	
retrograde	16185 Nov 04 06:47	15° ♊ 05'57		evening set	16186 Oct 19 11:42	26° ♍ 44'03	
desc. node	16185 Nov 05 15:29	14° ♊ 59'43		desc. node	16186 Oct 23 12:43	24° ♍ 43'33	
evening set	16185 Nov 06 04:26	14° ♊ 53'54		inferior conj	16186 Oct 26 23:25	22° ♍ 01'51	-1°06'29
inferior conj	16185 Nov 14 09:17	10° ♊ 33'04	-2°47'17	minimum elong	16186 Oct 26 20:57	22° ♍ 07'03	1°04'57
minimum elong	16185 Nov 14 02:28	10° ♊ 45'21	2°44'01	min. Earth dist.	16186 Oct 30 05:29	19° ♍ 18'30	0.58800 AU
min. Earth dist.	16185 Nov 17 09:19	8° ♊ 23'59	0.56739 AU	morning rise	16186 Nov 03 02:44	16° ♍ 36'03	
morning rise	16185 Nov 21 21:33	5° ♊ 43'38		direct	16186 Nov 09 13:18	14° ♍ 44'52	
direct	16185 Nov 27 20:09	4° ♊ 19'01		morning max el	16186 Nov 23 20:16	22° ♍ 24'39	27°30'20
morning max el	16185 Dec 12 00:18	11° ♊ 38'04	26°23'34		16186 Nov 30 14:00	0° ♊	
	16185 Dec 26 04:56	0° ♊		asc. node	16186 Dec 18 01:58	27° ♊ 46'39	
asc. node	16185 Dec 31 04:51	8° ♊ 30'58			16186 Dec 19 05:45	0° ♊	
morning set	16186 Jan 09 18:46	27° ♊ 35'44		morning set	16186 Dec 25 02:30	11° ♊ 57'11	
	16186 Jan 10 21:24	0° ♊		max. Earth dist.	16186 Dec 31 16:57	26° ♊ 28'18	1.30983 AU
superior conj	16186 Jan 16 12:37	12° ♋ 30'06	1°38'03	superior conj	16187 Jan 01 00:05	27° ♊ 08'18	1°36'12
minimum elong	16186 Jan 16 12:49	12° ♋ 31'13	1°38'37	minimum elong	16186 Dec 31 23:15	27° ♊ 03'35	1°36'50
max. Earth dist.	16186 Jan 17 09:10	14° ♋ 24'43	1.31283 AU		16187 Jan 02 06:44	0° ♋	
evening rise	16186 Jan 23 12:03	27° ♋ 44'34		evening rise	16187 Jan 07 18:02	12° ♋ 03'31	
	16186 Jan 24 13:58	0° ♋			16187 Jan 16 17:41	0° ♋	
desc. node	16186 Feb 01 15:10	15° ♋ 37'31		desc. node	16187 Jan 19 11:55	4° ♋ 53'28	
	16186 Feb 10 08:10	0° ♋		evening max el	16187 Feb 06 05:27	28° ♋ 49'31	26°38'11
evening max el	16186 Feb 24 04:15	17° ♋ 11'52	27°24'38		16187 Feb 07 12:14	0° ♋	
retrograde	16186 Mar 10 04:29	24° ♋ 34'15		retrograde	16187 Feb 20 05:44	6° ♋ 01'11	
evening set	16186 Mar 16 22:37	22° ♋ 29'52		evening set	16187 Feb 26 15:43	4° ♋ 19'46	
min. Earth dist.	16186 Mar 20 18:15	19° ♋ 41'19	0.60883 AU	min. Earth dist.	16187 Mar 02 19:06	1° ♋ 41'43	0.58638 AU
inferior conj	16186 Mar 23 22:31	16° ♋ 54'22	-1°39'26		16187 Mar 05 00:53	30° ♋	
minimum elong	16186 Mar 24 02:09	16° ♋ 46'22	1°38'07	inferior conj	16187 Mar 05 23:32	29° ♋ 16'28	-3°09'00
asc. node	16186 Mar 29 02:16	12° ♋ 09'25		minimum elong	16187 Mar 06 06:47	29° ♋ 02'39	3°06'16
morning rise	16186 Mar 31 09:03	12° ♋ 00'32		morning rise	16187 Mar 14 01:22	24° ♋ 43'50	
direct	16186 Apr 02 11:49	11° ♋ 41'51		asc. node	16187 Mar 15 23:38	24° ♋ 30'18	
morning max el	16186 Apr 09 12:37	15° ♋ 13'18	17°54'00	direct	16187 Mar 16 00:27	24° ♋ 30'18	
	16186 Apr 19 18:50	0° ♋		morning max el	16187 Mar 23 23:52	28° ♋ 26'55	18°21'11
morning set	16186 Apr 25 03:30	9° ♋ 35'22			16187 Mar 25 10:57	0° ♋	
desc. node	16186 Apr 30 16:30	19° ♋ 35'14		morning set	16187 Apr 08 17:47	23° ♋ 32'34	
superior conj	16186 May 05 20:46	28° ♋ 41'08	-0°41'36		16187 Apr 12 03:20	0° ♋	
minimum elong	16186 May 05 17:05	28° ♋ 25'14	0°41'36	desc. node	16187 Apr 17 13:16	10° ♋ 06'15	
	16186 May 06 15:05	0° ♋		superior conj	16187 Apr 18 02:53	11° ♋ 08'29	-0°04'45
max. Earth dist.	16186 May 13 06:34	11° ♋ 08'58	1.43018 AU	minimum elong	16187 Apr 18 02:30	11° ♋ 06'41	0°05'07
evening rise	16186 May 19 11:34	21° ♋ 07'06		behind sun begin	16187 Apr 17 19:31	10° ♋ 34'49	
	16186 May 25 05:22	0° ♋		behind sun end	16187 Apr 18 09:28	11° ♋ 38'29	
	16186 Jun 15 13:53	0° ♋		max. Earth dist.	16187 Apr 25 16:09	24° ♋ 28'16	1.40942 AU
evening max el	16186 Jun 20 17:01	5° ♋ 45'01	21°56'40		16187 Apr 28 23:02	0° ♋	
asc. node	16186 Jun 25 00:33	9° ♋ 23'40		evening rise	16187 Apr 30 03:23	1° ♋ 56'52	
retrograde	16186 Jun 30 01:05	11° ♋ 11'49			16187 May 18 13:29	0° ♋	
evening set	16186 Jul 04 17:29	9° ♋ 14'49		evening max el	16187 Jun 03 08:18	19° ♋ 39'17	23°17'24
inferior conj	16186 Jul 09 23:16	2° ♋ 57'31	3°06'57	asc. node	16187 Jun 11 21:32	25° ♋ 33'36	
minimum elong	16186 Jul 09 22:47	2° ♋ 59'12	3°06'17	retrograde	16187 Jun 13 21:06	25° ♋ 50'28	
min. Earth dist.	16186 Jul 10 00:23	2° ♋ 53'37	0.69116 AU	evening set	16187 Jun 19 01:03	23° ♋ 38'37	
	16186 Jul 12 03:26	30° ♋		inferior conj	16187 Jun 24 09:12	17° ♋ 13'22	2°56'09
morning rise	16186 Jul 15 03:55	26° ♋ 41'42		minimum elong	16187 Jun 24 07:51	17° ♋ 17'58	2°55'16
direct	16186 Jul 19 23:22	24° ♋ 39'25		min. Earth dist.	16187 Jun 23 21:17	17° ♋ 54'30	0.69076 AU
desc. node	16186 Jul 27 15:37	28° ♋ 29'44		morning rise	16187 Jun 29 14:37	11° ♋ 05'26	
	16186 Jul 29 06:11	0° ♋		direct	16187 Jul 03 21:53	9° ♋ 22'11	
morning max el	16186 Jul 29 12:37	0° ♋ 16'00	22°13'19	morning max el	16187 Jul 12 06:23	14° ♋ 09'09	20°51'41
	16186 Aug 20 21:34	0° ♋		desc. node	16187 Jul 14 12:52	16° ♋ 34'04	
morning set	16186 Aug 31 13:56	16° ♋ 35'44			16187 Jul 24 20:38	0° ♋	
max. Earth dist.	16186 Sep 05 21:50	25° ♋ 19'58	1.41398 AU	morning set	16187 Aug 11 06:27	25° ♋ 57'49	
	16186 Sep 08 16:10	0° ♋			16187 Aug 13 20:28	0° ♋	
superior conj	16186 Sep 13 17:35	8° ♋ 48'08	-1°01'01	max. Earth dist.	16187 Aug 19 05:33	8° ♋ 33'50	1.43460 AU
minimum elong	16186 Sep 13 22:32	9° ♋ 10'03	1°00'14	superior conj	16187 Aug 26 02:25	19° ♋ 52'02	-1°36'11
asc. node	16186 Sep 21 01:32	22° ♋ 07'33		minimum elong	16187 Aug 26 10:01	20° ♋ 23'56	1°35'32
evening rise	16186 Sep 24 02:49	27° ♋ 48'26			16187 Sep 01 00:51	0° ♋	
	16186 Sep 25 07:06	0° ♋		evening rise	16187 Sep 07 02:25	10° ♋ 39'20	
evening max el	16186 Oct 10 00:42	23° ♋ 15'15	18°15'39	asc. node	16187 Sep 07 22:13	12° ♋ 07'00	

	16187 Sep 18 13:16	0°♍		evening rise	16188 Aug 19 06:43	22°♎40'18	
evening max el	16187 Sep 23 13:20	6°♍17'08	18°01'45		16188 Aug 23 15:23	0°♎	
retrograde	16187 Sep 30 05:23	9°♍43'48		asc. node	16188 Aug 24 18:54	1°♎54'46	
evening set	16187 Oct 02 14:36	9°♍17'13		evening max el	16188 Sep 06 04:17	19°♎44'15	18°06'36
inferior conj	16187 Oct 09 09:30	4°♍15'10	0°19'09	retrograde	16188 Sep 12 13:09	23°♎04'43	
minimum elong	16187 Oct 09 10:06	4°♍13'42	0°19'16	evening set	16188 Sep 15 06:55	22°♎25'22	
desc. node	16187 Oct 10 10:02	3°♍15'17		inferior conj	16188 Sep 21 11:44	17°♎05'43	1°25'19
min. Earth dist.	16187 Oct 12 11:20	1°♍17'08	0.61088 AU	minimum elong	16188 Sep 21 13:47	17°♎00'05	1°24'46
	16187 Oct 13 22:08	30°♎♎		min. Earth dist.	16188 Sep 24 03:06	14°♎13'15	0.63335 AU
morning rise	16187 Oct 16 02:37	28°♎20'26		desc. node	16188 Sep 26 07:22	12°♎04'55	
direct	16187 Oct 22 18:44	26°♎06'06		morning rise	16188 Sep 27 18:33	10°♎52'04	
	16187 Nov 01 09:41	0°♍		direct	16188 Oct 04 10:14	8°♎22'00	
morning max el	16187 Nov 05 23:47	4°♍00'10	27°58'23	morning max el	16188 Oct 18 08:24	16°♎20'41	27°47'50
	16187 Nov 25 07:28	0°♎			16188 Oct 29 15:44	0°♍	
asc. node	16187 Dec 04 23:00	17°♎24'31			16188 Nov 17 01:09	0°♎	
morning set	16187 Dec 09 05:10	26°♎00'35		asc. node	16188 Nov 20 19:56	7°♎18'15	
	16187 Dec 11 02:34	0°♎		morning set	16188 Nov 22 00:30	9°♎41'07	
max. Earth dist.	16187 Dec 14 22:55	8°♎22'14	1.31238 AU	max. Earth dist.	16188 Nov 26 23:24	19°♎59'17	1.32071 AU
superior conj	16187 Dec 16 10:37	11°♎40'09	1°28'18	superior conj	16188 Nov 29 18:19	26°♎00'55	1°14'17
minimum elong	16187 Dec 16 08:54	11°♎30'33	1°28'51	minimum elong	16188 Nov 29 16:02	25°♎48'29	1°14'41
evening rise	16187 Dec 23 03:15	26°♎28'35			16188 Dec 01 13:58	0°♎	
	16187 Dec 24 18:43	0°♎		evening rise	16188 Dec 06 13:57	10°♎56'01	
desc. node	16188 Jan 06 08:44	23°♎30'37			16188 Dec 16 03:34	0°♎	
	16188 Jan 10 17:49	0°♎		desc. node	16188 Dec 23 05:36	11°♎15'08	
evening max el	16188 Jan 18 22:17	9°♎34'11	25°19'39	evening max el	16188 Dec 30 08:39	19°♎39'20	23°40'10
retrograde	16188 Feb 01 19:13	16°♎32'14		retrograde	16189 Jan 12 18:47	26°♎18'06	
evening set	16188 Feb 07 12:15	15°♎18'23		evening set	16189 Jan 17 09:59	25°♎31'39	
min. Earth dist.	16188 Feb 12 10:53	12°♎36'03	0.56616 AU	min. Earth dist.	16189 Jan 23 19:55	22°♎27'16	0.55120 AU
inferior conj	16188 Feb 15 03:56	10°♎48'44	-4°37'33	inferior conj	16189 Jan 25 11:34	21°♎29'05	-5°43'40
minimum elong	16188 Feb 15 13:21	10°♎33'09	4°34'38	minimum elong	16189 Jan 25 18:03	21°♎19'33	5°42'17
morning rise	16188 Feb 23 17:14	6°♎37'21		morning rise	16189 Feb 03 03:37	17°♎34'48	
direct	16188 Feb 25 18:27	6°♎25'04		direct	16189 Feb 05 17:12	17°♎18'32	
asc. node	16188 Mar 01 21:01	7°♎46'29		morning max el	16189 Feb 16 14:18	22°♎34'41	20°21'28
morning max el	16188 Mar 06 01:49	10°♎57'53	19°09'43	asc. node	16189 Feb 16 18:20	22°♎44'31	
	16188 Mar 18 16:25	0°♎			16189 Feb 22 16:04	0°♎	
morning set	16188 Mar 22 17:48	7°♎54'06		morning set	16189 Mar 07 00:14	22°♎30'16	
					16189 Mar 10 15:27	0°♎	
superior conj	16188 Mar 31 02:26	24°♎21'42	0°27'48				
minimum elong	16188 Mar 31 04:05	24°♎29'40	0°27'17	superior conj	16189 Mar 14 15:10	8°♎09'18	0°54'27
desc. node	16188 Apr 03 09:58	0°♎38'22		minimum elong	16189 Mar 14 17:39	8°♎21'49	0°54'03
	16188 Apr 03 01:45	0°♎		max. Earth dist.	16189 Mar 20 05:22	19°♎08'25	1.36414 AU
max. Earth dist.	16188 Apr 06 22:15	7°♎04'07	1.38660 AU	desc. node	16189 Mar 21 06:37	21°♎08'03	
evening rise	16188 Apr 10 16:24	13°♎41'09		evening rise	16189 Mar 24 00:24	26°♎12'34	
	16188 Apr 20 15:07	0°♎			16189 Mar 26 03:01	0°♎	
	16188 May 12 12:54	0°♎			16189 Apr 14 02:26	0°♎	
evening max el	16188 May 15 21:55	3°♎34'26	24°38'16	evening max el	16189 Apr 28 11:32	17°♎27'52	25°51'55
retrograde	16188 May 27 13:39	10°♎22'52		retrograde	16189 May 11 01:29	24°♎42'07	
asc. node	16188 May 28 18:36	10°♎16'45		asc. node	16189 May 15 15:44	23°♎17'36	
evening set	16188 Jun 02 05:02	7°♎59'28		evening set	16189 May 17 03:42	22°♎11'30	
min. Earth dist.	16188 Jun 06 16:41	2°♎52'32	0.68547 AU	min. Earth dist.	16189 May 21 08:24	17°♎40'59	0.67551 AU
inferior conj	16188 Jun 07 17:33	1°♎29'29	2°34'50	inferior conj	16189 May 22 22:18	15°♎41'14	2°02'25
minimum elong	16188 Jun 07 15:35	1°♎36'02	2°33'42	minimum elong	16189 May 22 20:07	15°♎48'10	2°01'07
	16188 Jun 08 20:37	30°♎♎		morning rise	16189 May 28 13:09	9°♎53'04	
morning rise	16188 Jun 13 02:19	25°♎30'46		direct	16189 May 31 22:01	8°♎48'12	
direct	16188 Jun 16 22:01	24°♎07'05		morning max el	16189 Jun 07 14:31	12°♎23'49	18°48'04
morning max el	16188 Jun 24 06:54	28°♎12'29	19°42'15	desc. node	16189 Jun 17 07:07	24°♎50'31	
	16188 Jun 25 23:56	0°♎			16189 Jun 20 17:48	0°♎	
desc. node	16188 Jun 30 10:02	5°♎25'10		greatest brilliancy	16189 Jun 21 09:09	0°♎58'22	-0.8m
greatest brilliancy	16188 Jul 07 10:18	15°♎15'35	-0.6m	morning set	16189 Jun 29 22:15	14°♎10'21	
	16188 Jul 17 06:24	0°♎			16189 Jul 10 02:32	0°♎	
morning set	16188 Jul 20 10:47	4°♎51'54		max. Earth dist.	16189 Jul 14 14:10	6°♎59'26	1.45858 AU
max. Earth dist.	16188 Jul 31 19:31	22°♎31'55	1.44995 AU				
				superior conj	16189 Jul 16 02:25	9°♎21'02	-2°14'17
superior conj	16188 Aug 05 11:52	29°♎58'45	-2°03'06	minimum elong	16189 Jul 16 03:03	9°♎23'29	2°14'53
minimum elong	16188 Aug 05 18:41	0°♎26'08	2°03'06		16189 Jul 29 04:05	0°♎	
	16188 Aug 05 12:11	0°♎		evening rise	16189 Jul 31 10:54	3°♎39'24	

asc. node	16189 Aug 11 15:36	21° \mathbb{M} 24'58		max. Earth dist.	16190 Jun 27 11:00	21° \mathbb{S} 40'25	1.45972 AU
	16189 Aug 17 17:04	0° \mathbb{L}			16190 Jul 02 19:25	0° \mathbb{Q}	
evening max el	16189 Aug 20 18:08	3° \mathbb{L} 26'48	18°29'15	evening rise	16190 Jul 11 14:45	13° \mathbb{Q} 39'17	
retrograde	16189 Aug 27 05:02	6° \mathbb{L} 54'28			16190 Jul 22 05:57	0° \mathbb{M}	
evening set	16189 Aug 30 07:56	5° \mathbb{L} 59'39		greatest brilliancy	16190 Jul 22 23:52	1° \mathbb{M} 07'28	-0.7m
inferior conj	16189 Sep 05 02:06	0° \mathbb{L} 24'31	2°12'59	asc. node	16190 Jul 29 12:19	10° \mathbb{M} 31'17	
minimum elong	16189 Sep 05 04:24	0° \mathbb{L} 17'34	2°12'18	evening max el	16190 Aug 04 04:13	17° \mathbb{M} 17'48	19°08'50
	16189 Sep 05 10:13	30° \mathbb{R} \mathbb{M}		retrograde	16190 Aug 11 01:44	21° \mathbb{M} 05'48	
min. Earth dist.	16189 Sep 07 04:10	27° \mathbb{M} 54'15	0.65339 AU	evening set	16190 Aug 14 14:18	19° \mathbb{M} 53'53	
morning rise	16189 Sep 10 23:36	24° \mathbb{M} 00'51		inferior conj	16190 Aug 20 01:13	14° \mathbb{M} 05'02	2°44'32
desc. node	16189 Sep 13 04:43	22° \mathbb{M} 30'20		minimum elong	16190 Aug 20 03:04	13° \mathbb{M} 59'05	2°43'56
direct	16189 Sep 17 09:49	21° \mathbb{M} 24'02		min. Earth dist.	16190 Aug 21 13:15	12° \mathbb{M} 08'34	0.66978 AU
morning max el	16189 Sep 30 19:25	29° \mathbb{M} 15'23	27°04'19	morning rise	16190 Aug 25 15:07	7° \mathbb{M} 38'10	
	16189 Oct 01 12:54	0° \mathbb{L}		desc. node	16190 Aug 31 02:05	5° \mathbb{M} 04'22	
	16189 Oct 23 12:49	0° \mathbb{M}		direct	16190 Aug 31 16:26	5° \mathbb{M} 02'58	
morning set	16189 Nov 05 09:43	22° \mathbb{M} 52'11		morning max el	16190 Sep 13 06:59	12° \mathbb{M} 33'17	25°56'08
asc. node	16189 Nov 07 16:47	27° \mathbb{M} 22'13			16190 Sep 27 08:57	0° \mathbb{L}	
	16189 Nov 09 00:15	0° \mathbb{M}			16190 Oct 16 05:11	0° \mathbb{M}	
max. Earth dist.	16189 Nov 09 15:22	1° \mathbb{M} 16'36	1.33469 AU	morning set	16190 Oct 19 05:30	5° \mathbb{M} 26'41	
				max. Earth dist.	16190 Oct 22 21:55	12° \mathbb{M} 22'09	1.35372 AU
superior conj	16189 Nov 13 20:56	10° \mathbb{M} 04'30	0°54'05	asc. node	16190 Oct 25 13:35	17° \mathbb{M} 32'08	
minimum elong	16189 Nov 13 18:38	9° \mathbb{M} 52'20	0°54'21				
evening rise	16189 Nov 21 00:18	25° \mathbb{M} 21'06		superior conj	16190 Oct 28 15:51	23° \mathbb{M} 44'30	0°27'50
	16189 Nov 23 05:22	0° \mathbb{S}		minimum elong	16190 Oct 28 14:19	23° \mathbb{M} 36'42	0°28'05
desc. node	16189 Dec 10 02:33	27° \mathbb{S} 48'26			16190 Oct 31 16:55	0° \mathbb{M}	
evening max el	16189 Dec 11 19:53	29° \mathbb{S} 36'03	21°57'25	evening rise	16190 Nov 05 08:18	9° \mathbb{M} 39'09	
	16189 Dec 12 05:50	0° \mathbb{M}			16190 Nov 16 02:07	0° \mathbb{S}	
retrograde	16189 Dec 24 06:47	5° \mathbb{M} 45'29		evening max el	16190 Nov 23 17:29	10° \mathbb{S} 01'49	20°27'41
evening set	16189 Dec 27 15:19	5° \mathbb{M} 20'22		desc. node	16190 Nov 26 23:35	12° \mathbb{S} 47'50	
inferior conj	16190 Jan 05 04:41	1° \mathbb{M} 29'49	-6°00'39	retrograde	16190 Dec 04 17:22	15° \mathbb{S} 29'53	
minimum elong	16190 Jan 05 02:22	1° \mathbb{M} 33'03	5°59'54	evening set	16190 Dec 07 01:19	15° \mathbb{S} 16'16	
min. Earth dist.	16190 Jan 05 01:13	1° \mathbb{M} 34'39	0.54412 AU	inferior conj	16190 Dec 15 20:37	11° \mathbb{S} 21'55	-5°16'16
	16190 Jan 07 22:28	30° \mathbb{R} \mathbb{S}		minimum elong	16190 Dec 15 11:18	11° \mathbb{S} 35'32	5°13'32
morning rise	16190 Jan 13 14:11	27° \mathbb{S} 42'25		min. Earth dist.	16190 Dec 17 06:42	10° \mathbb{S} 32'04	0.54637 AU
direct	16190 Jan 17 02:41	27° \mathbb{S} 15'06		morning rise	16190 Dec 23 20:55	7° \mathbb{S} 22'44	
	16190 Jan 25 11:27	0° \mathbb{M}		direct	16190 Dec 28 11:14	6° \mathbb{S} 37'16	
morning max el	16190 Jan 29 11:39	3° \mathbb{M} 14'28	21°55'36	morning max el	16191 Jan 10 22:14	13° \mathbb{S} 13'51	23°44'12
asc. node	16190 Feb 03 15:37	9° \mathbb{M} 08'07		asc. node	16191 Jan 21 12:53	26° \mathbb{S} 38'49	
	16190 Feb 15 22:29	0° \mathbb{M}			16191 Jan 23 14:33	0° \mathbb{M}	
morning set	16190 Feb 19 10:27	7° \mathbb{M} 13'27		morning set	16191 Feb 03 22:18	21° \mathbb{M} 56'55	
					16191 Feb 07 15:22	0° \mathbb{M}	
superior conj	16190 Feb 26 13:29	22° \mathbb{M} 21'20	1°14'46				
minimum elong	16190 Feb 26 15:54	22° \mathbb{M} 33'59	1°14'37	superior conj	16191 Feb 10 18:22	6° \mathbb{M} 49'00	1°28'41
	16190 Mar 02 06:09	0° \mathbb{Y}		minimum elong	16191 Feb 10 20:08	6° \mathbb{M} 58'33	1°28'53
max. Earth dist.	16190 Mar 02 17:51	0° \mathbb{Y} 59'16	1.34411 AU	max. Earth dist.	16191 Feb 13 13:42	12° \mathbb{M} 50'40	1.32806 AU
evening rise	16190 Mar 06 23:52	9° \mathbb{Y} 21'16		evening rise	16191 Feb 18 11:21	22° \mathbb{M} 58'07	
desc. node	16190 Mar 08 03:17	11° \mathbb{Y} 31'33			16191 Feb 22 01:53	0° \mathbb{Y}	
	16190 Mar 18 16:10	0° \mathbb{S}		desc. node	16191 Feb 22 23:56	1° \mathbb{Y} 43'54	
	16190 Apr 09 20:23	0° \mathbb{I}			16191 Mar 12 08:39	0° \mathbb{S}	
evening max el	16190 Apr 11 01:23	1° \mathbb{I} 12'25	26°50'48	evening max el	16191 Mar 24 14:22	14° \mathbb{S} 36'08	27°27'34
retrograde	16190 Apr 24 07:46	8° \mathbb{I} 40'53		retrograde	16191 Apr 07 07:35	22° \mathbb{S} 08'51	
evening set	16190 Apr 30 19:11	6° \mathbb{I} 08'27		evening set	16191 Apr 14 01:17	19° \mathbb{S} 41'17	
asc. node	16190 May 02 12:54	4° \mathbb{I} 35'37		min. Earth dist.	16191 Apr 17 20:35	16° \mathbb{S} 16'27	0.64285 AU
min. Earth dist.	16190 May 04 18:21	2° \mathbb{I} 12'32	0.66113 AU	asc. node	16191 Apr 19 10:09	14° \mathbb{S} 37'25	
inferior conj	16190 May 06 21:15	29° \mathbb{S} 43'38	1°17'53	inferior conj	16191 Apr 20 11:41	13° \mathbb{S} 28'59	0°19'57
minimum elong	16190 May 06 19:27	29° \mathbb{S} 48'57	1°16'40	minimum elong	16191 Apr 20 11:07	13° \mathbb{S} 30'30	0°19'17
	16190 May 06 15:41	30° \mathbb{R} \mathbb{S}		morning rise	16191 Apr 26 23:10	8° \mathbb{S} 07'32	
morning rise	16190 May 12 21:00	24° \mathbb{S} 07'47		direct	16191 Apr 29 13:02	7° \mathbb{S} 33'42	
direct	16190 May 15 19:55	23° \mathbb{S} 19'48		morning max el	16191 May 05 21:06	10° \mathbb{S} 48'28	17°50'06
morning max el	16190 May 22 04:05	26° \mathbb{S} 38'43	18°10'31		16191 May 19 03:57	0° \mathbb{I}	
	16190 May 25 04:14	0° \mathbb{I}		desc. node	16191 May 22 01:04	4° \mathbb{I} 49'32	
desc. node	16190 Jun 04 04:08	14° \mathbb{I} 41'14		morning set	16191 May 22 23:00	6° \mathbb{I} 21'42	
morning set	16190 Jun 10 09:02	24° \mathbb{I} 37'31					
	16190 Jun 13 17:29	0° \mathbb{S}		superior conj	16191 Jun 05 08:52	28° \mathbb{I} 27'14	-1°39'22
				minimum elong	16191 Jun 05 00:21	27° \mathbb{I} 53'02	1°39'12
superior conj	16190 Jun 25 11:51	18° \mathbb{S} 36'14	-2°05'27		16191 Jun 06 08:02	0° \mathbb{S}	
minimum elong	16190 Jun 25 05:15	18° \mathbb{S} 10'27	2°05'49	max. Earth dist.	16191 Jun 10 06:45	6° \mathbb{S} 15'51	1.45336 AU

evening rise	16191 Jun 21 02:56	23°☾04'31		superior conj	16192 May 16 03:37	9°♊18'44	-1°03'35
	16191 Jun 25 16:14	0°♊		minimum elong	16192 May 15 21:46	8°♊54'10	1°03'24
greatest brilliancy	16191 Jul 05 19:25	15°♊02'46	-0.6m	max. Earth dist.	16192 May 22 23:10	20°♊30'27	1.44024 AU
asc. node	16191 Jul 16 09:07	29°♊04'53			16192 May 28 22:59	0°☾	
	16191 Jul 17 05:04	0°♊		evening rise	16192 May 30 15:54	2°☾38'56	
evening max el	16191 Jul 18 08:41	1°♊11'38	20°04'10		16192 Jun 18 03:51	0°♊	
retrograde	16191 Jul 26 00:36	5°♊31'58		evening max el	16192 Jun 30 07:08	15°♊06'00	21°12'48
evening set	16191 Jul 29 23:25	4°♊02'17		asc. node	16192 Jul 02 05:58	16°♊54'41	
	16191 Aug 02 18:39	30°♋♊		retrograde	16192 Jul 08 23:32	20°♊07'23	
inferior conj	16191 Aug 04 06:14	28°♊01'15	3°02'25	evening set	16192 Jul 13 09:17	18°♊20'12	
minimum elong	16191 Aug 04 07:14	27°♊57'49	3°01'54	inferior conj	16192 Jul 18 14:45	12°♊08'28	3°08'26
min. Earth dist.	16191 Aug 05 04:26	26°♊45'52	0.68180 AU	minimum elong	16192 Jul 18 14:48	12°♊08'16	3°07'51
morning rise	16191 Aug 09 14:40	21°♊36'08		min. Earth dist.	16192 Jul 18 23:32	11°♊37'53	0.68914 AU
direct	16191 Aug 15 05:03	19°♊09'35		morning rise	16192 Jul 23 20:04	5°♊48'28	
desc. node	16191 Aug 17 23:27	19°♊39'57		direct	16192 Jul 28 22:34	3°♊36'01	
morning max el	16191 Aug 26 18:04	26°♊04'12	24°32'45	desc. node	16192 Aug 03 20:48	5°♊54'39	
	16191 Aug 30 08:52	0°♊		morning max el	16192 Aug 08 05:32	9°♊42'47	23°03'37
	16191 Sep 20 21:41	0°♊			16192 Aug 24 06:02	0°♊	
morning set	16191 Oct 01 07:50	17°♊15'39		morning set	16192 Sep 11 12:32	28°♊08'46	
max. Earth dist.	16191 Oct 04 21:35	23°♊36'05	1.37640 AU		16192 Sep 12 15:20	0°♊	
	16191 Oct 08 09:02	0°♊		max. Earth dist.	16192 Sep 15 20:30	5°♊26'17	1.40056 AU
superior conj	16191 Oct 11 23:50	6°♊53'19	-0°03'57	superior conj	16192 Sep 23 16:56	19°♊21'20	-0°39'42
minimum elong	16191 Oct 12 00:04	6°♊54'28	0°03'32	minimum elong	16192 Sep 23 19:58	19°♊35'17	0°39'01
behind sun begin	16191 Oct 11 17:28	6°♊22'32		asc. node	16192 Sep 28 07:03	27°♊54'22	
behind sun end	16191 Oct 12 06:40	7°♊26'28			16192 Sep 29 09:32	0°♊	
asc. node	16191 Oct 12 10:21	7°♊44'17		evening rise	16192 Oct 03 07:19	7°♊28'25	
evening rise	16191 Oct 20 11:38	23°♊44'16			16192 Oct 16 09:28	0°♊	
	16191 Oct 23 15:34	0°♊		evening max el	16192 Oct 19 06:52	3°♊21'28	18°32'41
evening max el	16191 Nov 06 05:48	21°♊17'21	19°19'03	retrograde	16192 Oct 27 06:26	7°♊24'12	
desc. node	16191 Nov 13 20:44	25°♊49'54		evening set	16192 Oct 29 05:18	7°♊10'26	
retrograde	16191 Nov 15 14:49	25°♊59'29		desc. node	16192 Oct 30 17:57	6°♊41'40	
evening set	16191 Nov 17 12:35	25°♊48'38		inferior conj	16192 Nov 06 03:08	2°♊40'54	-2°03'18
inferior conj	16191 Nov 26 01:35	21°♊39'42	-3°47'01	minimum elong	16192 Nov 05 22:13	2°♊50'21	2°00'42
minimum elong	16191 Nov 25 16:31	21°♊54'39	3°43'14	min. Earth dist.	16192 Nov 09 07:30	0°♊14'49	0.57571 AU
min. Earth dist.	16191 Nov 28 16:01	19°♊56'52	0.55758 AU		16192 Nov 09 15:37	30°♋♊	
morning rise	16191 Dec 03 18:10	17°♊10'55		morning rise	16192 Nov 13 11:47	27°♊35'33	
direct	16191 Dec 09 06:40	16°♊01'20		direct	16192 Nov 19 16:29	25°♊59'05	
morning max el	16191 Dec 23 07:19	23°♊07'37	25°30'46		16192 Nov 29 21:16	0°♊	
	16191 Dec 29 11:00	0°♊		morning max el	16192 Dec 03 22:14	3°♊28'01	26°56'17
asc. node	16192 Jan 08 10:05	15°♊00'25			16192 Dec 23 02:20	0°♊	
	16192 Jan 16 06:59	0°♊		asc. node	16192 Dec 25 07:14	3°♊59'12	
morning set	16192 Jan 19 09:58	6°♊35'53		morning set	16193 Jan 02 19:38	21°♊04'41	
					16193 Jan 06 21:19	0°♊	
superior conj	16192 Jan 26 03:28	21°♊25'51	1°36'24	superior conj	16193 Jan 09 14:36	6°♊04'55	1°38'00
minimum elong	16192 Jan 26 04:16	21°♊30'20	1°36'51	minimum elong	16193 Jan 09 14:21	6°♊03'31	1°38'37
max. Earth dist.	16192 Jan 27 16:19	24°♊49'25	1.31687 AU	max. Earth dist.	16193 Jan 09 23:09	6°♊52'47	1.31088 AU
	16192 Jan 30 01:18	0°♋		evening rise	16193 Jan 16 11:09	21°♊09'25	
evening rise	16192 Feb 02 07:58	6°♋56'30			16193 Jan 20 18:11	0°♋	
desc. node	16192 Feb 09 20:38	21°♋40'12		desc. node	16193 Jan 26 17:22	11°♋13'04	
	16192 Feb 14 14:19	0°♋			16193 Feb 07 20:46	0°♋	
evening max el	16192 Mar 06 00:48	27°♋27'48	27°35'21	evening max el	16193 Feb 16 06:19	9°♋35'33	27°09'14
	16192 Mar 08 21:26	0°♋		retrograde	16193 Mar 02 07:18	16°♋53'47	
retrograde	16192 Mar 20 00:01	4°♋56'19		evening set	16193 Mar 08 22:38	14°♋58'47	
evening set	16192 Mar 26 19:28	2°♋41'21		min. Earth dist.	16193 Mar 12 20:39	12°♋15'54	0.59914 AU
	16192 Mar 30 05:33	30°♋♋		inferior conj	16193 Mar 16 01:58	9°♋36'08	-2°16'40
min. Earth dist.	16192 Mar 30 13:40	29°♋41'43	0.62169 AU	minimum elong	16193 Mar 16 07:08	9°♋25'25	2°14'42
inferior conj	16192 Apr 02 14:28	26°♋49'42	-0°52'02	asc. node	16193 Mar 23 04:47	5°♋01'28	
minimum elong	16192 Apr 02 16:15	26°♋45'28	0°51'33	morning rise	16193 Mar 23 19:09	4°♋50'51	
asc. node	16192 Apr 05 07:26	24°♋23'23		direct	16193 Mar 25 19:44	4°♋34'52	
morning rise	16192 Apr 09 16:08	21°♋45'02		morning max el	16193 Apr 02 05:10	8°♋16'05	18°03'03
direct	16192 Apr 11 22:16	21°♋21'57			16193 Apr 16 06:33	0°♋	
morning max el	16192 Apr 18 14:36	24°♋44'20	17°47'16	morning set	16193 Apr 17 19:00	2°♋48'15	
	16192 Apr 22 23:02	0°♋		desc. node	16193 Apr 24 18:44	15°♋38'29	
morning set	16192 May 04 12:17	19°♋11'05					
desc. node	16192 May 07 21:56	25°♋10'09		superior conj	16193 Apr 27 21:37	21°♋13'10	-0°25'35
	16192 May 10 16:29	0°♊					

minimum elong	16193 Apr 27 19:27	21°♄03'38	0°25'45	behind sun begin	16194 Apr 10 06:34	3°♄37'33	
	16193 May 02 23:13	0°♄		behind sun end	16194 Apr 10 17:59	4°♄30'52	
max. Earth dist.	16193 May 05 11:29	4°♄13'26	1.42175 AU	desc. node	16194 Apr 11 15:26	6°♄10'18	
evening rise	16193 May 10 19:56	12°♄57'25		max. Earth dist.	16194 Apr 17 19:42	17°♄15'44	1.39982 AU
	16193 May 21 21:37	0°♄		evening rise	16194 Apr 21 20:50	24°♄10'50	
evening max el	16193 Jun 13 00:37	29°♄00'58	22°30'41		16194 Apr 25 09:32	0°♄	
	16193 Jun 14 01:02	0°♄			16194 May 15 16:46	0°♄	
asc. node	16193 Jun 19 02:54	3°♄46'22		evening max el	16194 May 26 15:01	12°♄56'04	23°52'17
retrograde	16193 Jun 22 20:55	4°♄46'44		asc. node	16194 Jun 05 23:55	19°♄21'50	
evening set	16193 Jun 27 18:10	2°♄43'20		retrograde	16194 Jun 06 15:25	19°♄23'37	
	16193 Jun 30 07:52	30°♄		evening set	16194 Jun 12 00:23	17°♄06'18	
inferior conj	16193 Jul 03 00:42	26°♄22'34	3°03'39	min. Earth dist.	16194 Jun 16 16:45	11°♄38'18	0.68912 AU
minimum elong	16193 Jul 02 23:50	26°♄25'34	3°02'54	inferior conj	16194 Jun 17 10:10	10°♄38'52	2°48'25
min. Earth dist.	16193 Jul 02 20:21	26°♄37'45	0.69159 AU	minimum elong	16194 Jun 17 08:32	10°♄44'27	2°47'26
morning rise	16193 Jul 08 05:22	20°♄09'52		morning rise	16194 Jun 22 16:42	4°♄34'54	
direct	16193 Jul 12 19:42	18°♄15'15		direct	16194 Jun 26 19:03	2°♄59'55	
desc. node	16193 Jul 21 18:05	23°♄24'57		morning max el	16194 Jul 04 16:31	7°♄27'24	20°20'31
morning max el	16193 Jul 21 20:05	23°♄29'56	21°37'23	desc. node	16194 Jul 08 15:16	11°♄50'48	
	16193 Jul 27 12:57	0°♄			16194 Jul 21 18:41	0°♄	
	16193 Aug 17 13:48	0°♄		morning set	16194 Aug 02 02:53	17°♄07'01	
morning set	16193 Aug 22 17:28	8°♄01'53			16194 Aug 10 08:39	0°♄	
max. Earth dist.	16193 Aug 29 00:46	18°♄11'39	1.42331 AU	max. Earth dist.	16194 Aug 11 11:49	1°♄48'12	1.44192 AU
	16193 Sep 05 01:03	0°♄					
superior conj	16193 Sep 05 14:45	0°♄59'12	-1°16'28	superior conj	16194 Aug 17 13:34	11°♄38'23	-1°49'03
minimum elong	16193 Sep 05 21:01	1°♄26'20	1°15'39	minimum elong	16194 Aug 17 21:27	12°♄10'50	1°48'37
asc. node	16193 Sep 15 03:45	17°♄59'18			16194 Aug 28 10:42	0°♄	
evening rise	16193 Sep 16 15:36	20°♄42'38		evening rise	16194 Aug 30 07:38	3°♄14'12	
	16193 Sep 21 18:58	0°♄		asc. node	16194 Sep 02 00:25	7°♄54'33	
evening max el	16193 Oct 02 16:33	16°♄05'40	18°07'20	evening max el	16194 Sep 16 06:34	29°♄19'21	18°01'31
retrograde	16193 Oct 09 16:54	19°♄41'27			16194 Sep 16 23:47	0°♄	
evening set	16193 Oct 11 21:50	19°♄20'32		retrograde	16194 Sep 22 18:22	2°♄41'52	
desc. node	16193 Oct 17 15:12	15°♄46'13		evening set	16194 Sep 25 07:08	2°♄10'10	
inferior conj	16193 Oct 19 02:09	14°♄29'32	-0°27'52		16194 Sep 28 16:09	30°♄	
minimum elong	16193 Oct 19 01:12	14°♄31'40	0°27'01	inferior conj	16194 Oct 01 19:37	26°♄59'57	0°49'36
min. Earth dist.	16193 Oct 22 07:25	11°♄37'36	0.59773 AU	minimum elong	16194 Oct 01 21:01	26°♄56'22	0°49'20
morning rise	16193 Oct 26 01:17	8°♄50'36		min. Earth dist.	16194 Oct 04 17:22	24°♄02'19	0.62064 AU
direct	16193 Nov 01 15:12	6°♄48'56		desc. node	16194 Oct 04 12:30	24°♄14'16	
morning max el	16193 Nov 15 21:27	14°♄34'45	27°47'04	morning rise	16194 Oct 08 08:19	20°♄55'58	
	16193 Nov 28 08:39	0°♄		direct	16194 Oct 15 00:47	18°♄34'18	
asc. node	16193 Dec 12 04:19	23°♄25'18		morning max el	16194 Oct 29 03:37	26°♄31'00	27°58'27
	16193 Dec 15 12:00	0°♄			16194 Nov 01 10:18	0°♄	
morning set	16193 Dec 18 01:27	5°♄18'47			16194 Nov 21 23:37	0°♄	
max. Earth dist.	16193 Dec 24 06:41	18°♄53'32	1.31030 AU	asc. node	16194 Nov 29 01:18	13°♄10'57	
				morning set	16194 Dec 02 01:20	19°♄13'36	
superior conj	16193 Dec 25 01:54	20°♄40'56	1°33'35		16194 Dec 07 03:12	0°♄	
minimum elong	16193 Dec 25 00:39	20°♄33'58	1°34'12	max. Earth dist.	16194 Dec 07 11:02	0°♄42'42	1.31526 AU
	16193 Dec 29 06:06	0°♄					
evening rise	16193 Dec 31 18:45	5°♄31'40		superior conj	16194 Dec 09 11:29	5°♄08'56	1°23'06
	16194 Jan 13 10:49	0°♄		minimum elong	16194 Dec 09 09:28	4°♄57'49	1°23'36
desc. node	16194 Jan 13 14:09	0°♄13'54		evening rise	16194 Dec 16 04:52	19°♄58'48	
evening max el	16194 Jan 29 04:14	20°♄50'48	26°08'14		16194 Dec 20 23:43	0°♄	
retrograde	16194 Feb 12 03:23	27°♄56'05		desc. node	16194 Dec 31 10:59	18°♄31'09	
evening set	16194 Feb 18 07:19	26°♄26'20			16195 Jan 09 11:02	0°♄	
min. Earth dist.	16194 Feb 22 17:25	23°♄48'26	0.57735 AU	evening max el	16195 Jan 10 17:44	1°♄16'07	24°38'51
inferior conj	16194 Feb 25 18:28	21°♄37'57	-3°47'43	retrograde	16195 Jan 24 10:51	8°♄06'51	
minimum elong	16194 Feb 26 03:00	21°♄22'39	3°44'42	evening set	16195 Jan 29 18:15	7°♄04'40	
morning rise	16194 Mar 06 01:53	17°♄14'12		min. Earth dist.	16195 Feb 04 05:39	4°♄15'36	0.55900 AU
direct	16194 Mar 08 01:05	17°♄01'36		inferior conj	16195 Feb 06 13:47	2°♄48'08	-5°09'57
asc. node	16194 Mar 10 02:08	17°♄15'51		minimum elong	16195 Feb 06 22:48	2°♄34'03	5°07'32
morning max el	16194 Mar 16 12:52	21°♄12'25	18°39'06		16195 Feb 11 12:49	30°♄	
	16194 Mar 23 05:57	0°♄		morning rise	16195 Feb 15 05:36	28°♄45'12	
morning set	16194 Apr 01 13:54	16°♄57'22		direct	16195 Feb 17 10:47	28°♄31'56	
	16194 Apr 08 08:22	0°♄			16195 Feb 22 23:00	0°♄	
superior conj	16194 Apr 10 11:38	4°♄01'14	0°09'44	asc. node	16195 Feb 24 23:29	1°♄17'30	
minimum elong	16194 Apr 10 12:16	4°♄04'15	0°09'17	morning max el	16195 Feb 27 09:35	3°♄22'03	19°37'25
					16195 Mar 15 23:44	0°♄	
				morning set	16195 Mar 16 17:03	1°♄26'53	

superior conj	16195 Mar 24 17:21	17° Υ 31'17	0°39'51	superior conj	16196 Mar 07 10:36	1° Υ 30'39	1°03'50
minimum elong	16195 Mar 24 19:29	17° Υ 41'46	0°39'21	minimum elong	16196 Mar 07 13:08	1° Υ 43'42	1°03'31
desc. node	16195 Mar 29 12:06	26° Υ 42'13		max. Earth dist.	16196 Mar 12 10:31	11° Υ 32'31	1.35518 AU
max. Earth dist.	16195 Mar 31 01:55	29° Υ 37'47	1.37683 AU	desc. node	16196 Mar 15 08:46	17° Υ 09'47	
	16195 Mar 31 06:45	0° B		evening rise	16196 Mar 16 09:22	19° Υ 04'57	
evening rise	16195 Apr 03 18:21	6° B 16'34			16196 Mar 22 11:47	0° B	
	16195 Apr 18 07:40	0° II			16196 Apr 11 10:04	0° II	
evening max el	16195 May 09 04:22	26° II 50'44	25°10'49	evening max el	16196 Apr 20 17:55	10° II 40'35	26°19'09
	16195 May 12 16:36	0° E		retrograde	16196 May 03 15:49	18° II 03'08	
retrograde	16195 May 21 06:04	3° E 51'44		evening set	16196 May 09 22:11	15° II 30'49	
asc. node	16195 May 23 20:59	3° E 23'14		asc. node	16196 May 09 18:08	15° II 39'01	
evening set	16195 May 27 02:19	1° E 24'20		min. Earth dist.	16196 May 14 00:15	11° II 15'18	0.66987 AU
	16195 May 28 13:32	30° R II		inferior conj	16196 May 15 19:47	9° II 01'48	1°45'05
min. Earth dist.	16195 May 31 10:43	26° II 33'20	0.68182 AU	minimum elong	16196 May 15 17:40	9° II 08'18	1°43'47
inferior conj	16195 Jun 01 17:13	24° II 53'36	2°22'31	morning rise	16196 May 21 14:05	3° II 18'42	
minimum elong	16195 Jun 01 15:06	25° II 00'31	2°21'17	direct	16196 May 24 18:29	2° II 21'29	
morning rise	16195 Jun 07 04:16	18° II 59'29		morning max el	16196 May 31 06:39	5° II 48'47	18°30'00
direct	16195 Jun 10 19:14	17° II 44'07		desc. node	16196 Jun 11 09:26	20° II 34'38	
morning max el	16195 Jun 17 20:14	21° II 35'08	19°17'17		16196 Jun 17 11:07	0° E	
	16195 Jun 24 19:37	0° E		morning set	16196 Jun 21 03:41	5° E 48'08	
desc. node	16195 Jun 25 12:23	0° E 57'44			16196 Jul 06 14:45	0° Ω	
greatest brilliancy	16195 Jun 30 13:13	8° E 12'54	-0.7m				
morning set	16195 Jul 12 07:41	26° E 04'34		superior conj	16196 Jul 07 00:04	0° Ω 36'19	-2°13'00
	16195 Jul 14 20:50	0° Ω		minimum elong	16196 Jul 06 21:16	0° Ω 25'26	2°13'36
max. Earth dist.	16195 Jul 25 04:08	16° Ω 00'55	1.45449 AU	max. Earth dist.	16196 Jul 06 23:27	0° Ω 33'53	1.45993 AU
				evening rise	16196 Jul 22 19:30	25° Ω 21'53	
superior conj	16195 Jul 28 13:45	21° Ω 22'23	-2°10'09		16196 Jul 25 18:02	0° I	
minimum elong	16195 Jul 28 18:33	21° Ω 41'20	2°10'29	greatest brilliancy	16196 Jul 31 04:35	8° I 32'08	-0.8m
	16195 Aug 02 23:36	0° I		asc. node	16196 Aug 05 17:48	16° I 56'39	
evening rise	16195 Aug 12 02:07	14° I 49'48		evening max el	16196 Aug 13 09:50	26° I 40'20	18°44'08
asc. node	16195 Aug 19 21:05	27° I 35'33			16196 Aug 18 08:25	0° A	
	16195 Aug 21 09:20	0° A		retrograde	16196 Aug 20 00:25	0° A 15'19	
evening max el	16195 Aug 30 21:20	12° A 53'25	18°14'04		16196 Aug 21 15:41	30° R I	
retrograde	16195 Sep 06 06:08	16° A 15'44		evening set	16196 Aug 23 07:15	29° I 13'34	
evening set	16195 Sep 09 03:37	15° A 30'11		inferior conj	16196 Aug 28 21:58	23° I 32'37	2°28'08
inferior conj	16195 Sep 15 03:29	10° A 03'35	1°47'39	minimum elong	16196 Aug 29 00:08	23° I 25'51	2°27'29
minimum elong	16195 Sep 15 05:45	9° A 57'05	1°47'00	min. Earth dist.	16196 Aug 30 18:11	21° I 15'13	0.66080 AU
min. Earth dist.	16195 Sep 17 13:21	7° A 18'42	0.64220 AU	morning rise	16196 Sep 03 15:58	17° I 06'42	
morning rise	16195 Sep 21 06:08	3° A 44'21		desc. node	16196 Sep 07 07:12	14° I 56'11	
desc. node	16195 Sep 21 09:51	3° A 37'08		direct	16196 Sep 09 22:46	14° I 29'16	
direct	16195 Sep 27 19:49	1° A 10'25		morning max el	16196 Sep 23 01:13	22° I 14'20	26°37'47
morning max el	16195 Oct 11 13:47	9° A 08'18	27°32'57		16196 Sep 29 21:07	0° A	
	16195 Oct 27 21:20	0° M			16196 Oct 20 03:10	0° M	
	16195 Nov 14 07:37	0° J		morning set	16196 Oct 28 20:46	15° M 39'50	
morning set	16195 Nov 15 16:45	2° J 42'43		asc. node	16196 Nov 01 19:01	23° M 16'58	
asc. node	16195 Nov 15 22:11	3° J 09'41		max. Earth dist.	16196 Nov 01 19:54	23° M 21'20	1.34215 AU
max. Earth dist.	16195 Nov 20 08:17	12° J 11'49	1.32595 AU		16196 Nov 05 02:46	0° J	
superior conj	16195 Nov 23 17:17	19° J 23'03	1°06'28	superior conj	16196 Nov 06 17:01	3° J 17'56	0°43'42
minimum elong	16195 Nov 23 14:55	19° J 10'17	1°06'49	minimum elong	16196 Nov 06 14:56	3° J 07'05	0°43'56
	16195 Nov 28 14:28	0° Z		evening rise	16196 Nov 14 01:15	18° J 48'35	
evening rise	16195 Nov 30 15:38	4° Z 25'43			16196 Nov 19 13:09	0° Z	
	16195 Dec 14 05:01	0° \approx		evening max el	16196 Dec 03 17:54	21° Z 18'34	21°17'06
desc. node	16195 Dec 18 07:54	5° \approx 48'15		desc. node	16196 Dec 04 04:54	21° Z 45'09	
evening max el	16195 Dec 23 03:05	11° \approx 12'27	22°55'45	retrograde	16196 Dec 15 15:18	27° Z 11'23	
retrograde	16196 Jan 05 05:23	17° \approx 41'10		evening set	16196 Dec 18 11:38	26° Z 52'36	
evening set	16196 Jan 09 07:29	17° \approx 04'51		inferior conj	16196 Dec 27 04:53	23° Z 02'22	-5°48'59
min. Earth dist.	16196 Jan 16 12:44	13° \approx 45'02	0.54705 AU	minimum elong	16196 Dec 26 22:49	23° Z 10'54	5°47'34
inferior conj	16196 Jan 17 14:02	13° \approx 09'00	-5°58'14	min. Earth dist.	16196 Dec 27 18:06	22° Z 43'43	0.54393 AU
minimum elong	16196 Jan 17 17:13	13° \approx 04'27	5°57'28	morning rise	16197 Jan 04 10:18	19° Z 12'01	
morning rise	16196 Jan 26 04:12	9° \approx 19'34		direct	16197 Jan 08 09:54	18° Z 37'40	
direct	16196 Jan 29 02:14	8° \approx 59'45		morning max el	16197 Jan 21 07:38	24° Z 54'31	22°40'39
morning max el	16196 Feb 09 15:44	14° \approx 34'51	20°59'04		16197 Jan 25 22:05	0° \approx	
asc. node	16196 Feb 11 20:48	16° \approx 54'19		asc. node	16197 Jan 28 18:04	3° \approx 48'39	
	16196 Feb 20 19:12	0° H			16197 Feb 12 03:00	0° H	
morning set	16196 Feb 29 01:21	16° H 06'43		morning set	16197 Feb 12 12:31	0° H 50'26	
	16196 Mar 06 17:00	0° Υ					

superior conj	16197 Feb 19 12:03	15° H 50'10	1°21'26		16197 Dec 27 08:46	0° Z	
minimum elong	16197 Feb 19 14:15	16° H 01'49	1°21'25	morning max el	16198 Jan 02 16:08	4° Z 45'40	24°30'50
max. Earth dist.	16197 Feb 23 01:49	23° H 20'58	1.33679 AU	asc. node	16198 Jan 15 15:18	21° Z 42'31	
	16197 Feb 26 08:33	0° Y			16198 Jan 20 08:25	0° \approx	
evening rise	16197 Feb 27 14:23	2° Y 26'51		morning set	16198 Jan 28 00:32	15° \approx 32'27	
desc. node	16197 Mar 02 05:27	7° Y 29'05					
	16197 Mar 15 09:41	0° Z		superior conj	16198 Feb 03 19:01	0° H 22'15	1°32'42
evening max el	16197 Apr 03 07:40	24° Z 17'49	27°09'36	minimum elong	16198 Feb 03 20:23	0° H 29'50	1°33'01
	16197 Apr 10 15:25	0° H			16198 Feb 03 14:57	0° H	
retrograde	16197 Apr 16 19:38	1° H 49'25		max. Earth dist.	16198 Feb 06 00:59	5° H 16'10	1.32275 AU
	16197 Apr 22 10:42	30° R 8		evening rise	16198 Feb 11 06:08	16° H 13'48	
evening set	16197 Apr 23 09:58	29° Z 18'27		desc. node	16198 Feb 17 02:09	27° H 35'28	
asc. node	16197 Apr 26 15:21	26° Z 18'59			16198 Feb 18 09:35	0° Y	
min. Earth dist.	16197 Apr 27 07:18	25° Z 35'57	0.65375 AU		16198 Mar 10 00:34	0° Z	
inferior conj	16197 Apr 29 15:29	22° Z 57'45	0°54'59	evening max el	16198 Mar 16 20:09	7° Z 30'37	27°34'50
minimum elong	16197 Apr 29 14:05	23° Z 01'44	0°53'57	retrograde	16198 Mar 30 16:20	15° Z 01'31	
morning rise	16197 May 05 19:52	17° Z 27'30		evening set	16198 Apr 06 11:21	12° Z 38'42	
direct	16197 May 08 14:45	16° Z 45'56		min. Earth dist.	16198 Apr 10 05:55	9° Z 25'16	0.63415 AU
morning max el	16197 May 14 21:57	20° Z 01'54	17°59'38	inferior conj	16198 Apr 13 01:27	6° Z 34'19	-0°08'50
	16197 May 22 14:49	0° H		minimum elong	16198 Apr 13 01:44	6° Z 33'36	0°09'05
desc. node	16197 May 29 06:25	10° H 33'23		transit middle	16198 Apr 13 01:44	6° Z 33'36	0°09'05
morning set	16197 Jun 02 02:11	16° H 48'18		transit begin	16198 Apr 12 23:08	6° Z 40'14	
	16197 Jun 10 05:19	0° Z		transit end	16198 Apr 13 04:21	6° Z 26'58	
				asc. node	16198 Apr 13 12:38	6° Z 06'01	
superior conj	16197 Jun 16 12:34	10° Z 01'47	-1°56'06	morning rise	16198 Apr 19 18:40	1° Z 19'23	
minimum elong	16197 Jun 16 04:24	9° Z 29'30	1°56'12	direct	16198 Apr 22 05:09	0° Z 50'25	
max. Earth dist.	16197 Jun 19 19:48	15° Z 12'58	1.45789 AU	morning max el	16198 Apr 28 15:33	4° Z 06'56	17°46'41
	16197 Jun 29 08:28	0° H		morning set	16198 May 15 02:54	29° Z 03'11	
evening rise	16197 Jul 02 14:55	5° H 01'40			16198 May 15 16:10	0° H	
greatest brilliancy	16197 Jul 15 22:57	25° H 12'54	-0.7m	desc. node	16198 May 16 03:20	0° H 47'46	
	16197 Jul 19 06:32	0° H					
asc. node	16197 Jul 23 14:34	5° H 50'05		superior conj	16198 May 27 18:13	20° H 17'06	-1°24'52
evening max el	16197 Jul 27 17:45	10° H 33'08	19°30'41	minimum elong	16198 May 27 10:29	19° H 45'32	1°24'38
retrograde	16197 Aug 03 22:10	14° H 33'15		max. Earth dist.	16198 Jun 02 15:00	29° H 43'46	1.44860 AU
evening set	16197 Aug 07 15:03	13° H 13'50			16198 Jun 02 19:05	0° Z	
inferior conj	16197 Aug 12 23:53	7° H 19'57	2°53'39	evening rise	16198 Jun 12 01:29	14° Z 26'22	
minimum elong	16197 Aug 13 01:24	7° H 14'55	2°53'06		16198 Jun 22 09:36	0° H	
min. Earth dist.	16197 Aug 14 06:04	5° H 40'07	0.67546 AU	asc. node	16198 Jul 10 11:24	24° H 06'45	
morning rise	16197 Aug 18 11:12	0° H 53'28		evening max el	16198 Jul 10 19:45	24° H 27'47	20°31'55
	16197 Aug 19 14:02	30° R 8		retrograde	16198 Jul 18 21:14	29° H 04'14	
direct	16197 Aug 24 08:11	28° H 20'57		evening set	16198 Jul 23 00:44	27° H 26'49	
desc. node	16197 Aug 25 04:36	28° H 23'48		inferior conj	16198 Jul 28 06:39	21° H 21'06	3°06'20
	16197 Aug 29 15:24	0° H		minimum elong	16198 Jul 28 07:16	21° H 18'59	3°05'47
morning max el	16197 Sep 05 12:18	5° H 37'28	25°21'57	min. Earth dist.	16198 Jul 28 23:03	20° H 24'42	0.68558 AU
	16197 Sep 24 09:07	0° Z		morning rise	16198 Aug 02 13:30	14° H 58'06	
morning set	16197 Oct 11 09:35	27° Z 55'32		direct	16198 Aug 07 22:57	12° H 37'06	
	16197 Oct 12 13:06	0° H		desc. node	16198 Aug 12 01:57	13° H 44'29	
max. Earth dist.	16197 Oct 14 22:41	4° H 25'45	1.36303 AU	morning max el	16198 Aug 18 23:18	19° H 11'37	23°55'00
asc. node	16197 Oct 19 15:48	13° H 28'03			16198 Aug 28 03:13	0° H	
					16198 Sep 17 11:58	0° Z	
superior conj	16197 Oct 21 07:44	16° H 45'35	0°15'01	morning set	16198 Sep 23 03:06	9° Z 20'51	
minimum elong	16197 Oct 21 06:49	16° H 41'01	0°15'18	max. Earth dist.	16198 Sep 26 21:36	15° Z 53'11	1.38674 AU
behind sun begin	16197 Oct 21 04:47	16° H 30'55					
behind sun end	16197 Oct 21 08:50	16° H 51'07		superior conj	16198 Oct 04 09:52	29° Z 37'41	-0°18'44
	16197 Oct 27 20:06	0° Z		minimum elong	16198 Oct 04 11:11	29° Z 43'54	0°18'13
evening rise	16197 Oct 29 07:33	3° Z 01'27			16198 Oct 04 14:35	0° H	
	16197 Nov 14 00:02	0° Z		asc. node	16198 Oct 06 12:32	3° H 39'24	
evening max el	16197 Nov 15 21:46	2° Z 04'24	19°55'47	evening rise	16198 Oct 13 08:00	16° H 58'14	
desc. node	16197 Nov 21 02:00	5° Z 57'13			16198 Oct 20 04:26	0° Z	
retrograde	16197 Nov 26 04:35	7° Z 12'11		evening max el	16198 Oct 29 15:50	13° Z 40'14	18°56'35
evening set	16197 Nov 28 06:42	7° Z 00'28		retrograde	16198 Nov 07 09:26	18° Z 04'33	
inferior conj	16197 Dec 07 00:50	3° Z 01'11	-4°42'06	desc. node	16198 Nov 07 23:11	18° Z 03'28	
minimum elong	16197 Dec 06 14:48	3° Z 16'29	4°38'37	evening set	16198 Nov 09 06:49	17° Z 52'58	
min. Earth dist.	16197 Dec 09 00:41	1° Z 48'13	0.55020 AU	inferior conj	16198 Nov 17 13:58	13° Z 35'13	-3°03'06
	16197 Dec 12 06:10	30° R 8		minimum elong	16198 Nov 17 06:29	13° Z 48'22	2°59'37
morning rise	16197 Dec 14 21:45	28° Z 51'23		min. Earth dist.	16198 Nov 20 11:55	11° Z 32'35	0.56462 AU
direct	16197 Dec 19 22:29	27° Z 56'02		morning rise	16198 Nov 25 03:22	8° Z 51'14	

direct	16198 Nov 30 23:29	7° ♄ 30'40		morning max el	16199 Nov 26 21:44	25° ♄ 26'10	27°22'47
morning max el	16198 Dec 15 03:02	14° ♄ 46'33	26°10'52		16199 Dec 01 03:56	0° ♄	
	16198 Dec 27 06:41	0° ♄		asc. node	16199 Dec 20 09:35	29° ♄ 32'20	
asc. node	16199 Jan 02 12:29	10° ♄ 20'59			16199 Dec 20 15:26	0° ♄	
morning set	16199 Jan 12 11:34	0° \approx 07'30		morning set	16199 Dec 27 19:50	14° ♄ 30'53	
	16199 Jan 12 10:10	0° \approx					
superior conj	16199 Jan 19 05:10	15° \approx 00'14	1°37'48	superior conj	16200 Jan 03 16:36	29° ♄ 38'42	1°36'52
minimum elong	16199 Jan 19 05:32	15° \approx 02'15	1°38'21	minimum elong	16200 Jan 03 15:55	29° ♄ 34'50	1°37'30
max. Earth dist.	16199 Jan 20 05:59	17° \approx 18'21	1.31367 AU	max. Earth dist.	16200 Jan 03 13:34	29° ♄ 21'40	1.30988 AU
evening rise	16199 Jan 26 05:48	0° ♄ 18'37		evening rise	16200 Jan 03 20:24	0° \approx	
	16199 Jan 26 02:15	0° ♄			16200 Jan 10 11:05	14° \approx 35'52	
desc. node	16199 Feb 03 22:52	17° ♄ 22'39		desc. node	16200 Jan 18 02:18	0° ♄	
	16199 Feb 11 10:43	0° ♄			16200 Jan 21 19:37	6° ♄ 43'16	
evening max el	16199 Feb 27 04:47	20° ♄ 04'38	27°28'33	evening max el	16200 Feb 07 10:59	0° ♄	
retrograde	16199 Mar 13 04:47	27° ♄ 28'51		retrograde	16200 Feb 09 07:04	1° ♄ 49'47	26°47'20
evening set	16199 Mar 19 23:33	25° ♄ 21'24		evening set	16200 Feb 23 07:47	9° ♄ 03'32	
min. Earth dist.	16199 Mar 23 18:34	22° ♄ 30'25	0.61220 AU	min. Earth dist.	16200 Mar 01 19:20	7° ♄ 18'23	
inferior conj	16199 Mar 26 22:13	19° ♄ 41'30	-1°26'33	inferior conj	16200 Mar 05 20:57	4° ♄ 39'32	0.58964 AU
minimum elong	16199 Mar 27 01:20	19° ♄ 34'30	1°25'27	minimum elong	16200 Mar 09 02:00	2° ♄ 09'50	-2°55'07
asc. node	16199 Mar 31 09:58	16° ♄ 06'29			16200 Mar 09 08:43	1° ♄ 56'44	2°52'34
morning rise	16199 Apr 03 06:26	14° ♄ 44'54			16200 Mar 12 00:03	30° ♄	
direct	16199 Apr 05 10:00	14° ♄ 25'11		morning rise	16200 Mar 17 01:41	27° ♄ 33'57	
morning max el	16199 Apr 12 08:16	17° ♄ 53'46	17°51'39	asc. node	16200 Mar 18 07:16	27° ♄ 21'56	
	16199 Apr 21 01:26	0° ♄		direct	16200 Mar 19 00:57	27° ♄ 19'56	
morning set	16199 Apr 28 00:18	12° ♄ 14'50			16200 Mar 25 12:24	0° ♄	
desc. node	16199 May 03 00:09	21° ♄ 11'59		morning max el	16200 Mar 26 20:30	1° ♄ 12'16	18°15'47
	16199 May 08 00:43	0° ♄		morning set	16200 Apr 11 12:42	26° ♄ 06'45	
					16200 Apr 13 14:06	0° ♄	
superior conj	16199 May 08 23:04	1° ♄ 36'06	-0°47'24	desc. node	16200 Apr 19 20:54	11° ♄ 42'06	
minimum elong	16199 May 08 18:49	1° ♄ 17'52	0°47'20	superior conj	16200 Apr 21 02:07	13° ♄ 54'48	-0°10'08
max. Earth dist.	16199 May 16 06:11	13° ♄ 47'44	1.43296 AU	minimum elong	16200 Apr 21 01:18	13° ♄ 51'07	0°10'26
evening rise	16199 May 22 19:34	24° ♄ 16'19		behind sun begin	16200 Apr 20 19:36	13° ♄ 25'20	
	16199 May 26 12:17	0° ♄		behind sun end	16200 Apr 21 07:00	14° ♄ 16'51	
	16199 Jun 16 11:00	0° ♄		max. Earth dist.	16200 Apr 28 16:10	27° ♄ 12'03	1.41271 AU
evening max el	16199 Jun 23 15:48	8° ♄ 21'40	21°44'58		16200 Apr 30 08:05	0° ♄	
asc. node	16199 Jun 27 08:19	11° ♄ 33'37		evening rise	16200 May 03 08:09	4° ♄ 57'14	
retrograde	16199 Jul 02 19:45	13° ♄ 41'59			16200 May 19 17:17	0° ♄	
evening set	16199 Jul 07 10:24	11° ♄ 47'25		evening max el	16200 Jun 06 07:31	22° ♄ 15'38	23°05'15
inferior conj	16199 Jul 12 16:01	5° ♄ 31'24	3°07'40	asc. node	16200 Jun 14 05:17	27° ♄ 54'44	
minimum elong	16199 Jul 12 15:40	5° ♄ 32'35	3°07'02	retrograde	16200 Jun 16 16:11	28° ♄ 20'36	
min. Earth dist.	16199 Jul 12 19:06	5° ♄ 20'38	0.69082 AU	evening set	16200 Jun 21 18:21	26° ♄ 10'53	
	16199 Jul 17 01:14	30° ♄		min. Earth dist.	16200 Jun 26 16:03	20° ♄ 21'06	0.69112 AU
morning rise	16199 Jul 17 20:46	29° ♄ 14'22		inferior conj	16200 Jun 27 01:59	19° ♄ 46'40	2°58'28
direct	16199 Jul 22 17:59	27° ♄ 09'28		minimum elong	16200 Jun 27 00:47	19° ♄ 50'53	2°57'37
	16199 Jul 29 06:38	0° ♄		morning rise	16200 Jul 02 07:07	13° ♄ 37'21	
desc. node	16199 Jul 29 23:14	0° ♄ 33'40		direct	16200 Jul 06 16:12	11° ♄ 51'07	
morning max el	16199 Aug 01 11:53	2° ♄ 54'01	22°26'09	morning max el	16200 Jul 15 04:42	16° ♄ 45'14	21°03'07
	16199 Aug 22 03:08	0° ♄		desc. node	16200 Jul 16 20:27	18° ♄ 29'14	
morning set	16199 Sep 03 21:44	19° ♄ 48'19			16200 Jul 25 22:59	0° ♄	
max. Earth dist.	16199 Sep 08 22:31	28° ♄ 06'32	1.41058 AU	morning set	16200 Aug 14 17:13	29° ♄ 17'43	
	16199 Sep 10 01:24	0° ♄			16200 Aug 15 04:03	0° ♄	
				max. Earth dist.	16200 Aug 22 05:10	11° ♄ 12'40	1.43182 AU
superior conj	16199 Sep 16 19:15	11° ♄ 44'54	-0°55'27	superior conj	16200 Aug 29 07:33	22° ♄ 57'48	-1°31'14
minimum elong	16199 Sep 16 23:42	12° ♄ 04'46	0°54'39	minimum elong	16200 Aug 29 14:53	23° ♄ 28'49	1°30'30
asc. node	16199 Sep 23 09:16	23° ♄ 47'39			16200 Sep 02 10:10	0° ♄	
evening rise	16199 Sep 26 23:22	0° ♄ 30'56		evening rise	16200 Sep 10 01:22	13° ♄ 28'12	
	16199 Sep 26 16:47	0° ♄		asc. node	16200 Sep 10 05:58	13° ♄ 48'41	
evening max el	16199 Oct 12 21:00	26° ♄ 02'01	18°19'24		16200 Sep 19 14:49	0° ♄	
retrograde	16199 Oct 20 09:38	29° ♄ 52'07		evening max el	16200 Sep 26 09:00	8° ♄ 59'44	18°02'35
evening set	16199 Oct 22 10:32	29° ♄ 35'55		retrograde	16200 Oct 03 02:52	12° ♄ 28'13	
desc. node	16199 Oct 25 20:23	28° ♄ 03'57		evening set	16200 Oct 05 10:55	12° ♄ 03'13	
inferior conj	16199 Oct 30 00:53	24° ♄ 57'02	-1°20'57	inferior conj	16200 Oct 12 08:12	7° ♄ 04'04	0°07'26
minimum elong	16199 Oct 29 21:48	25° ♄ 03'21	1°19'09	minimum elong	16200 Oct 12 08:27	7° ♄ 03'29	0°07'42
min. Earth dist.	16199 Nov 02 06:55	22° ♄ 17'24	0.58470 AU	transit middle	16200 Oct 12 08:27	7° ♄ 03'29	0°07'42
morning rise	16199 Nov 06 05:36	19° ♄ 36'12		transit begin	16200 Oct 12 05:34	7° ♄ 10'20	
direct	16199 Nov 12 14:49	17° ♄ 48'41					

transit end	16200 Oct 12 11:20	6°♄56'37		inferior conj	16201 Sep 25 08:18	19°♄49'32	1°16'29
desc. node	16200 Oct 12 17:40	6°♄41'30		minimum elong	16201 Sep 25 10:14	19°♄44'21	1°16'00
min. Earth dist.	16200 Oct 15 11:12	4°♄06'53	0.60749 AU	min. Earth dist.	16201 Sep 28 01:25	16°♄55'17	0.63017 AU
morning rise	16200 Oct 19 02:53	1°♄13'08		desc. node	16201 Sep 29 14:58	15°♄22'40	
	16200 Oct 21 08:14	30°♄8'♂		morning rise	16201 Oct 01 16:39	13°♄38'12	
direct	16200 Oct 25 18:43	29°♄01'44		direct	16201 Oct 08 08:45	11°♄10'04	
	16200 Oct 30 10:11	0°♄		morning max el	16201 Oct 22 08:08	19°♄08'10	27°51'37
morning max el	16200 Nov 09 00:09	6°♄54'01	27°56'41		16201 Oct 31 14:06	0°♄	
	16200 Nov 26 12:30	0°♄♂			16201 Nov 19 11:01	0°♄♂	
asc. node	16200 Dec 07 06:37	19°♄07'01		asc. node	16201 Nov 24 03:35	8°♄58'37	
morning set	16200 Dec 11 23:21	28°♄36'50		morning set	16201 Nov 25 19:55	12°♄20'46	
	16200 Dec 12 15:11	0°♄♂		max. Earth dist.	16201 Nov 30 21:30	22°♄56'45	1.31915 AU
max. Earth dist.	16200 Dec 17 19:56	11°♄16'46	1.31164 AU				
				superior conj	16201 Dec 03 11:37	28°♄33'59	1°16'48
superior conj	16200 Dec 19 03:23	14°♄11'30	1°29'53	minimum elong	16201 Dec 03 09:23	28°♄21'48	1°17'14
minimum elong	16200 Dec 19 01:46	14°♄02'32	1°30'28		16201 Dec 04 03:18	0°♄♂	
evening rise	16200 Dec 25 19:55	28°♄59'59		evening rise	16201 Dec 10 06:31	13°♄27'12	
	16200 Dec 26 07:02	0°♄♂			16201 Dec 18 10:38	0°♄♂	
desc. node	16201 Jan 08 16:25	25°♄26'39		desc. node	16201 Dec 26 13:17	13°♄19'53	
	16201 Jan 11 15:19	0°♄♂		evening max el	16202 Jan 03 12:13	22°♄50'55	23°55'34
evening max el	16201 Jan 22 01:12	12°♄41'48	25°33'04	retrograde	16202 Jan 17 00:22	29°♄32'47	
retrograde	16201 Feb 04 23:00	19°♄41'48		evening set	16202 Jan 21 20:04	28°♄42'26	
evening set	16201 Feb 10 19:03	18°♄23'54		min. Earth dist.	16202 Jan 27 23:45	25°♄42'40	0.55296 AU
min. Earth dist.	16201 Feb 15 14:02	15°♄43'10	0.56888 AU	inferior conj	16202 Jan 29 20:00	24°♄36'51	-5°36'17
inferior conj	16201 Feb 18 09:31	13°♄49'32	-4°25'01	minimum elong	16202 Jan 30 03:22	24°♄25'52	5°34'38
minimum elong	16201 Feb 18 18:51	13°♄33'48	4°22'01	morning rise	16202 Feb 07 12:20	20°♄40'35	
morning rise	16201 Feb 26 21:32	9°♄34'55		direct	16202 Feb 09 23:27	20°♄25'15	
direct	16201 Feb 28 21:53	9°♄22'43		asc. node	16202 Feb 20 01:54	25°♄04'23	
asc. node	16201 Mar 05 04:35	10°♄21'15		morning max el	16202 Feb 20 14:40	25°♄34'36	20°09'23
morning max el	16201 Mar 10 00:02	13°♄49'45	19°01'05		16202 Feb 24 11:52	0°♄♂	
	16201 Mar 21 01:09	0°♄♂		morning set	16202 Mar 10 17:11	24°♄59'46	
morning set	16201 Mar 26 11:31	10°♄25'18			16202 Mar 13 03:44	0°♄♂	
superior conj	16201 Apr 03 23:19	27°♄01'44	0°23'13	superior conj	16202 Mar 18 10:20	10°♄44'43	0°50'50
minimum elong	16201 Apr 04 00:45	27°♄08'33	0°22'42	minimum elong	16202 Mar 18 12:45	10°♄56'51	0°50'22
	16201 Apr 05 12:56	0°♄♂		max. Earth dist.	16202 Mar 24 05:31	22°♄03'02	1.36733 AU
desc. node	16201 Apr 06 17:37	2°♄14'13		desc. node	16202 Mar 24 14:18	22°♄44'24	
max. Earth dist.	16201 Apr 10 22:40	9°♄54'26	1.39002 AU	evening rise	16202 Mar 27 23:28	28°♄58'36	
evening rise	16201 Apr 14 18:06	16°♄33'53			16202 Mar 28 13:06	0°♄♂	
	16201 Apr 22 22:14	0°♄♂			16202 Apr 16 05:13	0°♄♂	
	16201 May 14 06:22	0°♄♂		evening max el	16202 May 02 10:54	20°♄05'13	25°41'42
evening max el	16201 May 19 21:19	6°♄11'10	24°26'33	retrograde	16202 May 14 21:45	27°♄16'10	
retrograde	16201 May 31 09:13	12°♄54'23		asc. node	16202 May 18 23:23	26°♄09'15	
asc. node	16201 Jun 01 02:17	12°♄52'15		evening set	16202 May 20 22:31	24°♄46'13	
evening set	16201 Jun 05 22:57	10°♄32'33		min. Earth dist.	16202 May 25 04:08	20°♄10'31	0.67729 AU
min. Earth dist.	16201 Jun 10 11:48	5°♄20'06	0.68657 AU	inferior conj	16202 May 26 16:07	18°♄15'46	2°08'07
inferior conj	16201 Jun 11 10:42	4°♄03'09	2°38'48	minimum elong	16202 May 26 13:56	18°♄22'45	2°06'50
minimum elong	16201 Jun 11 08:49	4°♄09'29	2°37'42	morning rise	16202 Jun 01 05:54	12°♄26'03	
	16201 Jun 14 16:16	30°♄8'♂		direct	16202 Jun 04 16:22	11°♄18'27	
morning rise	16201 Jun 16 18:48	28°♄02'57		morning max el	16202 Jun 11 10:45	14°♄57'30	18°55'09
direct	16201 Jun 20 16:13	26°♄36'16		desc. node	16202 Jun 20 14:43	26°♄34'44	
	16201 Jun 27 08:18	0°♄♂			16202 Jun 22 22:31	0°♄♂	
morning max el	16201 Jun 28 04:06	0°♄46'59	19°51'41	greatest brilliancy	16202 Jun 24 19:08	2°♄47'30	-0.7m
desc. node	16201 Jul 03 17:37	7°♄14'04		morning set	16202 Jul 04 07:28	17°♄24'37	
	16201 Jul 19 12:50	0°♄♂			16202 Jul 12 10:16	0°♄♂	
morning set	16201 Jul 24 22:17	8°♄13'02		max. Earth dist.	16202 Jul 18 12:49	9°♄30'42	1.45780 AU
max. Earth dist.	16201 Aug 04 18:27	25°♄05'42	1.44811 AU				
	16201 Aug 07 20:25	0°♄♂		superior conj	16202 Jul 20 13:04	12°♄39'30	-2°13'51
				minimum elong	16202 Jul 20 14:53	12°♄46'39	2°14'24
superior conj	16201 Aug 09 20:24	3°♄12'47	-1°59'52		16202 Jul 31 11:51	0°♄♂	
minimum elong	16201 Aug 10 03:42	3°♄42'14	1°59'45	evening rise	16202 Aug 04 16:51	6°♄46'04	
evening rise	16201 Aug 23 08:52	25°♄37'25		asc. node	16202 Aug 14 23:20	23°♄11'41	
	16201 Aug 25 22:51	0°♄♂			16202 Aug 19 13:45	0°♄♂	
asc. node	16201 Aug 28 02:39	3°♄38'35		evening max el	16202 Aug 24 14:03	6°♄04'09	18°24'45
evening max el	16201 Sep 09 23:52	22°♄23'45	18°04'42	retrograde	16202 Aug 31 00:06	9°♄30'02	
retrograde	16201 Sep 16 09:07	25°♄44'10		evening set	16202 Sep 03 01:36	8°♄37'38	
evening set	16201 Sep 19 01:36	25°♄06'51		inferior conj	16202 Sep 08 21:08	3°♄04'32	2°06'47

minimum elong	16202 Sep 08 23:27	2°♎57'37	2°06'07	evening set	16203 Aug 18 07:20	22°♎28'59	
min. Earth dist.	16202 Sep 11 01:12	0°♎30'11	0.65062 AU	inferior conj	16203 Aug 23 19:09	16°♎42'03	2°40'38
	16202 Sep 11 11:46	30°♎		minimum elong	16203 Aug 23 21:05	16°♎35'50	2°40'02
morning rise	16202 Sep 14 19:56	26°♎41'47		min. Earth dist.	16203 Aug 25 09:17	14°♎39'55	0.66759 AU
desc. node	16202 Sep 16 12:19	25°♎30'10		morning rise	16203 Aug 29 10:03	10°♎15'09	
direct	16202 Sep 21 07:06	24°♎05'34		desc. node	16203 Sep 03 09:42	7°♎44'10	
	16202 Oct 02 17:27	0°♎		direct	16203 Sep 04 12:48	7°♎39'12	
morning max el	16202 Oct 04 19:06	1°♎58'50	27°12'34	morning max el	16203 Sep 17 06:45	15°♎14'04	26°07'27
	16202 Oct 25 19:02	0°♎			16203 Sep 29 10:34	0°♎	
morning set	16202 Nov 09 06:53	25°♎36'51			16203 Oct 18 14:37	0°♎	
asc. node	16202 Nov 11 00:28	29°♎01'28		morning set	16203 Oct 23 04:56	8°♎17'22	
	16202 Nov 11 12:12	0°♎		max. Earth dist.	16203 Oct 26 22:54	15°♎23'35	1.35057 AU
max. Earth dist.	16202 Nov 13 15:05	4°♎17'50	1.33226 AU	asc. node	16203 Oct 28 21:18	19°♎10'43	
superior conj	16202 Nov 17 15:10	12°♎40'35	0°57'34	superior conj	16203 Nov 01 11:26	26°♎24'25	0°32'12
minimum elong	16202 Nov 17 12:49	12°♎28'08	0°57'50	minimum elong	16203 Nov 01 09:43	26°♎15'40	0°32'26
evening rise	16202 Nov 24 17:04	27°♎53'11			16203 Nov 03 05:17	0°♎	
	16202 Nov 25 16:59	0°♎		evening rise	16203 Nov 09 01:35	12°♎12'26	
desc. node	16202 Dec 13 10:14	0°♎05'35			16203 Nov 18 05:34	0°♎	
	16202 Dec 13 08:19	0°♎		evening max el	16203 Nov 27 18:18	13°♎06'10	20°39'52
evening max el	16202 Dec 15 22:40	2°♎46'33	22°12'13	desc. node	16203 Nov 30 07:18	15°♎20'46	
retrograde	16202 Dec 28 13:57	9°♎01'30		retrograde	16203 Dec 09 00:06	18°♎41'05	
evening set	16203 Jan 01 03:01	8°♎33'44		evening set	16203 Dec 11 10:44	18°♎26'27	
min. Earth dist.	16203 Jan 09 05:19	4°♎55'17	0.54458 AU	inferior conj	16203 Dec 20 05:52	14°♎33'30	-5°26'34
inferior conj	16203 Jan 09 14:39	4°♎42'13	-6°02'02	minimum elong	16203 Dec 19 21:09	14°♎46'06	5°24'11
minimum elong	16203 Jan 09 13:48	4°♎43'25	6°01'24	min. Earth dist.	16203 Dec 21 10:46	13°♎51'44	0.54541 AU
morning rise	16203 Jan 18 01:33	0°♎54'58		morning rise	16203 Dec 28 07:24	10°♎37'10	
direct	16203 Jan 21 10:07	0°♎29'53		direct	16204 Jan 01 17:53	9°♎54'49	
morning max el	16203 Feb 02 14:18	6°♎22'56	21°40'25	morning max el	16204 Jan 15 02:03	16°♎26'44	23°27'38
asc. node	16203 Feb 06 23:13	11°♎16'26		asc. node	16204 Jan 24 20:30	28°♎38'00	
	16203 Feb 18 08:44	0°♎			16204 Jan 25 17:34	0°♎	
morning set	16203 Feb 23 03:00	9°♎42'28		morning set	16204 Feb 07 14:45	24°♎26'02	
					16204 Feb 10 04:37	0°♎	
superior conj	16203 Mar 02 07:29	24°♎53'54	1°12'06	superior conj	16204 Feb 14 11:35	9°♎19'38	1°26'58
minimum elong	16203 Mar 02 09:56	25°♎06'46	1°11'53	minimum elong	16204 Feb 14 13:28	9°♎29'49	1°27'07
	16203 Mar 04 18:39	0°♎		max. Earth dist.	16204 Feb 17 11:36	15°♎44'24	1.33017 AU
max. Earth dist.	16203 Mar 06 17:01	3°♎54'42	1.34684 AU	evening rise	16204 Feb 22 06:49	25°♎35'23	
evening rise	16203 Mar 10 20:53	12°♎02'21			16204 Feb 24 12:53	0°♎	
desc. node	16203 Mar 11 10:59	13°♎09'05		desc. node	16204 Feb 26 07:40	3°♎23'16	
	16203 Mar 20 23:36	0°♎			16204 Mar 13 09:55	0°♎	
	16203 Apr 11 08:32	0°♎		evening max el	16204 Mar 27 13:49	17°♎18'07	27°23'45
evening max el	16203 Apr 15 00:40	3°♎51'03	26°43'13	retrograde	16204 Apr 10 05:56	24°♎51'09	
retrograde	16203 Apr 28 04:57	11°♎18'22		evening set	16204 Apr 16 22:52	22°♎22'24	
evening set	16203 May 04 15:12	8°♎45'38		min. Earth dist.	16204 Apr 20 18:35	18°♎53'09	0.64576 AU
asc. node	16203 May 05 20:32	7°♎41'38		asc. node	16204 Apr 21 17:47	17°♎51'23	
min. Earth dist.	16203 May 08 15:02	4°♎44'51	0.66354 AU	inferior conj	16204 Apr 23 07:59	16°♎07'32	0°29'39
inferior conj	16203 May 10 16:05	2°♎19'32	1°25'29	minimum elong	16204 Apr 23 07:09	16°♎09'46	0°28'52
minimum elong	16203 May 10 14:10	2°♎25'14	1°24'15	morning rise	16204 Apr 29 17:32	10°♎43'48	
	16203 May 12 16:43	30°♎		direct	16204 May 02 08:38	10°♎08'07	
morning rise	16203 May 16 14:20	26°♎41'51		morning max el	16204 May 08 16:16	13°♎22'54	17°52'02
direct	16203 May 19 14:39	25°♎51'34			16204 May 20 11:11	0°♎	
morning max el	16203 May 25 23:36	29°♎12'11	18°15'03	desc. node	16204 May 24 08:43	6°♎27'33	
	16203 May 26 18:32	0°♎		morning set	16204 May 26 00:15	9°♎12'25	
desc. node	16203 Jun 07 11:46	16°♎21'48			16204 Jun 07 16:35	0°♎	
morning set	16203 Jun 14 14:11	27°♎39'36					
	16203 Jun 16 01:22	0°♎		superior conj	16204 Jun 08 16:37	1°♎36'07	-1°44'07
				minimum elong	16204 Jun 08 08:01	1°♎01'44	1°44'02
superior conj	16203 Jun 29 22:09	21°♎52'37	-2°08'03	max. Earth dist.	16204 Jun 13 05:08	8°♎45'54	1.45472 AU
minimum elong	16203 Jun 29 16:24	21°♎30'10	2°08'29	evening rise	16204 Jun 24 13:36	26°♎21'04	
max. Earth dist.	16203 Jul 01 09:22	24°♎09'58	1.46004 AU		16204 Jun 26 22:59	0°♎	
	16203 Jul 05 03:17	0°♎		greatest brilliancy	16204 Jul 09 07:07	18°♎25'30	-0.6m
evening rise	16203 Jul 16 00:02	16°♎53'29			16204 Jul 17 20:17	0°♎	
	16203 Jul 24 11:10	0°♎		asc. node	16204 Jul 18 16:52	1°♎01'13	
greatest brilliancy	16203 Jul 26 15:25	3°♎19'14	-0.8m	evening max el	16204 Jul 21 06:11	3°♎47'42	19°55'02
asc. node	16203 Aug 01 20:04	12°♎21'53		retrograde	16204 Jul 28 18:59	8°♎02'34	
evening max el	16203 Aug 08 00:47	19°♎53'51	19°01'54	evening set	16204 Aug 01 16:12	6°♎35'37	
retrograde	16203 Aug 14 20:19	23°♎38'12					

inferior conj	16204 Aug 06 23:27	0° \mathbb{M} 36'27	3°00'30	asc. node	16205 Jul 05 13:42	18° Ω 58'26	
minimum elong	16204 Aug 07 00:36	0° \mathbb{M} 32'33	2°59'57	retrograde	16205 Jul 12 17:57	22° Ω 36'46	
	16204 Aug 07 10:14	30° \mathbb{K} Ω		evening set	16205 Jul 17 02:03	20° Ω 52'09	
min. Earth dist.	16204 Aug 07 23:45	29° Ω 14'27	0.68029 AU	inferior conj	16205 Jul 22 07:33	14° Ω 42'02	3°08'15
morning rise	16204 Aug 12 08:33	24° Ω 10'46		minimum elong	16205 Jul 22 07:46	14° Ω 41'19	3°07'40
direct	16204 Aug 18 00:41	21° Ω 42'24		min. Earth dist.	16205 Jul 22 18:20	14° Ω 04'37	0.68836 AU
desc. node	16204 Aug 20 07:04	22° Ω 02'46		morning rise	16205 Jul 27 13:11	8° Ω 21'11	
morning max el	16204 Aug 29 17:50	28° Ω 43'19	24°45'44	direct	16205 Aug 01 17:33	6° Ω 06'19	
	16204 Aug 30 23:21	0° \mathbb{M}		desc. node	16205 Aug 07 04:22	8° Ω 03'48	
	16204 Sep 22 04:19	0° $\underline{\Omega}$		morning max el	16205 Aug 12 05:00	12° Ω 20'23	23°16'55
morning set	16204 Oct 04 10:11	20° $\underline{\Omega}$ 13'50			16205 Aug 26 09:19	0° \mathbb{M}	
max. Earth dist.	16204 Oct 07 23:04	26° $\underline{\Omega}$ 33'42	1.37288 AU		16205 Sep 15 00:07	0° $\underline{\Omega}$	
	16204 Oct 09 19:54	0° \mathbb{M}		morning set	16205 Sep 15 18:16	1° $\underline{\Omega}$ 15'24	
				max. Earth dist.	16205 Sep 19 21:47	8° $\underline{\Omega}$ 17'17	1.39704 AU
superior conj	16204 Oct 14 21:19	9° \mathbb{M} 38'31	0°01'14	superior conj	16205 Sep 27 16:53	22° $\underline{\Omega}$ 13'10	-0°34'07
minimum elong	16204 Oct 14 21:13	9° \mathbb{M} 38'01	0°01'36	minimum elong	16205 Sep 27 19:27	22° $\underline{\Omega}$ 25'01	0°33'28
behind sun begin	16204 Oct 14 14:37	9° \mathbb{M} 05'52		asc. node	16205 Oct 01 14:47	29° $\underline{\Omega}$ 33'20	
behind sun end	16204 Oct 15 03:49	10° \mathbb{M} 10'15			16205 Oct 01 20:24	0° \mathbb{M}	
asc. node	16204 Oct 14 18:04	9° \mathbb{M} 22'42		evening rise	16205 Oct 07 02:47	10° \mathbb{M} 07'20	
evening rise	16204 Oct 23 05:47	26° \mathbb{M} 19'44			16205 Oct 18 06:05	0° \mathbb{X}	
	16204 Oct 25 01:49	0° \mathbb{X}		evening max el	16205 Oct 23 03:52	6° \mathbb{X} 10'53	18°38'09
evening max el	16204 Nov 09 04:29	24° \mathbb{X} 13'52	19°27'50	retrograde	16205 Oct 31 07:41	10° \mathbb{X} 18'39	
desc. node	16204 Nov 16 04:25	28° \mathbb{X} 41'38		evening set	16205 Nov 02 06:03	10° \mathbb{X} 05'33	
retrograde	16204 Nov 18 18:59	29° \mathbb{X} 02'22		desc. node	16205 Nov 03 01:35	9° \mathbb{X} 52'33	
evening set	16204 Nov 20 17:29	28° \mathbb{X} 51'30		inferior conj	16205 Nov 10 06:24	5° \mathbb{X} 39'05	-2°18'46
inferior conj	16204 Nov 29 08:10	24° \mathbb{X} 45'26	-4°02'10	minimum elong	16205 Nov 10 00:48	5° \mathbb{X} 49'36	2°15'56
minimum elong	16204 Nov 28 22:41	25° \mathbb{X} 00'45	3°58'20	min. Earth dist.	16205 Nov 13 09:33	3° \mathbb{X} 18'37	0.57274 AU
min. Earth dist.	16204 Dec 01 19:22	23° \mathbb{X} 09'59	0.55545 AU	morning rise	16205 Nov 17 16:21	0° \mathbb{X} 39'22	
morning rise	16204 Dec 07 01:50	20° \mathbb{X} 21'50			16205 Nov 19 04:26	30° \mathbb{R} \mathbb{M}	
direct	16204 Dec 12 11:33	19° \mathbb{X} 15'57		direct	16205 Nov 23 19:10	29° \mathbb{M} 06'58	
morning max el	16204 Dec 26 10:39	26° \mathbb{X} 18'18	25°15'44		16205 Nov 28 11:27	0° \mathbb{X}	
	16204 Dec 29 23:07	0° \mathbb{Z}		morning max el	16205 Dec 08 00:20	6° \mathbb{X} 32'24	26°45'33
asc. node	16205 Jan 10 17:44	16° \mathbb{Z} 52'35			16205 Dec 25 08:43	0° \mathbb{Z}	
	16205 Jan 17 18:13	0° \approx		asc. node	16205 Dec 28 14:53	5° \mathbb{Z} 46'16	
morning set	16205 Jan 22 02:32	9° \approx 05'28		morning set	16206 Jan 06 12:36	23° \mathbb{Z} 35'53	
					16206 Jan 09 10:58	0° \approx	
superior conj	16205 Jan 28 20:10	23° \approx 55'05	1°35'36	superior conj	16206 Jan 13 07:06	8° \approx 33'55	1°38'08
minimum elong	16205 Jan 28 21:08	24° \approx 00'24	1°36'02	minimum elong	16206 Jan 13 07:00	8° \approx 33'24	1°38'45
max. Earth dist.	16205 Jan 30 13:18	27° \approx 41'31	1.31824 AU	max. Earth dist.	16206 Jan 13 19:48	9° \approx 44'56	1.31143 AU
	16205 Jan 31 14:41	0° \mathbb{X}		evening rise	16206 Jan 20 04:34	23° \approx 41'41	
evening rise	16205 Feb 05 02:14	9° \mathbb{X} 30'40			16206 Jan 23 05:32	0° \mathbb{X}	
desc. node	16205 Feb 12 04:22	23° \mathbb{X} 22'03		desc. node	16206 Jan 30 01:06	12° \mathbb{X} 59'04	
	16205 Feb 15 21:38	0° \mathbb{Y}			16206 Feb 09 17:54	0° \mathbb{Y}	
	16205 Mar 09 18:29	0° \mathbb{Z}		evening max el	16206 Feb 20 07:23	12° \mathbb{Y} 30'49	27°15'27
evening max el	16205 Mar 10 00:53	0° \mathbb{Z} 15'26	27°36'18	retrograde	16206 Mar 06 08:11	19° \mathbb{Y} 50'26	
retrograde	16205 Mar 23 23:35	7° \mathbb{Z} 44'48		evening set	16206 Mar 13 00:37	17° \mathbb{Y} 52'07	
evening set	16205 Mar 30 18:59	5° \mathbb{Z} 27'41		min. Earth dist.	16206 Mar 16 21:41	15° \mathbb{Y} 07'27	0.60251 AU
min. Earth dist.	16205 Apr 03 13:12	2° \mathbb{Z} 24'36	0.62495 AU	inferior conj	16206 Mar 20 02:47	12° \mathbb{Y} 24'53	-2°03'11
	16205 Apr 06 01:21	30° \mathbb{K} \mathbb{Y}		minimum elong	16206 Mar 20 07:23	12° \mathbb{Y} 15'06	2°01'26
inferior conj	16205 Apr 06 12:44	29° \mathbb{Y} 32'21	-0°40'13	asc. node	16206 Mar 26 12:24	8° \mathbb{Y} 01'33	
minimum elong	16205 Apr 06 14:05	29° \mathbb{Y} 29'05	0°39'58	morning rise	16206 Mar 27 17:38	7° \mathbb{Y} 36'28	
asc. node	16205 Apr 08 15:05	27° \mathbb{Y} 34'48		direct	16206 Mar 29 18:55	7° \mathbb{Y} 19'36	
morning rise	16205 Apr 13 12:08	24° \mathbb{Y} 24'52		morning max el	16206 Apr 06 01:06	10° \mathbb{Y} 57'09	17°59'27
direct	16205 Apr 15 19:19	24° \mathbb{Y} 00'23			16206 Apr 18 15:54	0° \mathbb{Z}	
morning max el	16205 Apr 22 09:52	27° \mathbb{Y} 21'02	17°46'31	morning set	16206 Apr 21 14:54	5° \mathbb{Z} 24'24	
	16205 Apr 24 19:09	0° \mathbb{Z}		desc. node	16206 Apr 28 02:22	17° \mathbb{Z} 13'51	
morning set	16205 May 08 10:26	21° \mathbb{Z} 53'03					
desc. node	16205 May 11 05:34	26° \mathbb{Z} 46'22		superior conj	16206 May 01 22:28	24° \mathbb{Z} 03'05	-0°31'17
	16205 May 13 02:10	0° \mathbb{I}		minimum elong	16206 May 01 19:47	23° \mathbb{Z} 51'19	0°31'22
superior conj	16205 May 20 07:48	12° \mathbb{I} 17'30	-1°09'17		16206 May 05 08:58	0° \mathbb{I}	
minimum elong	16205 May 20 01:24	11° \mathbb{I} 50'50	1°09'04	max. Earth dist.	16206 May 09 11:27	6° \mathbb{I} 54'04	1.42479 AU
max. Earth dist.	16205 May 26 22:14	23° \mathbb{I} 04'37	1.44256 AU	evening rise	16206 May 15 02:34	16° \mathbb{I} 02'01	
	16205 May 31 07:00	0° \mathbb{S}			16206 May 24 03:46	0° \mathbb{S}	
evening rise	16205 Jun 04 01:20	5° \mathbb{S} 51'15			16206 Jun 15 10:21	0° Ω	
	16205 Jun 20 07:01	0° Ω		evening max el	16206 Jun 16 23:40	1° Ω 36'49	22°18'40
evening max el	16205 Jul 04 05:34	17° Ω 42'10	21°01'55				

asc. node	16206 Jun 22 10:37	5°♎59'54		16207 Apr 27 18:11	0°♊	
retrograde	16206 Jun 26 15:35	7°♎15'51		16207 May 17 18:09	0°♊	
evening set	16206 Jul 01 11:10	5°♎14'34		evening max el	16207 May 30 14:17	15°♊31'23 23°40'05
	16206 Jul 05 22:43	30°♋♊		asc. node	16207 Jun 09 07:36	21°♊47'54
inferior conj	16206 Jul 06 17:24	28°♊55'03 3°05'02		retrograde	16207 Jun 10 10:38	21°♊53'20
minimum elong	16206 Jul 06 16:40	28°♊57'36 3°04'19		evening set	16207 Jun 15 17:53	19°♊37'46
min. Earth dist.	16206 Jul 06 14:58	29°♊03'34 0.69157 AU		min. Earth dist.	16207 Jun 20 11:32	14°♊04'11 0.68981 AU
morning rise	16206 Jul 11 22:01	22°♊41'16		inferior conj	16207 Jun 21 03:02	13°♊11'00 2°51'23
direct	16206 Jul 16 14:08	20°♊43'55		minimum elong	16207 Jun 21 01:31	13°♊16'15 2°50'27
desc. node	16206 Jul 25 01:37	25°♊23'43		morning rise	16207 Jun 26 09:08	7°♊05'42
morning max el	16206 Jul 25 18:55	26°♊06'01 21°49'46		direct	16207 Jun 30 13:12	5°♊27'52
	16206 Jul 29 08:29	0°♎		morning max el	16207 Jul 08 14:24	10°♊01'55 20°31'09
	16206 Aug 19 20:39	0°♐		desc. node	16207 Jul 11 22:49	13°♊41'59
morning set	16206 Aug 27 02:38	11°♐16'54			16207 Jul 23 23:39	0°♎
max. Earth dist.	16206 Sep 02 01:12	20°♐54'43 1.42016 AU		morning set	16207 Aug 06 14:17	20°♎27'20
	16206 Sep 07 10:39	0°♏			16207 Aug 12 16:53	0°♐
				max. Earth dist.	16207 Aug 15 11:11	4°♐23'54 1.43945 AU
superior conj	16206 Sep 09 17:48	3°♏58'42 -1°11'01				
minimum elong	16206 Sep 09 23:37	4°♏24'05 1°10'12		superior conj	16207 Aug 21 20:07	14°♐46'32 -1°44'41
asc. node	16206 Sep 18 11:29	19°♏39'13		minimum elong	16207 Aug 22 04:00	15°♐19'11 1°44'09
evening rise	16206 Sep 20 13:01	23°♏26'33			16207 Aug 30 19:46	0°♏
	16206 Sep 24 03:05	0°♌		evening rise	16207 Sep 03 07:49	6°♏05'26
evening max el	16206 Oct 06 12:28	18°♌49'23 18°09'47		asc. node	16207 Sep 05 08:11	9°♏36'23
retrograde	16206 Oct 13 15:39	22°♌28'30			16207 Sep 18 06:31	0°♌
evening set	16206 Oct 15 19:28	22°♌08'55		evening max el	16207 Sep 20 02:05	1°♌59'23 18°01'12
desc. node	16206 Oct 20 22:48	19°♌09'51		retrograde	16207 Sep 26 15:12	5°♌23'11
inferior conj	16206 Oct 23 02:20	17°♌20'49 -0°41'14		evening set	16207 Sep 29 02:41	4°♌53'23
minimum elong	16206 Oct 23 00:53	17°♌24'01 0°40'10			16207 Oct 05 11:45	30°♋♊
min. Earth dist.	16206 Oct 26 08:02	14°♌31'33 0.59433 AU		inferior conj	16207 Oct 05 17:21	29°♏45'56 0°39'04
morning rise	16206 Oct 30 02:57	11°♌46'20		minimum elong	16207 Oct 05 18:30	29°♏43'03 0°38'57
direct	16206 Nov 05 15:49	9°♌48'17		desc. node	16207 Oct 07 20:04	27°♏37'59
morning max el	16206 Nov 19 22:24	17°♌31'54 27°42'04		min. Earth dist.	16207 Oct 08 16:36	26°♏47'45 0.61722 AU
	16206 Nov 30 07:55	0°♌		morning rise	16207 Oct 12 07:34	23°♏44'54
asc. node	16206 Dec 15 11:57	25°♌08'44		direct	16207 Oct 18 23:59	21°♏25'41
	16206 Dec 17 23:25	0°♏		morning max el	16207 Nov 02 03:47	29°♏21'46 27°59'13
morning set	16206 Dec 21 19:06	7°♏52'32			16207 Nov 02 19:01	0°♌
max. Earth dist.	16206 Dec 28 03:31	21°♏46'56 1.31001 AU			16207 Nov 24 07:16	0°♌
				asc. node	16207 Dec 02 08:57	14°♌52'04
superior conj	16206 Dec 28 18:28	23°♏10'36 1°34'39		morning set	16207 Dec 05 20:01	21°♌50'51
minimum elong	16206 Dec 28 17:21	23°♏04'25 1°35'16			16207 Dec 09 16:27	0°♏
	16206 Dec 31 19:40	0°♏		max. Earth dist.	16207 Dec 11 08:34	3°♏38'28 1.31416 AU
evening rise	16207 Jan 04 11:37	8°♏02'45				
	16207 Jan 15 16:33	0°♏		superior conj	16207 Dec 13 04:26	7°♏40'20 1°25'06
desc. node	16207 Jan 16 21:52	2°♏05'30		minimum elong	16207 Dec 13 02:31	7°♏29'43 1°25'37
evening max el	16207 Feb 02 06:27	23°♏53'40 26°19'23		evening rise	16207 Dec 19 21:28	22°♏29'30
	16207 Feb 11 04:01	0°♐			16207 Dec 23 10:41	0°♏
retrograde	16207 Feb 16 06:00	1°♐01'10		desc. node	16208 Jan 03 18:42	20°♏30'16
	16207 Feb 21 06:45	30°♋♊			16208 Jan 10 17:50	0°♏
evening set	16207 Feb 22 12:16	29°♏27'16		evening max el	16208 Jan 14 20:59	4°♏25'09 24°53'24
min. Earth dist.	16207 Feb 26 19:44	26°♏49'44 0.58044 AU		retrograde	16208 Jan 28 15:37	11°♏18'41
inferior conj	16207 Mar 01 22:17	24°♏33'44 -3°34'03		evening set	16208 Feb 03 02:33	10°♏12'23
minimum elong	16207 Mar 02 06:24	24°♏18'52 3°31'05		min. Earth dist.	16208 Feb 08 09:07	7°♏26'02 0.56138 AU
morning rise	16207 Mar 10 03:51	20°♏06'57		inferior conj	16208 Feb 10 20:41	5°♏51'24 -4°59'03
direct	16207 Mar 12 02:55	19°♏54'05		minimum elong	16208 Feb 11 05:59	5°♏36'37 4°56'26
asc. node	16207 Mar 13 09:44	19°♏59'49		morning rise	16208 Feb 19 11:52	1°♏45'42
morning max el	16207 Mar 20 10:07	23°♏59'36 18°32'23		direct	16208 Feb 21 15:23	1°♏32'55
	16207 Mar 25 07:13	0°♐		asc. node	16208 Feb 28 07:03	3°♏45'09
morning set	16207 Apr 05 08:16	19°♐29'31		morning max el	16208 Mar 02 08:44	6°♏16'50 19°27'17
	16207 Apr 10 19:41	0°♏			16208 Mar 17 10:51	0°♐
				morning set	16208 Mar 19 10:23	3°♐56'16
superior conj	16207 Apr 14 09:48	6°♏44'03 0°04'40				
minimum elong	16207 Apr 14 10:07	6°♏45'29 0°04'15		superior conj	16208 Mar 27 13:28	20°♐08'27 0°35'40
behind sun begin	16207 Apr 14 03:14	6°♏13'38		minimum elong	16208 Mar 27 15:27	20°♐18'09 0°35'08
behind sun end	16207 Apr 14 16:59	7°♏17'14		desc. node	16208 Mar 31 19:50	28°♐17'36
desc. node	16207 Apr 14 23:06	7°♏45'27			16208 Apr 01 17:50	0°♏
max. Earth dist.	16207 Apr 21 20:11	20°♏02'37 1.40322 AU		max. Earth dist.	16208 Apr 03 02:12	2°♏28'46 1.38023 AU
evening rise	16207 Apr 26 00:16	27°♏06'59		evening rise	16208 Apr 06 18:52	9°♏05'16

	16208 Apr 19 13:44	0°♄			16209 Mar 24 21:10	0°♄	
evening max el	16208 May 12 03:38	29°♄25'56	24°59'37		16209 Apr 13 09:26	0°♄	
	16208 May 12 17:37	0°♄		evening max el	16209 Apr 24 17:15	13°♄17'44	26°09'59
retrograde	16208 May 24 01:59	6°♄22'58		retrograde	16209 May 07 12:36	20°♄37'46	
asc. node	16208 May 26 04:39	6°♄04'22		asc. node	16209 May 13 01:46	18°♄36'54	
evening set	16208 May 29 20:34	3°♄56'49		evening set	16209 May 13 17:30	18°♄05'59	
	16208 Jun 02 11:31	30°♄		min. Earth dist.	16209 May 17 20:28	13°♄45'13	0.67191 AU
min. Earth dist.	16208 Jun 03 06:03	29°♄00'16	0.68319 AU	inferior conj	16209 May 19 14:02	11°♄36'21	1°51'35
inferior conj	16208 Jun 04 10:35	27°♄26'11	2°27'09	minimum elong	16209 May 19 11:52	11°♄43'03	1°50'17
minimum elong	16208 Jun 04 08:32	27°♄33'00	2°25'58	morning rise	16209 May 25 07:03	5°♄51'24	
morning rise	16208 Jun 09 20:47	21°♄30'24		direct	16209 May 28 13:00	4°♄51'32	
direct	16208 Jun 13 13:21	20°♄12'13		morning max el	16209 Jun 04 02:32	8°♄21'33	18°35'58
morning max el	16208 Jun 20 17:01	24°♄08'06	19°25'40	desc. node	16209 Jun 14 17:05	22°♄16'50	
	16208 Jun 25 18:51	0°♄			16209 Jun 19 17:50	0°♄	
desc. node	16208 Jun 27 19:58	2°♄43'24		morning set	16209 Jun 25 11:17	8°♄56'49	
greatest brilliancy	16208 Jul 03 09:05	10°♄37'51	-0.7m		16209 Jul 08 22:48	0°♄	
morning set	16208 Jul 15 18:27	29°♄22'12					
	16208 Jul 16 04:17	0°♄		superior conj	16209 Jul 11 10:56	3°♄54'21	-2°13'53
max. Earth dist.	16208 Jul 28 02:34	18°♄31'07	1.45302 AU	minimum elong	16209 Jul 11 09:20	3°♄48'08	2°14'30
				max. Earth dist.	16209 Jul 10 21:41	3°♄02'42	1.45962 AU
superior conj	16208 Jul 31 23:22	24°♄37'43	-2°08'02	evening rise	16209 Jul 27 03:00	28°♄31'32	
minimum elong	16208 Aug 01 05:00	25°♄00'06	2°08'14		16209 Jul 28 01:18	0°♄	
	16208 Aug 04 08:04	0°♄		greatest brilliancy	16209 Aug 03 13:19	10°♄17'05	-0.9m
evening rise	16208 Aug 15 05:48	17°♄49'48		asc. node	16209 Aug 09 01:34	18°♄44'28	
asc. node	16208 Aug 22 04:52	29°♄19'49		evening max el	16209 Aug 17 06:03	29°♄16'49	18°38'37
	16208 Aug 22 14:45	0°♄			16209 Aug 18 00:21	0°♄	
evening max el	16208 Sep 02 16:58	15°♄31'00	18°11'09	retrograde	16209 Aug 23 19:09	2°♄48'54	
retrograde	16208 Sep 09 01:40	18°♄52'29		evening set	16209 Aug 27 00:37	1°♄49'37	
evening set	16208 Sep 11 21:48	18°♄09'12			16209 Aug 29 07:34	30°♄	
inferior conj	16208 Sep 17 23:20	12°♄45'04	1°39'58	inferior conj	16209 Sep 01 16:29	26°♄10'44	2°22'59
minimum elong	16208 Sep 18 01:33	12°♄38'49	1°39'22	minimum elong	16209 Sep 01 18:43	26°♄03'51	2°22'19
min. Earth dist.	16208 Sep 20 11:12	9°♄57'10	0.63912 AU	min. Earth dist.	16209 Sep 03 14:47	23°♄48'34	0.65830 AU
desc. node	16208 Sep 23 17:25	6°♄47'32		morning rise	16209 Sep 07 11:41	19°♄45'31	
morning rise	16208 Sep 24 03:25	6°♄27'35		desc. node	16209 Sep 10 14:47	17°♄47'15	
direct	16208 Sep 30 17:53	3°♄54'44		direct	16209 Sep 13 19:47	17°♄08'04	
morning max el	16208 Oct 14 13:29	11°♄53'25	27°38'49	morning max el	16209 Sep 27 00:47	24°♄55'34	26°47'30
	16208 Oct 29 00:12	0°♄			16209 Oct 01 15:38	0°♄	
	16208 Nov 15 18:38	0°♄			16209 Oct 22 11:11	0°♄	
asc. node	16208 Nov 18 05:53	4°♄49'19		morning set	16209 Nov 01 18:48	18°♄26'20	
morning set	16208 Nov 18 12:54	5°♄24'14		asc. node	16209 Nov 05 02:46	24°♄55'42	
max. Earth dist.	16208 Nov 23 06:57	15°♄10'14	1.32398 AU	max. Earth dist.	16209 Nov 05 20:04	26°♄21'59	1.33942 AU
					16209 Nov 07 15:09	0°♄	
superior conj	16208 Nov 26 10:58	21°♄57'03	1°09'26				
minimum elong	16208 Nov 26 08:37	21°♄44'20	1°09'46	superior conj	16209 Nov 10 11:46	5°♄55'09	0°47'33
	16208 Nov 30 03:32	0°♄		minimum elong	16209 Nov 10 09:36	5°♄43'44	0°47'48
evening rise	16208 Dec 03 08:16	6°♄56'43		evening rise	16209 Nov 17 18:11	21°♄20'27	
	16208 Dec 15 06:42	0°♄			16209 Nov 21 22:53	0°♄	
desc. node	16208 Dec 20 15:36	7°♄57'39		desc. node	16209 Dec 07 12:35	24°♄08'06	
evening max el	16208 Dec 26 06:31	14°♄24'02	23°11'15	evening max el	16209 Dec 07 19:59	24°♄26'31	21°30'56
retrograde	16209 Jan 08 11:55	20°♄56'32			16209 Dec 16 16:47	0°♄	
evening set	16209 Jan 12 18:38	20°♄16'51		retrograde	16209 Dec 19 22:16	0°♄25'12	
min. Earth dist.	16209 Jan 19 16:57	17°♄02'43	0.54833 AU	evening set	16209 Dec 22 22:45	0°♄04'26	
inferior conj	16209 Jan 20 23:23	16°♄18'57	-5°54'11		16209 Dec 23 06:17	30°♄	
minimum elong	16209 Jan 21 03:52	16°♄12'31	5°53'16	inferior conj	16209 Dec 31 14:48	26°♄14'29	-5°54'26
morning rise	16209 Jan 29 14:25	12°♄27'58		minimum elong	16209 Dec 31 09:58	26°♄21'15	5°53'18
direct	16209 Feb 01 09:13	12°♄09'35		min. Earth dist.	16209 Dec 31 22:15	26°♄04'01	0.54380 AU
morning max el	16209 Feb 12 17:10	17°♄38'15	20°45'29	morning rise	16210 Jan 08 21:39	22°♄25'32	
asc. node	16209 Feb 14 04:22	19°♄08'29		direct	16210 Jan 12 17:26	21°♄53'44	
	16209 Feb 22 00:27	0°♄		morning max el	16210 Jan 25 10:51	28°♄04'41	22°24'36
morning set	16209 Mar 03 18:07	18°♄35'07			16210 Jan 27 08:05	0°♄	
	16209 Mar 09 05:47	0°♄		asc. node	16210 Feb 01 01:41	5°♄52'27	
					16210 Feb 14 15:08	0°♄	
superior conj	16209 Mar 11 05:15	4°♄04'06	1°00'37	morning set	16210 Feb 16 04:59	3°♄18'53	
minimum elong	16209 Mar 11 07:47	4°♄17'02	1°00'14				
max. Earth dist.	16209 Mar 16 10:05	14°♄26'06	1.35824 AU	superior conj	16210 Feb 23 05:39	18°♄21'14	1°19'10
desc. node	16209 Mar 18 16:33	18°♄46'19		minimum elong	16210 Feb 23 07:56	18°♄33'18	1°19'06
evening rise	16209 Mar 20 07:33	21°♄48'15		max. Earth dist.	16210 Feb 27 00:28	26°♄15'35	1.33928 AU

	16210 Feb 28 20:42	0°♿		max. Earth dist.	16211 Feb 09 22:37	8°♿10'26	1.32452 AU
evening rise	16210 Mar 03 10:42	5°♿05'53		evening rise	16211 Feb 15 01:02	18°♿49'55	
desc. node	16210 Mar 05 13:13	9°♿07'20		desc. node	16211 Feb 20 09:54	29°♿16'14	
	16210 Mar 17 15:18	0°♿			16211 Feb 20 19:19	0°♿	
evening max el	16210 Apr 07 07:10	26°♿58'07	27°03'33		16211 Mar 11 20:08	0°♿	
	16210 Apr 10 16:56	0°♿		evening max el	16211 Mar 20 19:52	10°♿15'13	27°32'51
retrograde	16210 Apr 20 17:16	4°♿28'41		retrograde	16211 Apr 03 15:01	17°♿46'43	
evening set	16210 Apr 27 06:38	1°♿57'08		evening set	16211 Apr 10 09:43	15°♿22'04	
	16210 Apr 29 11:07	30°♿8		min. Earth dist.	16211 Apr 14 04:29	12°♿04'48	0.63730 AU
asc. node	16210 Apr 29 22:59	29°♿29'50		inferior conj	16211 Apr 16 22:32	9°♿14'47	0°01'49
min. Earth dist.	16210 May 01 04:36	28°♿10'01	0.65641 AU	minimum elong	16211 Apr 16 22:29	9°♿14'54	0°01'23
inferior conj	16210 May 03 10:56	25°♿34'54	1°03'31	transit middle	16211 Apr 16 22:29	9°♿14'54	0°01'23
minimum elong	16210 May 03 09:22	25°♿39'24	1°02'25	transit begin	16211 Apr 16 19:21	9°♿23'01	
morning rise	16210 May 09 13:38	20°♿02'34		transit end	16211 Apr 17 01:37	9°♿06'49	
direct	16210 May 12 09:55	19°♿18'47		asc. node	16211 Apr 16 20:14	9°♿20'45	
morning max el	16210 May 18 17:16	22°♿35'31	18°03'05	morning rise	16211 Apr 23 13:41	3°♿57'32	
	16210 May 24 17:05	0°♿		direct	16211 Apr 26 01:22	3°♿26'53	
desc. node	16210 Jun 01 14:06	12°♿13'00		morning max el	16211 May 02 10:42	6°♿42'25	17°47'30
morning set	16210 Jun 06 05:41	19°♿45'41			16211 May 18 00:50	0°♿	
	16210 Jun 12 13:42	0°♿		morning set	16211 May 19 02:43	1°♿50'05	
				desc. node	16211 May 19 11:01	2°♿25'25	
superior conj	16210 Jun 20 22:03	13°♿15'33	-1°59'45	superior conj	16211 Jun 01 00:29	23°♿21'53	-1°30'12
minimum elong	16210 Jun 20 14:18	12°♿45'06	1°59'58	minimum elong	16211 May 31 16:24	22°♿49'05	1°29'58
max. Earth dist.	16210 Jun 23 18:26	17°♿43'32	1.45872 AU		16211 Jun 05 03:33	0°♿	
	16210 Jul 01 16:03	0°♿		max. Earth dist.	16211 Jun 06 13:54	2°♿16'22	1.45043 AU
evening rise	16210 Jul 07 01:11	8°♿18'02		evening rise	16211 Jun 16 11:56	17°♿41'57	
greatest brilliancy	16210 Jul 19 17:24	27°♿34'36	-0.7m		16211 Jun 24 15:17	0°♿	
	16210 Jul 21 09:00	0°♿		asc. node	16211 Jul 13 19:08	26°♿05'43	
asc. node	16210 Jul 26 22:20	7°♿42'47		evening max el	16211 Jul 14 17:37	27°♿03'34	20°21'52
evening max el	16210 Jul 31 14:47	13°♿09'15	19°22'41		16211 Jul 18 05:27	0°♿	
retrograde	16210 Aug 07 16:34	17°♿04'44		retrograde	16211 Jul 22 15:37	1°♿34'13	
evening set	16210 Aug 11 07:57	15°♿47'54		evening set	16211 Jul 26 17:28	29°♿59'26	
inferior conj	16210 Aug 16 17:28	9°♿55'44	2°50'38		16211 Jul 26 17:11	30°♿8	
minimum elong	16210 Aug 16 19:06	9°♿50'21	2°50'03	inferior conj	16211 Jul 31 23:38	23°♿55'17	3°05'09
min. Earth dist.	16210 Aug 18 01:41	8°♿10'02	0.67361 AU	minimum elong	16211 Aug 01 00:24	23°♿52'40	3°04'36
morning rise	16210 Aug 22 05:39	3°♿29'05		min. Earth dist.	16211 Aug 01 18:02	22°♿52'14	0.68439 AU
direct	16210 Aug 28 04:12	0°♿55'33		morning rise	16211 Aug 06 07:00	17°♿31'28	
desc. node	16210 Aug 28 12:09	0°♿55'59		direct	16211 Aug 11 18:10	15°♿08'31	
morning max el	16210 Sep 09 12:02	8°♿16'58	25°34'07	desc. node	16211 Aug 15 09:30	16°♿01'02	
	16210 Sep 26 13:28	0°♿		morning max el	16211 Aug 22 23:03	21°♿50'13	24°08'15
	16210 Oct 14 23:23	0°♿			16211 Aug 30 01:44	0°♿	
morning set	16210 Oct 15 10:08	0°♿48'35			16211 Sep 19 19:41	0°♿	
max. Earth dist.	16210 Oct 19 00:04	7°♿26'05	1.35969 AU	morning set	16211 Sep 27 06:47	12°♿22'18	
asc. node	16210 Oct 22 23:35	15°♿06'34		max. Earth dist.	16211 Sep 30 23:10	18°♿48'33	1.38313 AU
					16211 Oct 07 01:40	0°♿	
superior conj	16210 Oct 25 04:02	19°♿27'17	0°19'42	superior conj	16211 Oct 08 08:17	2°♿25'14	-0°13'23
minimum elong	16210 Oct 25 02:52	19°♿21'27	0°19'59	minimum elong	16211 Oct 08 09:11	2°♿29'34	0°12'54
	16210 Oct 30 08:02	0°♿		behind sun begin	16211 Oct 08 04:58	2°♿09'25	
evening rise	16210 Nov 02 01:07	5°♿35'15		behind sun end	16211 Oct 08 13:25	2°♿49'44	
	16210 Nov 15 14:59	0°♿		asc. node	16211 Oct 09 20:19	5°♿18'12	
evening max el	16210 Nov 19 21:37	5°♿05'08	20°06'33	evening rise	16211 Oct 17 02:38	19°♿35'04	
desc. node	16210 Nov 24 09:38	8°♿37'40			16211 Oct 22 11:54	0°♿	
retrograde	16210 Nov 30 10:24	10°♿20'04		evening max el	16211 Nov 02 13:38	16°♿33'20	19°03'57
evening set	16210 Dec 02 14:18	10°♿07'49		desc. node	16211 Nov 11 06:46	21°♿03'40	
inferior conj	16210 Dec 11 09:04	6°♿10'26	-4°55'06	retrograde	16211 Nov 11 12:31	21°♿03'51	
minimum elong	16210 Dec 10 23:08	6°♿25'21	4°51'49	evening set	16211 Nov 13 09:48	20°♿52'39	
min. Earth dist.	16210 Dec 13 04:17	5°♿05'36	0.54864 AU	inferior conj	16211 Nov 21 19:07	16°♿38'02	-3°18'50
morning rise	16210 Dec 19 07:07	2°♿04'52		minimum elong	16211 Nov 21 11:02	16°♿51'56	3°15'13
direct	16210 Dec 24 04:21	1°♿13'05		min. Earth dist.	16211 Nov 24 14:45	14°♿42'03	0.56198 AU
morning max el	16211 Jan 06 19:51	7°♿58'10	24°14'40	morning rise	16211 Nov 29 09:37	11°♿59'26	
asc. node	16211 Jan 18 22:57	23°♿38'49		direct	16211 Dec 05 03:08	10°♿42'48	
	16211 Jan 22 16:04	0°♿		morning max el	16211 Dec 19 05:58	17°♿55'34	25°57'30
morning set	16211 Jan 31 17:00	18°♿02'05			16211 Dec 29 06:06	0°♿	
	16211 Feb 06 04:29	0°♿		asc. node	16212 Jan 05 20:09	12°♿31'23	
superior conj	16211 Feb 07 11:57	2°♿52'19	1°31'22		16212 Jan 14 22:39	0°♿	
minimum elong	16211 Feb 07 13:28	3°♿00'39	1°31'39				

morning set	16212 Jan 16 04:16	2° \approx 38'28			16212 Dec 01 11:47	0° \approx	
					16212 Dec 22 00:27	0° \approx	
superior conj	16212 Jan 22 21:44	17° \approx 29'51	1°37'25	asc. node	16212 Dec 22 17:17	1° \approx 18'20	
minimum elong	16212 Jan 22 22:16	17° \approx 32'46	1°37'57	morning set	16212 Dec 30 13:02	17° \approx 03'29	
max. Earth dist.	16212 Jan 24 02:47	20° \approx 11'10	1.31463 AU		16213 Jan 05 10:10	0° \approx	
	16212 Jan 28 14:58	0° \approx					
evening rise	16212 Jan 29 23:38	2° \approx 52'17		superior conj	16213 Jan 06 09:04	2° \approx 08'21	1°37'24
desc. node	16212 Feb 07 06:34	19° \approx 06'39		minimum elong	16213 Jan 06 08:32	2° \approx 05'22	1°38'02
	16212 Feb 13 14:56	0° \approx		max. Earth dist.	16213 Jan 06 10:04	2° \approx 13'52	1.31008 AU
evening max el	16212 Mar 02 05:06	22° \approx 55'27	27°31'38	evening rise	16213 Jan 13 04:11	17° \approx 07'45	
	16212 Mar 13 08:47	0° \approx			16213 Jan 19 11:53	0° \approx	
retrograde	16212 Mar 16 04:53	0° \approx 21'25		desc. node	16213 Jan 24 03:17	8° \approx 31'29	
	16212 Mar 18 23:13	30° \approx 8'17			16213 Feb 07 19:41	0° \approx	
evening set	16212 Mar 23 00:02	28° \approx 11'05		evening max el	16213 Feb 12 08:30	4° \approx 48'17	26°55'46
min. Earth dist.	16212 Mar 26 18:37	25° \approx 17'21	0.61557 AU	retrograde	16213 Feb 26 09:30	12° \approx 03'54	
inferior conj	16212 Mar 29 21:27	22° \approx 26'53	-1°13'56	evening set	16213 Mar 04 22:28	10° \approx 15'14	
minimum elong	16212 Mar 30 00:04	22° \approx 20'53	1°13'05	min. Earth dist.	16213 Mar 08 22:37	7° \approx 35'12	0.59289 AU
asc. node	16212 Apr 02 17:32	19° \approx 14'27		inferior conj	16213 Mar 12 03:59	5° \approx 01'34	-2°41'22
morning rise	16212 Apr 06 03:21	17° \approx 27'29		minimum elong	16213 Mar 12 10:09	4° \approx 49'15	2°39'00
direct	16212 Apr 08 07:47	17° \approx 06'40		morning rise	16213 Mar 20 01:26	0° \approx 22'24	
morning max el	16212 Apr 15 03:46	20° \approx 32'47	17°49'42	asc. node	16213 Mar 20 14:52	0° \approx 15'23	
	16212 Apr 22 06:30	0° \approx		direct	16213 Mar 22 01:01	0° \approx 07'49	
morning set	16212 Apr 30 21:20	14° \approx 54'12		morning max el	16213 Mar 29 16:53	3° \approx 56'07	18°10'54
desc. node	16212 May 05 07:50	22° \approx 48'28		morning set	16213 Apr 14 07:50	28° \approx 41'15	
	16212 May 09 10:29	0° \approx			16213 Apr 15 00:38	0° \approx	
				desc. node	16213 Apr 22 04:36	13° \approx 18'00	
superior conj	16212 May 12 01:47	4° \approx 31'22	-0°53'12				
minimum elong	16212 May 11 20:57	4° \approx 10'50	0°53'04	superior conj	16213 Apr 24 01:42	16° \approx 41'50	-0°15'35
max. Earth dist.	16212 May 19 05:26	16° \approx 24'07	1.43561 AU	minimum elong	16213 Apr 24 00:26	16° \approx 36'09	0°15'50
evening rise	16212 May 26 03:53	27° \approx 12'54		behind sun begin	16213 Apr 23 23:32	16° \approx 32'05	
	16212 May 27 19:40	0° \approx		behind sun end	16213 Apr 24 01:21	16° \approx 40'12	
	16212 Jun 17 10:27	0° \approx		max. Earth dist.	16213 May 01 16:07	29° \approx 54'50	1.41592 AU
evening max el	16212 Jun 26 14:26	10° \approx 57'43	21°33'32		16213 May 01 17:20	0° \approx	
asc. node	16212 Jun 29 15:59	13° \approx 41'17		evening rise	16213 May 06 13:21	7° \approx 15'40	
retrograde	16212 Jul 05 14:20	16° \approx 11'30			16213 May 20 21:52	0° \approx	
evening set	16212 Jul 10 03:14	14° \approx 19'31		evening max el	16213 Jun 09 06:42	24° \approx 52'02	22°53'09
inferior conj	16212 Jul 15 08:44	8° \approx 04'54	3°08'10		16213 Jun 16 00:13	0° \approx	
minimum elong	16212 Jul 15 08:33	8° \approx 05'35	3°07'33	asc. node	16213 Jun 16 12:54	0° \approx 13'42	
min. Earth dist.	16212 Jul 15 13:49	7° \approx 47'12	0.69031 AU	retrograde	16213 Jun 19 11:07	0° \approx 50'26	
morning rise	16212 Jul 20 13:38	1° \approx 46'44			16213 Jun 22 15:38	30° \approx 8'25	
	16212 Jul 23 11:39	30° \approx 8'25		evening set	16213 Jun 24 11:32	28° \approx 42'55	
direct	16212 Jul 25 12:40	29° \approx 39'11		inferior conj	16213 Jun 29 18:45	22° \approx 19'52	3°00'32
	16212 Jul 27 16:15	0° \approx		minimum elong	16213 Jun 29 17:39	22° \approx 23'39	2°59'44
desc. node	16212 Aug 01 06:48	2° \approx 38'35		min. Earth dist.	16213 Jun 29 10:47	22° \approx 47'32	0.69138 AU
morning max el	16212 Aug 04 11:13	5° \approx 31'44	22°39'10	morning rise	16213 Jul 04 23:39	16° \approx 09'17	
	16212 Aug 23 08:14	0° \approx		direct	16213 Jul 09 10:34	14° \approx 20'02	
morning set	16212 Sep 07 05:01	22° \approx 59'26		morning max el	16213 Jul 18 03:08	19° \approx 21'19	21°14'51
	16212 Sep 11 10:30	0° \approx		desc. node	16213 Jul 19 04:03	20° \approx 25'25	
max. Earth dist.	16212 Sep 11 23:21	0° \approx 54'11	1.40714 AU		16213 Jul 27 00:03	0° \approx	
					16213 Aug 16 11:27	0° \approx	
superior conj	16212 Sep 19 20:28	14° \approx 40'22	-0°49'49	morning set	16213 Aug 18 03:36	2° \approx 36'35	
minimum elong	16212 Sep 20 00:24	14° \approx 58'08	0°49'04	max. Earth dist.	16213 Aug 25 04:57	13° \approx 52'34	1.42896 AU
asc. node	16212 Sep 25 17:01	25° \approx 27'26					
	16212 Sep 28 02:55	0° \approx		superior conj	16213 Sep 01 12:07	26° \approx 02'04	-1°26'05
evening rise	16212 Sep 29 19:37	3° \approx 12'23		minimum elong	16213 Sep 01 19:07	26° \approx 31'56	1°25'19
evening max el	16212 Oct 15 17:27	28° \approx 14'24	18°23'34		16213 Sep 03 19:32	0° \approx	
	16212 Oct 17 00:00	0° \approx		evening rise	16213 Sep 12 23:53	16° \approx 15'47	
retrograde	16212 Oct 23 09:42	2° \approx 43'38		asc. node	16213 Sep 12 13:41	15° \approx 29'55	
evening set	16212 Oct 25 09:47	2° \approx 28'24			16213 Sep 20 19:01	0° \approx	
desc. node	16212 Oct 28 03:57	1° \approx 22'02		evening max el	16213 Sep 29 04:45	11° \approx 42'52	18°03'51
	16212 Oct 30 08:16	30° \approx 8'16		retrograde	16213 Oct 06 00:39	15° \approx 13'33	
inferior conj	16212 Nov 02 02:47	27° \approx 52'51	-1°35'45	evening set	16213 Oct 08 07:36	14° \approx 50'03	
minimum elong	16212 Nov 01 23:05	28° \approx 00'18	1°33'41	inferior conj	16213 Oct 15 07:18	9° \approx 53'43	-0°04'48
min. Earth dist.	16212 Nov 05 08:32	25° \approx 17'27	0.58151 AU	minimum elong	16213 Oct 15 07:09	9° \approx 54'03	0°04'20
morning rise	16212 Nov 09 08:54	22° \approx 13'15		transit middle	16213 Oct 15 07:09	9° \approx 54'03	0°04'20
direct	16212 Nov 15 16:42	20° \approx 15'37		transit begin	16213 Oct 15 03:58	10° \approx 01'29	
morning max el	16212 Nov 29 23:21	28° \approx 15'15	27°14'17	transit end	16213 Oct 15 10:21	9° \approx 46'37	

desc. node	16213 Oct 15 01:14	10° \mathbb{M} 07'50		desc. node	16214 Oct 01 22:33	18° $\underline{\mathbf{a}}$ 42'27	
min. Earth dist.	16213 Oct 18 11:15	6° \mathbb{M} 57'59	0.60412 AU	morning rise	16214 Oct 04 15:02	16° $\underline{\mathbf{a}}$ 25'07	
morning rise	16213 Oct 22 03:34	4° \mathbb{M} 06'52		direct	16214 Oct 11 07:22	13° $\underline{\mathbf{a}}$ 59'09	
direct	16213 Oct 28 18:55	1° \mathbb{M} 58'38		morning max el	16214 Oct 25 08:00	21° $\underline{\mathbf{a}}$ 56'42	27°54'42
morning max el	16213 Nov 12 00:37	9° \mathbb{M} 48'42	27°54'05		16214 Nov 01 10:02	0° \mathbb{M}	
	16213 Nov 27 16:15	0° \mathbb{A}			16214 Nov 20 20:17	0° \mathbb{A}	
asc. node	16213 Dec 09 14:19	20° \mathbb{A} 50'08		asc. node	16214 Nov 26 11:17	10° \mathbb{A} 39'48	
	16213 Dec 14 03:33	0° \mathbb{B}		morning set	16214 Nov 28 15:11	15° \mathbb{A} 00'16	
morning set	16213 Dec 14 17:23	1° \mathbb{B} 12'23		max. Earth dist.	16214 Dec 03 19:34	25° \mathbb{A} 54'43	1.31770 AU
max. Earth dist.	16213 Dec 20 16:53	14° \mathbb{B} 10'56	1.31106 AU		16214 Dec 05 16:37	0° \mathbb{B}	
superior conj	16213 Dec 21 20:05	16° \mathbb{B} 42'29	1°31'21	superior conj	16214 Dec 06 04:51	1° \mathbb{B} 07'07	1°19'13
minimum elong	16213 Dec 21 18:36	16° \mathbb{B} 34'13	1°31'56	minimum elong	16214 Dec 06 02:42	0° \mathbb{B} 55'15	1°19'39
	16213 Dec 27 19:47	0° \approx		evening rise	16214 Dec 12 23:08	15° \mathbb{B} 58'54	
evening rise	16213 Dec 28 12:38	1° \approx 31'27			16214 Dec 19 18:56	0° \approx	
desc. node	16214 Jan 11 00:06	27° \approx 21'25		desc. node	16214 Dec 28 20:58	15° \approx 23'32	
	16214 Jan 12 15:52	0° \mathbb{X}		evening max el	16215 Jan 06 15:50	26° \approx 02'51	24°10'53
evening max el	16214 Jan 25 04:02	15° \mathbb{X} 48'38	25°45'59		16215 Jan 11 14:26	0° \mathbb{X}	
retrograde	16214 Feb 08 02:28	22° \mathbb{X} 50'31		retrograde	16215 Jan 20 05:49	2° \mathbb{X} 47'50	
evening set	16214 Feb 14 01:23	21° \mathbb{X} 28'33		evening set	16215 Jan 25 05:50	1° \mathbb{X} 53'25	
min. Earth dist.	16214 Feb 18 17:02	18° \mathbb{X} 49'07	0.57170 AU		16215 Jan 29 08:16	30° \mathbb{R} \approx	
inferior conj	16214 Feb 21 14:41	16° \mathbb{X} 49'24	-4°12'04	min. Earth dist.	16215 Jan 31 03:29	28° \approx 57'50	0.55491 AU
minimum elong	16214 Feb 21 23:49	16° \mathbb{X} 33'41	4°09'01	inferior conj	16215 Feb 02 04:09	27° \approx 44'23	-5°27'47
morning rise	16214 Mar 02 01:14	12° \mathbb{X} 31'34		minimum elong	16215 Feb 02 12:16	27° \approx 32'07	5°25'52
direct	16214 Mar 04 00:59	12° \mathbb{X} 19'19		morning rise	16215 Feb 10 20:33	23° \approx 45'59	
asc. node	16214 Mar 07 12:12	12° \mathbb{X} 58'39		direct	16215 Feb 13 05:24	23° \approx 31'29	
morning max el	16214 Mar 12 21:58	16° \mathbb{X} 40'38	18°52'57	asc. node	16215 Feb 22 09:33	27° \approx 27'03	
	16214 Mar 22 08:30	0° \mathbb{Y}		morning max el	16215 Feb 23 14:47	28° \approx 34'01	19°57'48
morning set	16214 Mar 29 05:25	12° \mathbb{Y} 57'13			16215 Feb 25 00:01	0° \mathbb{X}	
superior conj	16214 Apr 06 20:33	29° \mathbb{Y} 42'50	0°18'30	morning set	16215 Mar 13 10:17	27° \mathbb{X} 30'03	
minimum elong	16214 Apr 06 21:43	29° \mathbb{Y} 48'24	0°17'59		16215 Mar 14 15:43	0° \mathbb{Y}	
	16214 Apr 07 00:10	0° \mathbb{B}		superior conj	16215 Mar 21 05:48	13° \mathbb{Y} 21'23	0°47'01
desc. node	16214 Apr 09 01:20	3° \mathbb{B} 50'23		minimum elong	16215 Mar 21 08:09	13° \mathbb{Y} 33'02	0°46'32
max. Earth dist.	16214 Apr 13 23:14	12° \mathbb{B} 44'40	1.39345 AU	desc. node	16215 Mar 26 22:03	24° \mathbb{Y} 21'10	
evening rise	16214 Apr 17 20:16	19° \mathbb{B} 27'59		max. Earth dist.	16215 Mar 27 05:53	24° \mathbb{Y} 57'57	1.37060 AU
	16214 Apr 24 05:44	0° \mathbb{I}			16215 Mar 29 23:27	0° \mathbb{B}	
	16214 May 15 02:46	0° \mathbb{B}		evening rise	16215 Mar 30 22:58	1° \mathbb{B} 46'04	
evening max el	16214 May 22 20:46	8° \mathbb{B} 48'04	24°14'37		16215 Apr 17 08:57	0° \mathbb{I}	
retrograde	16214 Jun 03 04:40	15° \mathbb{B} 25'47		evening max el	16215 May 05 10:16	22° \mathbb{I} 42'30	25°31'07
asc. node	16214 Jun 03 09:55	15° \mathbb{B} 25'35		retrograde	16215 May 17 17:57	29° \mathbb{I} 50'03	
evening set	16214 Jun 08 16:45	13° \mathbb{B} 05'30		asc. node	16215 May 21 07:01	28° \mathbb{I} 58'46	
min. Earth dist.	16214 Jun 13 06:49	7° \mathbb{B} 47'36	0.68761 AU	evening set	16215 May 23 17:12	27° \mathbb{I} 20'50	
inferior conj	16214 Jun 14 03:46	6° \mathbb{B} 36'46	2°42'28	min. Earth dist.	16215 May 27 23:45	22° \mathbb{I} 39'54	0.67900 AU
minimum elong	16214 Jun 14 01:59	6° \mathbb{B} 42'51	2°41'25	inferior conj	16215 May 29 09:50	20° \mathbb{I} 50'15	2°13'32
morning rise	16214 Jun 19 11:16	0° \mathbb{B} 35'11		minimum elong	16215 May 29 07:40	20° \mathbb{I} 57'15	2°12'17
	16214 Jun 20 08:07	30° \mathbb{R} \mathbb{I}		morning rise	16215 Jun 03 22:36	14° \mathbb{I} 59'01	
direct	16214 Jun 23 10:26	29° \mathbb{I} 05'34		direct	16215 Jun 07 10:39	13° \mathbb{I} 48'42	
	16214 Jun 26 17:30	0° \mathbb{B}		morning max el	16215 Jun 14 07:09	17° \mathbb{I} 31'34	19°02'34
morning max el	16214 Jul 01 01:29	3° \mathbb{B} 21'45	20°01'26	desc. node	16215 Jun 22 22:23	28° \mathbb{I} 19'58	
desc. node	16214 Jul 06 01:15	9° \mathbb{B} 03'57			16215 Jun 24 02:09	0° \mathbb{B}	
	16214 Jul 20 18:53	0° \mathbb{Q}		greatest brilliancy	16215 Jun 27 08:24	4° \mathbb{B} 49'19	-0.7m
morning set	16214 Jul 28 09:50	11° \mathbb{Q} 34'22		morning set	16215 Jul 07 17:10	20° \mathbb{B} 40'25	
max. Earth dist.	16214 Aug 07 17:33	27° \mathbb{Q} 40'23	1.44613 AU		16215 Jul 13 17:51	0° \mathbb{Q}	
	16214 Aug 09 04:38	0° \mathbb{M}		max. Earth dist.	16215 Jul 21 11:27	12° \mathbb{Q} 02'16	1.45682 AU
superior conj	16214 Aug 13 04:25	6° \mathbb{M} 25'24	-1°56'18	superior conj	16215 Jul 23 23:32	15° \mathbb{Q} 57'48	-2°12'57
minimum elong	16214 Aug 13 12:02	6° \mathbb{M} 56'22	1°56'03	minimum elong	16215 Jul 24 02:30	16° \mathbb{Q} 09'27	2°13'25
evening rise	16214 Aug 26 10:28	28° \mathbb{M} 32'59			16215 Aug 01 19:45	0° \mathbb{M}	
	16214 Aug 27 06:51	0° $\underline{\mathbf{a}}$		evening rise	16215 Aug 07 22:14	9° \mathbb{M} 51'35	
asc. node	16214 Aug 30 10:22	5° $\underline{\mathbf{a}}$ 21'47		asc. node	16215 Aug 17 07:04	24° \mathbb{M} 58'03	
evening max el	16214 Sep 12 19:24	25° $\underline{\mathbf{a}}$ 03'28	18°03'13		16215 Aug 20 14:03	0° $\underline{\mathbf{a}}$	
retrograde	16214 Sep 19 05:19	28° $\underline{\mathbf{a}}$ 24'17		evening max el	16215 Aug 27 09:52	8° $\underline{\mathbf{a}}$ 41'59	18°20'39
evening set	16214 Sep 21 20:32	22° $\underline{\mathbf{a}}$ 48'57		retrograde	16215 Sep 02 19:19	12° $\underline{\mathbf{a}}$ 06'24	
inferior conj	16214 Sep 28 05:11	22° $\underline{\mathbf{a}}$ 34'01	1°07'15	evening set	16215 Sep 05 19:23	11° $\underline{\mathbf{a}}$ 16'27	
minimum elong	16214 Sep 28 06:56	22° $\underline{\mathbf{a}}$ 29'21	1°06'50	inferior conj	16215 Sep 11 16:22	5° $\underline{\mathbf{a}}$ 45'30	2°00'16
min. Earth dist.	16214 Sep 30 23:57	19° $\underline{\mathbf{a}}$ 38'19	0.62690 AU	minimum elong	16215 Sep 11 18:41	5° $\underline{\mathbf{a}}$ 38'40	1°59'36

min. Earth dist.	16215 Sep 13 22:28	3° Ω 07'15	0.64772 AU	inferior conj	16216 Aug 25 13:12	19° Π 20'18	2°36'27
	16215 Sep 16 23:21	30° κ Π		minimum elong	16216 Aug 25 15:14	19° Π 13'50	2°35'49
morning rise	16215 Sep 17 16:29	29° Π 23'48		min. Earth dist.	16216 Aug 27 05:29	17° Π 12'34	0.66529 AU
desc. node	16215 Sep 18 19:55	28° Π 33'21		morning rise	16216 Aug 31 05:09	12° Π 53'32	
direct	16215 Sep 24 04:34	26° Π 48'18		desc. node	16216 Sep 04 17:17	10° Π 27'42	
	16215 Oct 02 08:19	0° Ω		direct	16216 Sep 06 09:20	10° Π 16'53	
morning max el	16215 Oct 07 18:51	4° Ω 43'28	27°20'19	morning max el	16216 Sep 19 06:28	17° Π 55'50	26°18'27
	16215 Oct 27 00:22	0° Π			16216 Sep 29 10:30	0° Ω	
morning set	16215 Nov 12 03:49	28° Π 21'30			16216 Oct 18 23:30	0° Π	
	16215 Nov 12 23:49	0° κ		morning set	16216 Oct 25 04:01	11° Π 07'54	
asc. node	16215 Nov 13 08:12	0° κ 41'37		max. Earth dist.	16216 Oct 28 23:39	18° Π 25'41	1.34752 AU
max. Earth dist.	16215 Nov 16 14:35	7° κ 19'18	1.32994 AU	asc. node	16216 Oct 30 05:01	20° Π 50'12	
superior conj	16215 Nov 20 09:16	15° κ 16'49	1°00'54	superior conj	16216 Nov 03 06:47	29° Π 04'27	0°36'26
minimum elong	16215 Nov 20 06:55	15° κ 04'10	1°01'11	minimum elong	16216 Nov 03 04:55	28° Π 54'51	0°36'40
evening rise	16215 Nov 27 09:50	0° Σ 25'41			16216 Nov 03 17:33	0° κ	
	16215 Nov 27 05:02	0° Σ		evening rise	16216 Nov 10 18:45	14° κ 46'05	
	16215 Dec 13 21:15	0° \approx			16216 Nov 18 11:14	0° Σ	
desc. node	16215 Dec 15 17:55	2° \approx 21'07		evening max el	16216 Nov 29 19:27	16° Σ 12'16	20°52'30
evening max el	16215 Dec 19 01:40	5° \approx 58'04	22°27'14	desc. node	16216 Dec 01 14:56	17° Σ 51'37	
retrograde	16215 Dec 31 21:05	12° \approx 18'13		retrograde	16216 Dec 11 06:56	21° Σ 53'41	
evening set	16216 Jan 04 14:42	11° \approx 47'36		evening set	16216 Dec 13 20:38	21° Σ 37'50	
min. Earth dist.	16216 Jan 12 09:30	8° \approx 16'00	0.54527 AU	inferior conj	16216 Dec 22 15:20	17° Σ 46'07	-5°35'40
inferior conj	16216 Jan 13 00:34	7° \approx 54'50	-6°01'59	minimum elong	16216 Dec 22 07:24	17° Σ 57'28	5°33'39
minimum elong	16216 Jan 13 01:11	7° \approx 53'57	6°01'22	min. Earth dist.	16216 Dec 23 14:55	17° Σ 12'23	0.54469 AU
morning rise	16216 Jan 21 12:45	4° \approx 07'12		morning rise	16216 Dec 30 18:11	13° Σ 52'12	
direct	16216 Jan 24 17:27	3° \approx 44'09		direct	16217 Jan 04 00:52	13° Σ 12'48	
morning max el	16216 Feb 05 16:42	9° \approx 30'56	21°25'35	morning max el	16217 Jan 17 05:45	19° Σ 39'49	23°11'04
asc. node	16216 Feb 09 06:53	13° \approx 27'01			16217 Jan 25 17:36	0° \approx	
	16216 Feb 19 17:55	0° κ		asc. node	16217 Jan 26 04:10	0° \approx 39'14	
morning set	16216 Feb 25 19:36	12° κ 11'46		morning set	16217 Feb 09 07:09	26° \approx 55'24	
					16217 Feb 10 17:34	0° κ	
superior conj	16216 Mar 04 01:38	27° κ 27'12	1°09'15	superior conj	16217 Feb 16 04:51	11° κ 50'54	1°25'06
minimum elong	16216 Mar 04 04:09	27° κ 40'12	1°09'01	minimum elong	16217 Feb 16 06:51	12° κ 01'39	1°25'12
	16216 Mar 05 07:12	0° Υ		max. Earth dist.	16217 Feb 19 09:34	18° κ 38'31	1.33237 AU
max. Earth dist.	16216 Mar 08 16:14	6° Υ 49'52	1.34968 AU	evening rise	16217 Feb 24 02:27	28° κ 13'36	
evening rise	16216 Mar 12 18:12	14° Υ 44'21			16217 Feb 25 00:07	0° Υ	
desc. node	16216 Mar 12 18:44	14° Υ 46'52		desc. node	16217 Feb 27 15:24	5° Υ 02'57	
	16216 Mar 21 07:35	0° Σ			16217 Mar 14 12:30	0° Σ	
	16216 Apr 11 00:59	0° Π		evening max el	16217 Mar 30 13:16	20° Σ 00'21	27°19'25
evening max el	16216 Apr 16 23:53	6° Π 29'26	26°35'12	retrograde	16217 Apr 13 04:11	27° Σ 33'20	
retrograde	16216 Apr 30 02:05	13° Π 55'31		evening set	16217 Apr 19 20:13	25° Σ 03'39	
evening set	16216 May 06 11:03	11° Π 22'43		min. Earth dist.	16217 Apr 23 16:25	21° Σ 29'52	0.64859 AU
asc. node	16216 May 07 04:12	10° Π 46'09		asc. node	16217 Apr 24 01:25	21° Σ 05'44	
min. Earth dist.	16216 May 10 11:35	7° Π 16'55	0.66583 AU	inferior conj	16217 Apr 26 04:03	18° Σ 46'30	0°39'03
inferior conj	16216 May 12 10:45	4° Π 55'26	1°32'48	minimum elong	16217 Apr 26 02:59	18° Σ 49'24	0°38'09
minimum elong	16216 May 12 08:45	5° Π 01'28	1°31'32	morning rise	16217 May 02 11:43	13° Σ 20'26	
	16216 May 17 04:54	30° κ Σ		direct	16217 May 05 04:05	12° Σ 42'47	
morning rise	16216 May 18 07:34	29° Σ 15'54		morning max el	16217 May 11 11:27	15° Σ 57'52	17°54'20
direct	16216 May 21 09:17	28° Σ 23'17			16217 May 21 17:17	0° Π	
	16216 May 25 17:02	0° Π		desc. node	16217 May 26 16:24	8° Π 06'58	
morning max el	16216 May 27 19:12	1° Π 45'58	18°19'57	morning set	16217 May 29 02:02	12° Π 05'36	
desc. node	16216 Jun 08 19:26	18° Π 03'28			16217 Jun 09 00:55	0° Σ	
	16216 Jun 16 08:54	0° Σ		superior conj	16217 Jun 12 00:50	4° Σ 47'11	-1°48'40
morning set	16216 Jun 16 19:58	0° Σ 43'55		minimum elong	16217 Jun 11 16:15	4° Σ 13'05	1°48'37
superior conj	16216 Jul 02 08:42	25° Σ 10'20	-2°10'13	max. Earth dist.	16217 Jun 16 03:30	11° Σ 16'43	1.45595 AU
minimum elong	16216 Jul 02 03:55	24° Σ 51'40	2°10'44	evening rise	16217 Jun 28 00:13	29° Σ 38'39	
max. Earth dist.	16216 Jul 03 07:34	26° Σ 39'29	1.46014 AU		16217 Jun 28 05:48	0° Ω	
	16216 Jul 05 11:04	0° Ω		greatest brilliancy	16217 Jul 12 08:52	21° Ω 13'44	-0.6m
evening rise	16216 Jul 18 08:54	20° Ω 07'25			16217 Jul 18 16:10	0° Π	
	16216 Jul 24 16:54	0° Π		asc. node	16217 Jul 21 00:33	2° Π 57'19	
greatest brilliancy	16216 Jul 28 06:11	5° Π 28'50	-0.8m	evening max el	16217 Jul 24 03:35	6° Π 24'42	19°46'11
asc. node	16216 Aug 03 03:47	14° Π 12'26		retrograde	16217 Jul 31 13:19	10° Π 34'09	
evening max el	16216 Aug 09 21:15	22° Π 30'47	18°55'20	evening set	16217 Aug 04 08:58	9° Π 09'54	
retrograde	16216 Aug 16 14:55	26° Π 11'43		inferior conj	16217 Aug 09 16:43	3° Π 12'36	2°58'15
evening set	16216 Aug 20 00:27	25° Π 05'11					

































































































































minimum elong	16217 Aug 09 18:01	3° \mathbb{M} 08'17	2°57'42	evening max el	16218 Jul 07 03:52	20° Ω 19'12	20°51'10
min. Earth dist.	16217 Aug 10 19:06	1° \mathbb{M} 44'11	0.67872 AU	asc. node	16218 Jul 07 21:23	21° Ω 01'42	
	16217 Aug 12 03:14	30° \mathbb{R} Ω		retrograde	16218 Jul 15 12:18	25° Ω 07'11	
morning rise	16217 Aug 15 02:33	26° Ω 46'31		evening set	16218 Jul 19 18:48	23° Ω 25'03	
direct	16217 Aug 20 20:27	24° Ω 16'29		inferior conj	16218 Jul 25 00:23	17° Ω 16'33	3°07'43
desc. node	16217 Aug 22 14:37	24° Ω 28'44		minimum elong	16218 Jul 25 00:45	17° Ω 15'18	3°07'11
	16217 Aug 31 07:29	0° \mathbb{M}		min. Earth dist.	16218 Jul 25 13:08	16° Ω 32'24	0.68751 AU
morning max el	16217 Sep 01 17:31	1° \mathbb{M} 23'12	24°58'32	morning rise	16218 Jul 30 06:24	10° Ω 54'55	
	16217 Sep 23 10:12	0° $\underline{\Omega}$		direct	16218 Aug 04 12:35	8° Ω 37'47	
morning set	16217 Oct 07 11:57	23° $\underline{\Omega}$ 11'15		desc. node	16218 Aug 09 11:57	10° Ω 15'43	
max. Earth dist.	16217 Oct 11 00:29	29° $\underline{\Omega}$ 32'41	1.36941 AU	morning max el	16218 Aug 15 04:31	14° Ω 59'00	23°30'13
	16217 Oct 11 06:25	0° \mathbb{L}			16218 Aug 27 11:22	0° \mathbb{M}	
asc. node	16217 Oct 17 01:47	11° \mathbb{L} 01'59			16218 Sep 16 08:27	0° $\underline{\Omega}$	
				morning set	16218 Sep 18 23:26	4° $\underline{\Omega}$ 21'21	
superior conj	16217 Oct 17 18:25	12° \mathbb{L} 23'27	0°06'15	max. Earth dist.	16218 Sep 22 23:08	11° $\underline{\Omega}$ 10'13	1.39348 AU
minimum elong	16217 Oct 17 18:00	12° \mathbb{L} 21'23	0°06'36				
behind sun begin	16217 Oct 17 12:00	11° \mathbb{L} 51'57		superior conj	16218 Sep 30 16:24	25° $\underline{\Omega}$ 04'38	-0°28'34
behind sun end	16217 Oct 17 23:59	12° \mathbb{L} 50'53		minimum elong	16218 Sep 30 18:30	25° $\underline{\Omega}$ 14'25	0°27'57
evening rise	16217 Oct 25 23:42	28° \mathbb{L} 55'17			16218 Oct 03 07:10	0° \mathbb{L}	
	16217 Oct 26 12:31	0° \mathbb{X}		asc. node	16218 Oct 03 22:31	1° \mathbb{L} 13'02	
evening max el	16217 Nov 12 03:24	27° \mathbb{X} 12'05	19°37'07	evening rise	16218 Oct 09 22:00	12° \mathbb{L} 46'27	
	16217 Nov 15 12:05	0° \mathbb{Z}			16218 Oct 19 07:13	0° \mathbb{X}	
desc. node	16217 Nov 18 11:59	1° \mathbb{Z} 30'55		evening max el	16218 Oct 26 01:01	9° \mathbb{X} 02'03	18°44'07
retrograde	16217 Nov 21 23:29	2° \mathbb{Z} 07'04		retrograde	16218 Nov 03 09:24	13° \mathbb{X} 15'17	
evening set	16217 Nov 23 23:01	1° \mathbb{Z} 56'01		evening set	16218 Nov 05 07:19	13° \mathbb{X} 02'47	
	16217 Nov 29 01:52	30° \mathbb{R} \mathbb{X}		desc. node	16218 Nov 05 09:08	13° \mathbb{X} 01'48	
inferior conj	16217 Dec 02 15:08	27° \mathbb{X} 52'36	-4°16'48	inferior conj	16218 Nov 13 10:08	8° \mathbb{X} 39'21	-2°34'29
minimum elong	16217 Dec 02 05:20	28° \mathbb{X} 08'05	4°13'03	minimum elong	16218 Nov 13 03:51	8° \mathbb{X} 50'52	2°31'23
min. Earth dist.	16217 Dec 04 22:43	26° \mathbb{X} 24'48	0.55346 AU	min. Earth dist.	16218 Nov 16 11:45	6° \mathbb{X} 24'51	0.56980 AU
morning rise	16217 Dec 10 09:55	23° \mathbb{X} 34'05		morning rise	16218 Nov 20 21:18	3° \mathbb{X} 45'15	
direct	16217 Dec 15 16:42	22° \mathbb{X} 31'51		direct	16218 Nov 26 21:59	2° \mathbb{X} 16'58	
morning max el	16217 Dec 29 14:02	29° \mathbb{X} 29'59	25°00'21	morning max el	16218 Dec 11 02:37	9° \mathbb{X} 38'57	26°34'09
	16217 Dec 30 02:26	0° \mathbb{Z}			16218 Dec 26 13:23	0° \mathbb{Z}	
asc. node	16218 Jan 13 01:23	18° \mathbb{Z} 46'39		asc. node	16218 Dec 30 22:33	7° \mathbb{Z} 35'22	
	16218 Jan 19 04:31	0° \approx		morning set	16219 Jan 09 05:30	26° \mathbb{Z} 08'05	
morning set	16218 Jan 24 19:02	11° \approx 35'41			16219 Jan 11 00:11	0° \approx	
superior conj	16218 Jan 31 12:53	26° \approx 25'10	1°34'41	superior conj	16219 Jan 15 23:35	11° \approx 04'03	1°38'09
minimum elong	16218 Jan 31 14:00	26° \approx 31'19	1°35'05	minimum elong	16219 Jan 15 23:40	11° \approx 04'27	1°38'44
	16218 Feb 02 04:00	0° \mathbb{X}		max. Earth dist.	16219 Jan 16 16:31	12° \approx 38'36	1.31210 AU
max. Earth dist.	16218 Feb 02 10:24	0° \mathbb{X} 34'56	1.31970 AU	evening rise	16219 Jan 22 22:05	26° \approx 15'23	
evening rise	16218 Feb 07 20:37	12° \mathbb{X} 06'07			16219 Jan 24 17:09	0° \mathbb{X}	
desc. node	16218 Feb 14 12:04	25° \mathbb{X} 04'25		desc. node	16219 Feb 01 08:45	14° \mathbb{X} 45'17	
	16218 Feb 17 05:31	0° \mathbb{Y}			16219 Feb 10 17:20	0° \mathbb{Y}	
	16218 Mar 10 01:20	0° \mathbb{B}		evening max el	16219 Feb 23 08:15	15° \mathbb{Y} 25'48	27°20'46
evening max el	16218 Mar 13 00:54	3° \mathbb{B} 03'23	27°36'32	retrograde	16219 Mar 09 08:46	22° \mathbb{Y} 46'53	
retrograde	16218 Mar 26 22:51	10° \mathbb{B} 33'24		evening set	16219 Mar 16 02:11	20° \mathbb{Y} 45'19	
evening set	16218 Apr 02 18:12	8° \mathbb{B} 14'14		min. Earth dist.	16219 Mar 19 22:25	17° \mathbb{Y} 58'40	0.60592 AU
min. Earth dist.	16218 Apr 06 12:30	5° \mathbb{B} 07'36	0.62819 AU	inferior conj	16219 Mar 23 03:09	15° \mathbb{Y} 13'32	-1°49'54
inferior conj	16218 Apr 09 10:41	2° \mathbb{B} 15'31	-0°28'42	minimum elong	16219 Mar 23 07:13	15° \mathbb{Y} 04'45	1°48'22
minimum elong	16218 Apr 09 11:37	2° \mathbb{B} 13'11	0°28'39	asc. node	16219 Mar 28 20:01	11° \mathbb{Y} 04'52	
asc. node	16218 Apr 10 22:43	0° \mathbb{B} 48'37		morning rise	16219 Mar 30 15:41	10° \mathbb{Y} 22'09	
	16218 Apr 11 20:09	30° \mathbb{R} \mathbb{Y}		direct	16219 Apr 01 17:45	10° \mathbb{Y} 04'19	
morning rise	16218 Apr 16 07:51	27° \mathbb{Y} 05'18		morning max el	16219 Apr 08 20:54	13° \mathbb{Y} 38'25	17°56'18
direct	16218 Apr 18 16:09	26° \mathbb{Y} 39'19			16219 Apr 20 00:19	0° \mathbb{B}	
morning max el	16218 Apr 25 05:05	29° \mathbb{Y} 58'19	17°46'11	morning set	16219 Apr 24 11:06	8° \mathbb{B} 02'08	
	16218 Apr 25 05:46	0° \mathbb{B}		desc. node	16219 Apr 30 10:05	18° \mathbb{B} 50'31	
morning set	16218 May 11 08:59	24° \mathbb{B} 37'20					
desc. node	16218 May 13 13:16	28° \mathbb{B} 24'08		superior conj	16219 May 04 23:49	26° \mathbb{B} 55'08	-0°37'00
	16218 May 14 11:26	0° \mathbb{I}		minimum elong	16219 May 04 20:35	26° \mathbb{B} 41'05	0°37'02
					16219 May 06 18:37	0° \mathbb{I}	
superior conj	16218 May 23 12:32	15° \mathbb{I} 18'51	-1°14'57	max. Earth dist.	16219 May 12 11:20	9° \mathbb{I} 34'32	1.42777 AU
minimum elong	16218 May 23 05:37	14° \mathbb{I} 50'15	1°14'42	evening rise	16219 May 18 09:40	19° \mathbb{I} 08'33	
max. Earth dist.	16218 May 29 21:19	25° \mathbb{I} 39'36	1.44479 AU		16219 May 25 10:10	0° \mathbb{B}	
	16218 Jun 01 14:56	0° \mathbb{B}			16219 Jun 16 01:54	0° Ω	
evening rise	16218 Jun 07 11:08	9° \mathbb{B} 05'42		evening max el	16219 Jun 19 22:36	4° Ω 13'13	22°06'45
	16218 Jun 21 10:51	0° Ω		asc. node	16219 Jun 24 18:17	8° Ω 12'17	

retrograde	16219 Jun 29 10:14	9°Ω45'35			16220 May 17 20:30	0°☿	
evening set	16219 Jul 04 04:08	7°Ω46'33		evening max el	16220 Jun 01 13:32	18°☿07'24	23°27'55
inferior conj	16219 Jul 09 10:06	1°Ω28'14	3°06'10	asc. node	16220 Jun 10 15:15	24°☿12'35	
minimum elong	16219 Jul 09 09:30	1°Ω30'17	3°05'30	retrograde	16220 Jun 12 05:51	24°☿23'40	
min. Earth dist.	16219 Jul 09 09:34	1°Ω30'03	0.69142 AU	evening set	16220 Jun 17 11:21	22°☿10'01	
	16219 Jul 10 11:32	30°☿☿		inferior conj	16220 Jun 22 19:55	15°☿44'01	2°54'10
morning rise	16219 Jul 14 14:43	25°☿13'20		minimum elong	16220 Jun 22 18:30	15°☿48'55	2°53'16
direct	16219 Jul 19 08:37	23°☿13'21		min. Earth dist.	16220 Jun 22 06:20	16°☿30'47	0.69035 AU
desc. node	16219 Jul 27 09:15	27°☿24'49		morning rise	16220 Jun 28 01:38	9°☿37'19	
morning max el	16219 Jul 28 17:55	28°☿43'08	22°02'20	direct	16220 Jul 02 07:24	7°☿56'36	
	16219 Jul 29 23:35	0°Ω		morning max el	16220 Jul 10 12:30	12°☿37'34	20°42'05
	16219 Aug 21 02:56	0°☿		desc. node	16220 Jul 13 06:30	15°☿35'22	
morning set	16219 Aug 30 11:21	14°☿31'37			16220 Jul 24 03:42	0°Ω	
max. Earth dist.	16219 Sep 05 01:48	23°☿39'46	1.41688 AU	morning set	16220 Aug 09 01:33	23°Ω48'13	
	16219 Sep 08 20:02	0°☿			16220 Aug 13 00:48	0°☿	
				max. Earth dist.	16220 Aug 17 10:39	7°☿01'10	1.43687 AU
superior conj	16219 Sep 12 20:21	6°☿57'45	-1°05'30				
minimum elong	16219 Sep 13 01:42	7°☿21'16	1°04'41	superior conj	16220 Aug 24 02:13	17°☿54'19	-1°40'05
asc. node	16219 Sep 20 19:12	21°☿19'40		minimum elong	16220 Aug 24 09:58	18°☿26'44	1°39'27
evening rise	16219 Sep 23 10:08	26°☿10'35			16220 Aug 31 04:54	0°☿	
	16219 Sep 25 11:48	0°☿		evening rise	16220 Sep 05 07:35	8°☿56'16	
evening max el	16219 Oct 09 08:31	21°☿34'47	18°12'43	asc. node	16220 Sep 06 15:52	11°☿18'13	
retrograde	16219 Oct 16 14:48	25°☿17'36			16220 Sep 18 00:24	0°☿	
evening set	16219 Oct 18 17:33	24°☿59'16		evening max el	16220 Sep 21 21:41	4°☿40'47	18°01'20
desc. node	16219 Oct 23 06:23	22°☿33'38		retrograde	16220 Sep 28 12:19	8°☿06'03	
inferior conj	16219 Oct 26 03:00	20°☿14'16	-0°55'06	evening set	16220 Sep 30 22:33	7°☿38'03	
minimum elong	16219 Oct 26 01:00	20°☿18'34	0°53'46	inferior conj	16220 Oct 07 15:29	2°☿33'29	0°28'07
min. Earth dist.	16219 Oct 29 08:59	17°☿28'00	0.59091 AU	minimum elong	16220 Oct 07 16:20	2°☿31'22	0°28'07
morning rise	16219 Nov 02 05:04	14°☿44'23		desc. node	16220 Oct 09 03:42	1°☿03'34	
direct	16219 Nov 08 16:44	12°☿49'59			16220 Oct 10 05:44	30°☿☿	
morning max el	16219 Nov 22 23:36	20°☿31'31	27°36'10	min. Earth dist.	16220 Oct 10 16:08	29°☿35'14	0.61382 AU
	16219 Dec 01 04:16	0°☿		morning rise	16220 Oct 14 07:15	26°☿35'43	
asc. node	16219 Dec 17 19:38	26°☿53'57		direct	16220 Oct 20 23:34	24°☿19'02	
	16219 Dec 19 10:06	0°☿			16220 Nov 01 18:28	0°☿	
morning set	16219 Dec 24 12:40	10°☿27'02		morning max el	16220 Nov 04 04:06	2°☿14'09	27°59'06
					16220 Nov 24 14:00	0°☿	
superior conj	16219 Dec 31 11:01	25°☿41'11	1°35'35	asc. node	16220 Dec 03 16:39	16°☿34'17	
minimum elong	16219 Dec 31 10:04	25°☿35'49	1°36'12	morning set	16220 Dec 07 14:34	24°☿28'08	
max. Earth dist.	16219 Dec 31 00:19	24°☿41'14	1.30985 AU		16220 Dec 10 05:27	0°☿	
	16220 Jan 02 09:14	0°☿		max. Earth dist.	16220 Dec 13 05:54	6°☿33'58	1.31317 AU
evening rise	16220 Jan 07 04:33	10°☿34'57					
	16220 Jan 16 23:24	0°☿		superior conj	16220 Dec 14 21:20	10°☿12'05	1°26'57
desc. node	16220 Jan 19 05:30	3°☿56'43		minimum elong	16220 Dec 14 19:31	10°☿02'01	1°27'29
evening max el	16220 Feb 05 08:27	26°☿56'06	26°29'48	evening rise	16220 Dec 21 14:07	25°☿00'42	
	16220 Feb 08 22:55	0°☿			16220 Dec 23 22:14	0°☿	
retrograde	16220 Feb 19 08:24	4°☿05'51		desc. node	16221 Jan 05 02:20	22°☿28'13	
evening set	16220 Feb 25 16:44	2°☿27'52			16221 Jan 10 07:58	0°☿	
	16220 Feb 29 16:26	30°☿☿		evening max el	16221 Jan 17 00:09	7°☿34'01	25°07'38
min. Earth dist.	16220 Feb 29 21:53	29°☿50'15	0.58361 AU	retrograde	16221 Jan 30 20:05	14°☿30'05	
inferior conj	16220 Mar 04 01:36	27°☿29'05	-3°20'13	evening set	16221 Feb 05 10:22	13°☿19'43	
minimum elong	16220 Mar 04 09:15	27°☿14'46	3°17'22	min. Earth dist.	16221 Feb 10 12:34	10°☿35'38	0.56388 AU
morning rise	16220 Mar 12 05:13	22°☿59'11		inferior conj	16221 Feb 13 03:10	8°☿54'08	-4°47'28
direct	16220 Mar 14 04:14	22°☿46'00		minimum elong	16221 Feb 13 12:36	8°☿38'49	4°44'41
asc. node	16220 Mar 14 17:22	22°☿47'03		morning rise	16221 Feb 21 17:28	4°☿45'26	
morning max el	16220 Mar 22 07:08	26°☿46'34	18°26'10	direct	16221 Feb 23 19:36	4°☿33'00	
	16220 Mar 25 03:25	0°☿		asc. node	16221 Mar 01 14:43	6°☿15'45	
morning set	16220 Apr 07 02:50	22°☿02'46		morning max el	16221 Mar 05 07:35	9°☿10'55	19°17'40
	16220 Apr 11 06:47	0°☿			16221 Mar 18 21:11	0°☿	
				morning set	16221 Mar 22 03:51	6°☿26'33	
superior conj	16220 Apr 16 08:22	9°☿28'35	-0°00'33				
minimum elong	16220 Apr 16 08:18	9°☿28'16	0°00'56	superior conj	16221 Mar 30 09:52	22°☿46'56	0°31'19
behind sun begin	16220 Apr 16 01:06	8°☿55'11		minimum elong	16221 Mar 30 11:41	22°☿55'42	0°30'48
behind sun end	16220 Apr 16 15:30	10°☿01'17		desc. node	16221 Apr 03 03:33	29°☿53'27	
desc. node	16220 Apr 16 06:50	9°☿21'28			16221 Apr 03 04:57	0°☿	
max. Earth dist.	16220 Apr 23 20:32	22°☿48'45	1.40657 AU	max. Earth dist.	16221 Apr 06 02:29	5°☿19'33	1.38361 AU
evening rise	16220 Apr 28 04:09	0°☿04'58		evening rise	16221 Apr 09 19:48	11°☿55'43	
	16220 Apr 28 02:57	0°☿			16221 Apr 20 20:12	0°☿	

	16221 May 13 03:33	0°☿				16222 Apr 14 10:19	0°♊	
evening max el	16221 May 15 02:59	2°☿02'10	24°48'14		evening max el	16222 Apr 27 16:40	15°♊55'15	26°00'25
retrograde	16221 May 26 21:52	8°☿54'49			retrograde	16222 May 10 09:11	23°♊12'16	
asc. node	16221 May 28 12:19	8°☿44'03			asc. node	16222 May 15 09:27	21°♊32'35	
evening set	16221 Jun 01 14:45	6°☿30'04			evening set	16222 May 16 12:38	20°♊41'06	
min. Earth dist.	16221 Jun 06 01:22	1°☿27'56	0.68445 AU		min. Earth dist.	16222 May 20 16:31	16°♊15'05	0.67390 AU
inferior conj	16221 Jun 07 03:56	29°♊59'43	2°31'36		inferior conj	16222 May 22 08:07	14°♊11'02	1°57'49
minimum elong	16221 Jun 07 01:55	0°☿06'24	2°30'26		minimum elong	16222 May 22 05:56	14°♊17'53	1°56'30
	16221 Jun 07 03:51	30°♋♊			morning rise	16222 May 27 23:56	8°♊24'19	
morning rise	16221 Jun 12 13:20	24°♊02'19			direct	16222 May 31 07:28	7°♊21'44	
direct	16221 Jun 16 07:34	22°♊41'12			morning max el	16222 Jun 06 22:31	10°♊54'39	18°42'19
morning max el	16221 Jun 23 13:59	26°♊42'07	19°34'26		desc. node	16222 Jun 17 00:46	24°♊00'03	
	16221 Jun 26 14:26	0°☿				16222 Jun 20 23:53	0°☿	
desc. node	16221 Jun 30 03:41	4°☿31'00			morning set	16222 Jun 28 19:27	12°☿07'33	
greatest brilliancy	16221 Jul 06 08:33	13°☿16'36	-0.6m			16222 Jul 10 06:46	0°♌	
	16221 Jul 17 11:21	0°♌			max. Earth dist.	16222 Jul 13 20:06	5°♌32'31	1.45919 AU
morning set	16221 Jul 19 05:35	2°♌41'44						
max. Earth dist.	16221 Jul 31 01:08	21°♌02'45	1.45144 AU		superior conj	16222 Jul 14 21:47	7°♌12'40	-2°14'17
					minimum elong	16222 Jul 14 21:24	7°♌11'13	2°14'55
superior conj	16221 Aug 04 08:41	27°♌53'13	-2°05'28			16222 Jul 29 08:50	0°♍	
minimum elong	16221 Aug 04 15:03	28°♌18'35	2°05'34		evening rise	16222 Jul 30 09:58	1°♍40'10	
	16221 Aug 05 16:23	0°♍			greatest brilliancy	16222 Aug 05 12:23	11°♍23'33	-0.9m
evening rise	16221 Aug 18 08:59	20°♍49'10			asc. node	16222 Aug 11 09:16	20°♍31'28	
	16221 Aug 23 21:06	0°♎				16222 Aug 18 07:54	0°♎	
asc. node	16221 Aug 24 12:33	1°♎03'47			evening max el	16222 Aug 20 02:09	1°♎53'24	18°33'23
evening max el	16221 Sep 05 12:37	18°♎09'34	18°08'33		retrograde	16222 Aug 26 13:57	5°♎22'53	
retrograde	16221 Sep 11 21:21	21°♎30'25			evening set	16222 Aug 29 18:02	4°♎26'01	
evening set	16221 Sep 14 16:11	20°♎49'17				16222 Sep 03 11:34	30°♋♍	
inferior conj	16221 Sep 20 19:28	15°♎27'33	1°31'56		inferior conj	16222 Sep 04 11:07	28°♍49'09	2°17'30
minimum elong	16221 Sep 20 21:36	15°♎21'38	1°31'21		minimum elong	16222 Sep 04 13:24	28°♍42'13	2°16'49
min. Earth dist.	16221 Sep 23 09:14	12°♎37'04	0.63604 AU		min. Earth dist.	16222 Sep 06 11:27	26°♍22'30	0.65573 AU
desc. node	16221 Sep 26 01:04	10°♎00'58			morning rise	16222 Sep 10 07:33	22°♍24'42	
morning rise	16221 Sep 27 01:01	9°♎12'05			desc. node	16222 Sep 12 22:26	20°♍41'01	
direct	16221 Oct 03 16:10	6°♎40'37			direct	16222 Sep 16 16:50	19°♍47'32	
morning max el	16221 Oct 17 13:11	14°♎39'24	27°43'56		morning max el	16222 Sep 30 00:20	27°♍37'09	26°56'43
	16221 Oct 30 01:35	0°♏				16222 Oct 02 06:33	0°♎	
	16221 Nov 17 05:15	0°♐				16222 Oct 23 18:37	0°♏	
asc. node	16221 Nov 20 13:35	6°♐29'23			morning set	16222 Nov 04 16:30	21°♏11'48	
morning set	16221 Nov 21 08:48	8°♐05'13			asc. node	16222 Nov 07 10:27	26°♏34'10	
max. Earth dist.	16221 Nov 26 05:25	18°♐08'14	1.32216 AU		max. Earth dist.	16222 Nov 08 20:02	29°♏22'26	1.33680 AU
						16222 Nov 09 03:27	0°♑	
superior conj	16221 Nov 29 04:32	24°♑30'53	1°12'12					
minimum elong	16221 Nov 29 02:13	24°♑18'17	1°12'35		superior conj	16222 Nov 13 06:19	8°♑31'41	0°51'16
	16221 Dec 01 16:45	0°♒			minimum elong	16222 Nov 13 04:04	8°♑19'49	0°51'31
evening rise	16221 Dec 06 00:53	9°♒27'55			evening rise	16222 Nov 20 11:01	23°♑52'06	
	16221 Dec 16 10:53	0°♓				16222 Nov 23 09:31	0°♒	
desc. node	16221 Dec 22 23:15	10°♓05'16			desc. node	16222 Dec 09 20:13	26°♒28'33	
evening max el	16221 Dec 29 10:07	17°♓36'07	23°26'49		evening max el	16222 Dec 10 22:19	27°♒35'10	21°45'06
retrograde	16222 Jan 11 18:12	24°♓12'04				16222 Dec 13 16:33	0°♓	
evening set	16222 Jan 16 05:31	23°♓28'50			retrograde	16222 Dec 23 05:20	3°♓39'41	
min. Earth dist.	16222 Jan 22 21:05	20°♓20'06	0.54977 AU		evening set	16222 Dec 26 10:06	3°♓16'40	
inferior conj	16222 Jan 24 08:31	19°♓28'36	-5°48'57			16223 Jan 03 00:44	30°♋♒	
minimum elong	16222 Jan 24 14:09	19°♓20'24	5°47'48		inferior conj	16223 Jan 04 00:44	29°♒26'36	-5°58'28
morning rise	16222 Feb 02 00:12	15°♓35'55			minimum elong	16223 Jan 03 21:14	29°♒31'28	5°57'35
direct	16222 Feb 04 16:05	15°♓18'45			min. Earth dist.	16223 Jan 04 02:19	29°♒24'22	0.54386 AU
morning max el	16222 Feb 15 18:15	20°♓40'51	20°32'23		morning rise	16223 Jan 12 09:02	25°♒38'41	
asc. node	16222 Feb 16 12:02	21°♓25'15			direct	16223 Jan 16 00:54	25°♒09'22	
	16222 Feb 23 02:58	0°♈				16223 Jan 27 05:09	0°♓	
morning set	16222 Mar 06 10:56	21°♈04'09			morning max el	16223 Jan 28 13:51	1°♓14'10	22°08'51
	16222 Mar 10 18:24	0°♉			asc. node	16223 Feb 03 09:21	7°♓58'03	
						16223 Feb 16 02:38	0°♈	
superior conj	16222 Mar 14 00:04	6°♉38'29	0°57'13		morning set	16223 Feb 18 21:28	5°♈47'32	
minimum elong	16222 Mar 14 02:35	6°♉51'13	0°56'49					
max. Earth dist.	16222 Mar 19 09:56	17°♉20'38	1.36136 AU		superior conj	16223 Feb 25 23:21	20°♈52'42	1°16'45
desc. node	16222 Mar 21 00:14	20°♉22'45			minimum elong	16223 Feb 26 01:43	21°♈05'07	1°16'38
evening rise	16222 Mar 23 06:03	24°♉32'50			max. Earth dist.	16223 Mar 01 23:20	29°♈10'48	1.34185 AU
	16222 Mar 26 06:48	0°♊				16223 Mar 02 09:01	0°♉	

evening rise	16223 Mar 06 07:14	7° Υ 45'32		evening rise	16224 Feb 17 20:03	21° X 25'41	
desc. node	16223 Mar 07 20:52	10° Υ 44'52			16224 Feb 22 05:40	0° Υ	
	16223 Mar 18 21:41	0° B		desc. node	16224 Feb 22 17:32	0° Υ 55'38	
evening max el	16223 Apr 10 06:32	29° B 37'32	26°56'54		16224 Mar 11 18:26	0° B	
	16223 Apr 10 15:51	0° Π		evening max el	16224 Mar 22 19:23	12° B 58'06	27°30'15
retrograde	16223 Apr 23 14:39	7° Π 06'58		retrograde	16224 Apr 05 13:30	20° B 30'16	
evening set	16223 Apr 30 03:01	4° Π 34'53		evening set	16224 Apr 12 07:44	18° B 03'58	
asc. node	16223 May 02 06:39	2° Π 38'27		min. Earth dist.	16224 Apr 16 02:44	14° B 42'43	0.64035 AU
min. Earth dist.	16223 May 04 01:37	0° Π 43'04	0.65901 AU	asc. node	16224 Apr 18 03:54	12° B 34'26	
	16223 May 04 16:43	30° R B		inferior conj	16224 Apr 18 19:15	11° B 53'52	0°12'03
inferior conj	16223 May 06 06:07	28° B 11'13	1°11'41	minimum elong	16224 Apr 18 18:55	11° B 54'47	0°11'30
minimum elong	16223 May 06 04:24	28° B 16'12	1°10'31	transit middle	16224 Apr 18 18:55	11° B 54'47	0°11'30
morning rise	16223 May 12 07:11	22° B 36'57		transit begin	16224 Apr 18 16:45	12° B 00'29	
direct	16223 May 15 04:53	21° B 50'54		transit end	16224 Apr 18 21:05	11° B 49'05	
morning max el	16223 May 21 12:35	25° B 08'38	18°06'55	morning rise	16224 Apr 25 08:24	6° B 34'23	
	16223 May 25 16:32	0° Π		direct	16224 Apr 27 21:17	6° B 02'01	
desc. node	16223 Jun 03 21:44	13° Π 52'44		morning max el	16224 May 04 05:48	9° B 16'56	17°48'41
morning set	16223 Jun 09 09:41	22° Π 44'12			16224 May 18 09:10	0° Π	
	16223 Jun 13 21:58	0° C		desc. node	16224 May 20 18:38	4° Π 02'33	
				morning set	16224 May 21 02:54	4° Π 37'28	
superior conj	16223 Jun 24 07:46	16° C 29'47	-2°03'04	superior conj	16224 Jun 03 07:09	26° Π 27'20	-1°35'20
minimum elong	16223 Jun 24 00:36	16° C 01'41	2°03'20	minimum elong	16224 Jun 02 22:48	25° Π 53'37	1°35'08
max. Earth dist.	16223 Jun 26 16:55	20° C 13'17	1.45936 AU		16224 Jun 05 12:09	0° C	
	16223 Jul 02 23:48	0° Ω		max. Earth dist.	16224 Jun 08 12:31	4° C 47'21	1.45206 AU
evening rise	16223 Jul 10 11:04	11° Ω 33'18		evening rise	16224 Jun 18 22:21	20° C 57'09	
greatest brilliancy	16223 Jul 22 10:45	29° Ω 52'19	-0.7m		16224 Jun 24 21:30	0° Ω	
	16223 Jul 22 12:48	0° M		asc. node	16224 Jul 15 02:49	28° Ω 03'16	
asc. node	16223 Jul 29 06:01	9° M 34'18		evening max el	16224 Jul 16 15:17	29° Ω 38'59	20°12'14
evening max el	16223 Aug 03 11:36	15° M 44'59	19°15'05		16224 Jul 16 23:52	0° M	
retrograde	16223 Aug 10 11:00	19° M 36'18		retrograde	16224 Jul 24 09:58	4° M 04'02	
evening set	16223 Aug 14 00:52	18° M 22'05		evening set	16224 Jul 28 10:11	2° M 31'58	
inferior conj	16223 Aug 19 11:06	12° M 31'40	2°47'17		16224 Jul 30 23:46	30° R Ω	
minimum elong	16223 Aug 19 12:51	12° M 25'57	2°46'42	inferior conj	16224 Aug 02 16:40	26° Ω 29'28	3°03'41
min. Earth dist.	16223 Aug 20 21:22	10° M 40'09	0.67160 AU	minimum elong	16224 Aug 02 17:34	26° Ω 26'23	3°03'10
morning rise	16223 Aug 25 00:13	6° M 04'53		min. Earth dist.	16224 Aug 03 13:06	25° Ω 19'45	0.68303 AU
desc. node	16223 Aug 30 19:46	3° M 30'33		morning rise	16224 Aug 08 00:35	20° Ω 04'52	
direct	16223 Aug 31 00:15	3° M 30'25		direct	16224 Aug 13 13:27	17° Ω 40'01	
morning max el	16223 Sep 12 11:44	10° M 56'41	25°46'06	desc. node	16224 Aug 16 17:06	18° Ω 19'26	
	16223 Sep 27 16:56	0° L		morning max el	16224 Aug 24 22:47	24° Ω 28'47	24°21'28
	16223 Oct 16 09:22	0° M			16224 Aug 29 21:59	0° M	
morning set	16223 Oct 18 10:16	3° M 40'42			16224 Sep 20 03:02	0° L	
max. Earth dist.	16223 Oct 22 01:24	10° M 27'10	1.35642 AU	morning set	16224 Sep 29 09:59	15° L 22'31	
asc. node	16223 Oct 25 07:15	16° M 44'33		max. Earth dist.	16224 Oct 03 00:47	21° L 44'57	1.37952 AU
					16224 Oct 07 12:41	0° M	
superior conj	16223 Oct 28 00:03	22° M 08'07	0°24'18	superior conj	16224 Oct 10 06:19	5° M 11'47	-0°08'05
minimum elong	16223 Oct 27 22:40	22° M 01'09	0°24'33	minimum elong	16224 Oct 10 06:51	5° M 14'18	0°07'39
	16223 Oct 31 20:11	0° X		behind sun begin	16224 Oct 10 00:47	4° M 45'09	
evening rise	16223 Nov 04 18:34	8° X 08'44		behind sun end	16224 Oct 10 12:55	5° M 43'30	
	16223 Nov 16 12:30	0° B		asc. node	16224 Oct 11 03:59	6° M 56'18	
evening max el	16223 Nov 22 21:44	8° B 06'35	20°17'45	evening rise	16224 Oct 18 21:05	22° M 11'15	
desc. node	16223 Nov 26 17:16	11° B 14'54			16224 Oct 22 20:40	0° X	
retrograde	16223 Dec 03 16:30	13° B 28'41		evening max el	16224 Nov 04 11:43	19° X 27'26	19°11'49
evening set	16223 Dec 05 22:29	13° B 15'45		desc. node	16224 Nov 12 14:24	24° X 00'34	
inferior conj	16223 Dec 14 17:37	9° B 20'05	-5°07'08	retrograde	16224 Nov 13 15:59	24° X 04'10	
minimum elong	16223 Dec 14 07:57	9° B 34'23	5°04'10	evening set	16224 Nov 15 13:27	23° X 53'12	
min. Earth dist.	16223 Dec 16 08:01	8° B 23'19	0.54731 AU	inferior conj	16224 Nov 24 00:48	19° X 41'41	-3°34'27
morning rise	16223 Dec 22 16:51	5° B 18'11		minimum elong	16224 Nov 23 16:09	19° X 56'14	3°30'43
direct	16223 Dec 27 10:22	4° B 29'52		min. Earth dist.	16224 Nov 26 17:47	17° X 52'37	0.55956 AU
morning max el	16224 Jan 09 23:36	11° B 10'24	23°58'18	morning rise	16224 Dec 01 16:23	15° X 08'22	
asc. node	16224 Jan 21 06:36	25° B 35'41		direct	16224 Dec 07 07:17	13° X 55'32	
	16224 Jan 23 22:22	0° \approx		morning max el	16224 Dec 21 09:04	21° X 04'58	25°43'24
morning set	16224 Feb 03 09:25	20° \approx 30'56			16224 Dec 29 02:27	0° B	
	16224 Feb 07 18:00	0° X		asc. node	16225 Jan 07 03:47	14° B 01'43	
superior conj	16224 Feb 10 04:55	5° X 21'58	1°29'56		16225 Jan 15 10:49	0° \approx	
minimum elong	16224 Feb 10 06:34	5° X 30'59	1°30'08	morning set	16225 Jan 17 20:54	5° \approx 08'17	
max. Earth dist.	16224 Feb 12 20:16	11° X 03'44	1.32640 AU				

superior conj	16225 Jan 24 14:20	19° \approx 58'45	1°36'54		16226 Jan 07 00:01	0° \approx	
minimum elong	16225 Jan 24 15:01	20° \approx 02'33	1°37'23				
max. Earth dist.	16225 Jan 25 23:35	23° \approx 02'51	1.31576 AU	superior conj	16226 Jan 09 01:35	4° \approx 37'26	1°37'48
	16225 Jan 29 04:05	0° H		minimum elong	16226 Jan 09 01:13	4° \approx 35'20	1°38'25
evening rise	16225 Jan 31 17:36	5° H 25'29		max. Earth dist.	16226 Jan 09 06:36	5° \approx 05'29	1.31042 AU
desc. node	16225 Feb 08 14:14	20° H 49'06		evening rise	16226 Jan 15 21:26	19° \approx 39'27	
	16225 Feb 13 20:38	0° Y			16226 Jan 20 22:21	0° H	
evening max el	16225 Mar 05 05:17	25° Y 44'29	27°34'01	desc. node	16226 Jan 26 10:59	10° H 18'22	
	16225 Mar 10 09:21	0° B			16226 Feb 08 10:38	0° Y	
retrograde	16225 Mar 19 04:51	3° B 12'02		evening max el	16226 Feb 15 09:50	7° Y 45'19	27°03'26
evening set	16225 Mar 26 00:11	0° B 59'07		retrograde	16226 Mar 01 10:56	15° Y 02'32	
	16225 Mar 27 09:52	30° R Y		evening set	16226 Mar 08 01:12	13° Y 10'30	
min. Earth dist.	16225 Mar 29 18:29	28° Y 02'20	0.61885 AU	min. Earth dist.	16226 Mar 12 00:08	10° Y 29'01	0.59618 AU
inferior conj	16225 Apr 01 20:19	25° Y 10'48	-1°01'37	inferior conj	16226 Mar 15 05:33	7° Y 51'54	-2°27'37
minimum elong	16225 Apr 01 22:27	25° Y 05'47	1°00'59	minimum elong	16226 Mar 15 11:10	7° Y 40'27	2°25'28
asc. node	16225 Apr 05 01:11	22° Y 23'13		asc. node	16226 Mar 22 22:31	3° Y 10'53	
morning rise	16225 Apr 08 23:55	20° Y 08'35		morning rise	16226 Mar 23 00:43	3° Y 09'28	
direct	16225 Apr 11 05:14	19° Y 46'36		direct	16226 Mar 25 00:48	2° Y 54'10	
morning max el	16225 Apr 17 23:11	23° Y 10'36	17°48'13	morning max el	16226 Apr 01 13:08	6° Y 38'37	18°06'31
	16225 Apr 23 09:19	0° B			16226 Apr 16 10:56	0° B	
morning set	16225 May 03 18:46	17° B 34'09		morning set	16226 Apr 17 03:19	1° B 16'10	
desc. node	16225 May 07 15:29	24° B 24'22		desc. node	16226 Apr 24 12:17	14° B 53'15	
	16225 May 10 20:20	0° II					
superior conj	16225 May 15 05:01	7° II 27'38	-0°58'58	superior conj	16226 Apr 27 01:49	19° B 29'43	-0°21'08
minimum elong	16225 May 14 23:37	7° II 04'50	0°58'49	minimum elong	16226 Apr 27 00:04	19° B 21'55	0°21'20
max. Earth dist.	16225 May 22 04:37	18° II 59'22	1.43814 AU	max. Earth dist.	16226 May 03 02:56	0° II	
	16225 May 29 03:23	0° B		evening rise	16226 May 04 16:07	2° II 36'36	1.41909 AU
evening rise	16225 May 29 12:38	0° B 35'54			16226 May 09 19:11	11° II 01'12	
	16225 Jun 18 11:42	0° Q			16226 May 22 03:15	0° B	
evening max el	16225 Jun 29 12:59	13° Q 33'24	21°22'16	evening max el	16226 Jun 12 05:55	27° B 28'06	22°40'59
asc. node	16225 Jul 01 23:41	15° Q 47'04			16226 Jun 15 00:30	0° Q	
retrograde	16225 Jul 08 08:51	18° Q 40'31		asc. node	16226 Jun 18 20:38	2° Q 30'25	
evening set	16225 Jul 12 20:02	16° Q 51'06		retrograde	16226 Jun 22 05:58	3° Q 19'41	
inferior conj	16225 Jul 18 01:29	10° Q 38'01	3°08'22	evening set	16226 Jun 27 04:41	1° Q 14'22	
minimum elong	16225 Jul 18 01:26	10° Q 38'11	3°07'48		16226 Jun 28 11:30	30° R B	
min. Earth dist.	16225 Jul 18 08:34	10° Q 13'20	0.68973 AU	inferior conj	16226 Jul 02 11:30	24° B 52'34	3°02'22
morning rise	16225 Jul 23 06:36	4° Q 18'47		minimum elong	16226 Jul 02 10:33	24° B 55'55	3°01'36
direct	16225 Jul 28 07:29	2° Q 08'34		min. Earth dist.	16226 Jul 02 05:30	25° B 13'27	0.69159 AU
desc. node	16225 Aug 03 14:24	4° Q 44'30		morning rise	16226 Jul 07 16:16	18° B 40'46	
morning max el	16225 Aug 07 10:35	8° Q 08'54	22°52'15	direct	16226 Jul 12 05:01	16° B 48'36	
	16225 Aug 24 12:53	0° np		morning max el	16226 Jul 21 01:44	21° B 57'00	21°26'48
morning set	16225 Sep 10 11:42	26° np 08'18		desc. node	16226 Jul 21 11:41	22° B 22'09	
	16225 Sep 12 19:36	0° u			16226 Jul 27 23:40	0° Q	
max. Earth dist.	16225 Sep 15 00:11	3° u 41'59	1.40366 AU	morning set	16226 Aug 17 18:51	0° np	
				max. Earth dist.	16226 Aug 21 13:37	5° np 53'39	
superior conj	16225 Sep 22 21:11	17° u 33'53	-0°44'12		16226 Aug 28 04:57	16° np 32'52	1.42599 AU
minimum elong	16225 Sep 23 00:37	17° u 49'32	0°43'28	superior conj	16226 Sep 04 16:10	29° np 04'10	-1°20'50
asc. node	16225 Sep 28 00:42	27° u 06'11		minimum elong	16226 Sep 04 22:47	29° np 32'37	1°20'01
	16225 Sep 29 13:29	0° ml			16226 Sep 05 05:08	0° u	
evening rise	16225 Oct 02 15:33	5° ml 52'19		asc. node	16226 Sep 14 21:24	17° u 10'03	
	16225 Oct 17 02:21	0° x		evening rise	16226 Sep 15 22:00	19° u 01'26	
evening max el	16225 Oct 18 14:07	1° x 37'07	18°28'14		16226 Sep 22 01:14	0° ml	
retrograde	16225 Oct 26 10:10	5° x 35'45		evening max el	16226 Oct 02 00:35	14° ml 25'47	18°05'34
evening set	16225 Oct 28 09:34	5° x 21'20		retrograde	16226 Oct 08 22:47	17° ml 59'04	
desc. node	16225 Oct 30 11:36	4° x 37'09		evening set	16226 Oct 11 04:38	17° ml 36'59	
inferior conj	16225 Nov 05 05:11	0° x 49'02	-1°50'52	desc. node	16226 Oct 17 08:52	13° ml 32'57	
minimum elong	16225 Nov 05 00:49	0° x 57'36	1°48'31	inferior conj	16226 Oct 18 06:48	12° ml 43'29	-0°17'26
	16225 Nov 06 06:00	30° R ml		minimum elong	16226 Oct 18 06:13	12° ml 44'48	0°16'46
min. Earth dist.	16225 Nov 08 10:19	28° ml 18'26	0.57840 AU	min. Earth dist.	16226 Oct 21 11:32	9° ml 49'38	0.60067 AU
morning rise	16225 Nov 12 12:38	25° ml 38'53		morning rise	16226 Oct 25 04:35	7° ml 00'54	
direct	16225 Nov 18 18:55	23° ml 58'54		direct	16226 Oct 31 19:16	4° ml 56'05	
	16225 Dec 01 09:57	0° x		morning max el	16226 Nov 15 01:16	12° ml 43'51	27°50'45
morning max el	16225 Dec 03 01:05	1° x 30'38	27°04'59		16226 Nov 28 18:38	0° x	
	16225 Dec 23 08:42	0° B		asc. node	16226 Dec 11 21:59	22° x 32'58	
asc. node	16225 Dec 25 00:54	3° B 03'58			16226 Dec 15 15:40	0° B	
morning set	16226 Jan 02 06:10	19° B 35'10		morning set	16226 Dec 17 11:22	3° B 47'18	

max. Earth dist.	16226 Dec 23 13:54	17°  05'13	1.31056 AU	morning set	16227 Dec 01 10:16	17°  38'43	
				max. Earth dist.	16227 Dec 06 17:31	28°  51'54	1.31632 AU
superior conj	16226 Dec 24 12:48	19°  13'03	1°32'40		16227 Dec 07 06:01	0° 	
minimum elong	16226 Dec 24 11:27	19°  05'30	1°33'16				
	16226 Dec 29 08:57	0° 		superior conj	16227 Dec 08 22:00	3°  39'19	1°21'27
evening rise	16226 Dec 31 05:29	4°  02'53		minimum elong	16227 Dec 08 19:55	3°  27'50	1°21'56
desc. node	16227 Jan 13 07:47	29°  14'42		evening rise	16227 Dec 15 15:45	18°  29'59	
	16227 Jan 13 18:49	0° 			16227 Dec 21 04:28	0° 	
evening max el	16227 Jan 28 06:45	18°  54'11	25°58'17	desc. node	16227 Dec 31 04:39	17°  25'14	
retrograde	16227 Feb 11 05:39	25°  57'51		evening max el	16228 Jan 09 19:22	29°  13'45	24°26'03
evening set	16227 Feb 17 07:18	24°  31'45			16228 Jan 10 15:16	0° 	
min. Earth dist.	16227 Feb 21 19:50	21°  53'17	0.57468 AU	retrograde	16228 Jan 23 11:05	6°  01'50	
inferior conj	16227 Feb 24 19:27	19°  47'40	-3°58'41	evening set	16228 Jan 28 15:10	5°  03'13	
minimum elong	16227 Feb 25 04:17	19°  32'07	3°55'39	min. Earth dist.	16228 Feb 03 07:10	2°  11'21	0.55704 AU
morning rise	16227 Mar 05 04:23	15°  26'37		inferior conj	16228 Feb 05 11:58	0°  50'19	-5°18'21
direct	16227 Mar 07 03:45	15°  14'13		minimum elong	16228 Feb 05 20:39	0°  36'58	5°16'09
asc. node	16227 Mar 09 19:51	15°  38'07			16228 Feb 06 21:03	30° 	
morning max el	16227 Mar 15 19:42	19°  29'51	18°45'17	morning rise	16228 Feb 14 04:12	26°  49'33	
	16227 Mar 23 14:15	0° 		direct	16228 Feb 16 10:56	26°  35'48	
morning set	16227 Mar 31 23:31	15°  07'28'46		asc. node	16228 Feb 24 17:12	29°  51'13	
	16227 Apr 08 11:38	0° 			16228 Feb 24 21:35	0° 	
				morning max el	16228 Feb 26 14:35	1°  31'33	19°46'38
superior conj	16227 Apr 09 18:08	2°  24'02	0°13'38	morning set	16228 Mar 15 03:26	29°  59'29	
minimum elong	16227 Apr 09 19:02	2°  28'13	0°13'10		16228 Mar 15 03:32	0° 	
behind sun begin	16227 Apr 09 15:07	2°  09'51					
behind sun end	16227 Apr 09 22:56	2°  46'33		superior conj	16228 Mar 23 01:29	15°  57'40	0°43'04
desc. node	16227 Apr 11 09:02	5°  25'28		minimum elong	16228 Mar 23 03:43	16°  08'42	0°42'34
max. Earth dist.	16227 Apr 16 23:53	15°  33'28	1.39691 AU	desc. node	16228 Mar 28 05:44	25°  56'39	
evening rise	16227 Apr 20 22:55	22°  22'13		max. Earth dist.	16228 Mar 29 06:14	27°  50'59	1.37394 AU
	16227 Apr 25 13:53	0° 			16228 Mar 30 10:14	0° 	
	16227 May 16 01:42	0° 		evening rise	16228 Apr 01 22:48	4°  33'18	
evening max el	16227 May 25 20:11	11°  23'49	24°02'34		16228 Apr 17 13:48	0° 	
asc. node	16227 Jun 05 17:38	17°  55'54		evening max el	16228 May 07 09:34	25°  18'16	25°20'18
retrograde	16227 Jun 06 00:02	17°  55'58			16228 May 13 00:15	0° 	
evening set	16227 Jun 11 10:28	15°  53'14		retrograde	16228 May 19 14:04	2°  22'27	
min. Earth dist.	16227 Jun 16 01:45	10°  51'55	0.68853 AU	asc. node	16228 May 22 14:44	1°  54'43	
inferior conj	16227 Jun 16 20:48	9°  50'12	2°45'55	evening set	16228 May 25 11:44	29°  54'06	
minimum elong	16227 Jun 16 19:06	9°  51'01	2°44'54		16228 May 25 08:57	30° 	
morning rise	16227 Jun 22 03:46	3°  50'20		min. Earth dist.	16228 May 29 19:15	25°  57'49	0.68057 AU
direct	16227 Jun 26 04:40	1°  53'48		inferior conj	16228 May 31 03:25	23°  52'26	2°18'42
morning max el	16227 Jul 03 23:04	5°  55'52	20°11'30	minimum elong	16228 May 31 01:17	23°  53'02	2°17'27
desc. node	16227 Jul 08 08:54	10°  53'44		morning rise	16228 Jun 05 15:14	17°  53'04	
	16227 Jul 22 00:45	0° 		direct	16228 Jun 09 04:50	16°  51'39	
morning set	16227 Jul 31 21:25	14°  54'59		morning max el	16228 Jun 16 03:42	20°  54'46	19°10'20
max. Earth dist.	16227 Aug 10 16:52	0° 	1.44396 AU	desc. node	16228 Jun 24 06:01	0° 	
	16227 Aug 10 13:03	0° 			16228 Jun 24 04:39	0° 	
				greatest brilliancy	16228 Jun 28 23:38	6°  57'38	-0.7m
superior conj	16227 Aug 16 11:57	9°  55'56	-1°52'25	morning set	16228 Jul 10 03:18	23°  56'36	
minimum elong	16227 Aug 16 19:47	10°  57'07'56	1°52'04		16228 Jul 14 01:30	0° 	
	16227 Aug 28 15:27	0° 		max. Earth dist.	16228 Jul 23 10:02	14°  32'56	1.45565 AU
evening rise	16227 Aug 29 11:34	1°  26'29					
asc. node	16227 Sep 01 18:05	7°  03'52		superior conj	16228 Jul 26 09:47	19°  14'53	-2°11'35
evening max el	16227 Sep 15 14:56	27°  42'40	18°02'08	minimum elong	16228 Jul 26 13:48	19°  30'43	2°11'59
	16227 Sep 18 11:54	0° 			16228 Aug 02 03:59	0° 	
retrograde	16227 Sep 22 01:45	1°  04'18		evening rise	16228 Aug 10 03:04	12°  54'57	
evening set	16227 Sep 24 15:40	0° 		asc. node	16228 Aug 18 14:47	26°  43'13	
	16227 Sep 25 16:17	30° 			16228 Aug 20 16:56	0° 	
inferior conj	16227 Oct 01 02:20	25°  18'29	0°57'36	evening max el	16228 Aug 29 05:36	11°  19'12	18°16'54
minimum elong	16227 Oct 01 03:55	25°  14'24	0°57'15	retrograde	16228 Sep 04 14:38	14°  42'24	
min. Earth dist.	16227 Oct 03 22:43	22°  21'37	0.62354 AU	evening set	16228 Sep 07 13:17	13°  54'53	
desc. node	16227 Oct 04 06:12	22°  03'09		inferior conj	16228 Sep 13 11:47	8°  26'12	1°53'20
morning rise	16227 Oct 07 13:42	19°  12'09		minimum elong	16228 Sep 13 14:05	8°  19'32	1°52'40
direct	16227 Oct 14 06:09	16°  48'28		min. Earth dist.	16228 Sep 15 19:55	5°  44'17	0.64479 AU
morning max el	16227 Oct 28 08:01	24°  45'36	27°57'06	morning rise	16228 Sep 19 13:15	2°  05'43	
	16227 Nov 02 03:01	0° 		desc. node	16228 Sep 20 03:32	1°  38'35	
	16227 Nov 22 05:05	0° 			16228 Sep 23 05:15	30° 	
asc. node	16227 Nov 28 18:57	12°  20'25		direct	16228 Sep 26 02:14	29°  51'00	

	16228 Sep 29 02:46	0°♄			16229 Sep 30 08:50	0°♄		
morning max el	16228 Oct 09 18:34	7°♄27'46	27°27'22		16229 Oct 20 08:11	0°♄		
	16228 Oct 27 05:01	0°♄		morning set	16229 Oct 28 02:40	13°♄56'24		
	16228 Nov 13 11:19	0°♄		max. Earth dist.	16229 Nov 01 00:05	21°♄26'22	1.34460 AU	
morning set	16228 Nov 14 00:25	1°♄04'18		asc. node	16229 Nov 01 12:41	22°♄28'39		
asc. node	16228 Nov 14 15:51	2°♄20'43			16229 Nov 05 05:58	0°♄		
max. Earth dist.	16228 Nov 18 13:44	10°♄18'52	1.32774 AU					
				superior conj	16229 Nov 06 01:53	1°♄42'52	0°40'33	
superior conj	16228 Nov 22 03:10	17°♄51'24	1°04'05	minimum elong	16229 Nov 05 23:53	1°♄32'31	0°40'46	
minimum elong	16228 Nov 22 00:47	17°♄38'40	1°04'23	evening rise	16229 Nov 13 11:46	17°♄18'22		
	16228 Nov 27 17:38	0°♄			16229 Nov 19 18:52	0°♄		
evening rise	16228 Nov 29 02:29	2°♄56'50		evening max el	16229 Dec 02 20:52	19°♄18'21	21°05'33	
	16228 Dec 13 16:42	0°♄		desc. node	16229 Dec 03 22:34	20°♄18'59		
desc. node	16228 Dec 17 01:34	4°♄33'47		retrograde	16229 Dec 14 13:49	25°♄05'58		
evening max el	16228 Dec 21 04:47	9°♄08'56	22°42'30	evening set	16229 Dec 17 06:55	24°♄48'40		
retrograde	16229 Jan 03 04:01	15°♄33'52		inferior conj	16229 Dec 26 00:55	20°♄57'57	-5°43'32	
evening set	16229 Jan 07 02:14	15°♄00'14		minimum elong	16229 Dec 25 17:57	21°♄07'50	5°41'52	
min. Earth dist.	16229 Jan 14 13:41	11°♄35'05	0.54614 AU	min. Earth dist.	16229 Dec 26 19:02	20°♄32'16	0.54415 AU	
inferior conj	16229 Jan 15 10:18	11°♄05'56	-6°00'31	morning rise	16230 Jan 03 05:07	17°♄06'08		
minimum elong	16229 Jan 15 12:21	11°♄03'02	5°59'51	direct	16230 Jan 07 08:02	16°♄29'29		
morning rise	16229 Jan 23 23:38	7°♄17'28		morning max el	16230 Jan 20 09:15	22°♄51'22	22°54'43	
direct	16229 Jan 27 00:38	6°♄56'17			16230 Jan 26 13:58	0°♄		
morning max el	16229 Feb 07 18:45	12°♄36'51	21°11'09	asc. node	16230 Jan 28 11:45	2°♄40'52		
asc. node	16229 Feb 10 14:30	15°♄38'19		morning set	16230 Feb 11 23:33	29°♄24'08		
	16229 Feb 20 02:00	0°♄			16230 Feb 12 06:17	0°♄		
morning set	16229 Feb 27 12:12	14°♄40'06						
				superior conj	16230 Feb 18 22:12	14°♄21'51	1°23'06	
superior conj	16229 Mar 06 19:55	29°♄59'59	1°06'17	minimum elong	16230 Feb 19 00:19	14°♄33'07	1°23'08	
minimum elong	16229 Mar 06 22:27	0°♄13'02	1°06'00	max. Earth dist.	16230 Feb 22 07:46	21°♄32'47	1.33466 AU	
	16229 Mar 06 19:55	0°♄			16230 Feb 26 11:45	0°♄		
max. Earth dist.	16229 Mar 11 15:30	9°♄43'48	1.35258 AU	evening rise	16230 Feb 26 22:18	0°♄51'58		
desc. node	16229 Mar 15 02:23	16°♄23'21		desc. node	16230 Mar 01 23:03	6°♄41'37		
evening rise	16229 Mar 15 15:45	17°♄26'12			16230 Mar 15 16:26	0°♄		
	16229 Mar 22 16:15	0°♄		evening max el	16230 Apr 02 12:44	22°♄41'44	27°14'27	
	16229 Apr 11 20:47	0°♄			16230 Apr 13 22:36	0°♄		
evening max el	16229 Apr 19 23:07	9°♄06'50	26°26'47	retrograde	16230 Apr 16 02:10	0°♄14'11		
retrograde	16229 May 02 23:06	16°♄31'18			16230 Apr 18 03:59	30°♄		
evening set	16229 May 09 06:41	13°♄58'39		evening set	16230 Apr 22 17:17	27°♄43'44		
asc. node	16229 May 09 11:53	13°♄47'51		asc. node	16230 Apr 26 09:05	24°♄18'43		
min. Earth dist.	16229 May 13 08:00	9°♄47'43	0.66802 AU	min. Earth dist.	16230 Apr 26 14:05	24°♄05'18	0.65138 AU	
inferior conj	16229 May 15 05:14	7°♄30'21	1°39'48	inferior conj	16230 Apr 28 23:52	21°♄24'34	0°48'06	
minimum elong	16229 May 15 03:10	7°♄36'40	1°38'31	minimum elong	16230 Apr 28 22:36	21°♄28'05	0°47'08	
morning rise	16229 May 21 00:40	1°♄48'56		morning rise	16230 May 05 05:43	15°♄56'12		
direct	16229 May 24 03:49	0°♄53'52		direct	16230 May 07 23:26	15°♄16'28		
morning max el	16229 May 30 14:52	4°♄18'57	18°25'13	morning max el	16230 May 14 06:39	18°♄31'58	17°57'02	
desc. node	16229 Jun 11 03:03	19°♄44'45			16230 May 22 22:21	0°♄		
	16229 Jun 17 16:18	0°♄		desc. node	16230 May 28 24:00	9°♄45'49		
morning set	16229 Jun 20 02:21	3°♄49'18		morning set	16230 Jun 01 04:23	14°♄59'46		
					16230 Jun 10 09:25	0°♄		
superior conj	16229 Jul 05 19:25	28°♄27'58	-2°11'57					
minimum elong	16229 Jul 05 15:41	28°♄13'29	2°12'30	superior conj	16230 Jun 15 09:29	7°♄58'43	-1°52'55	
max. Earth dist.	16229 Jul 06 05:43	29°♄08'06	1.46010 AU	minimum elong	16230 Jun 15 01:04	7°♄25'26	1°52'56	
	16229 Jul 06 19:02	0°♄		max. Earth dist.	16230 Jun 19 01:52	13°♄46'40	1.45709 AU	
evening rise	16229 Jul 21 17:20	23°♄19'35			16230 Jun 29 13:01	0°♄		
	16229 Jul 25 23:23	0°♄		evening rise	16230 Jul 01 10:43	2°♄55'19		
greatest brilliancy	16229 Jul 30 19:40	7°♄32'49	-0.8m	greatest brilliancy	16230 Jul 15 06:51	23°♄47'53	-0.6m	
asc. node	16229 Aug 05 11:31	16°♄01'39			16230 Jul 19 15:25	0°♄		
evening max el	16229 Aug 12 17:36	25°♄07'08	18°49'05	asc. node	16230 Jul 23 08:18	4°♄51'46		
retrograde	16229 Aug 19 09:32	28°♄44'44		evening max el	16230 Jul 27 00:49	9°♄00'49	19°37'38	
evening set	16229 Aug 22 17:35	27°♄40'49		retrograde	16230 Aug 03 07:37	13°♄05'03		
inferior conj	16229 Aug 28 07:23	21°♄58'03	2°31'52	evening set	16230 Aug 07 01:45	11°♄43'26		
minimum elong	16229 Aug 28 09:30	21°♄51'25	2°31'14	inferior conj	16230 Aug 12 10:04	5°♄47'58	2°55'43	
min. Earth dist.	16229 Aug 30 01:48	19°♄45'00	0.66295 AU	minimum elong	16230 Aug 12 11:29	5°♄43'15	2°55'11	
morning rise	16229 Sep 03 00:26	15°♄31'38		min. Earth dist.	16230 Aug 13 14:30	4°♄13'20	0.67706 AU	
desc. node	16229 Sep 07 00:53	13°♄13'26			16230 Aug 17 04:15	30°♄		
direct	16229 Sep 09 06:01	12°♄54'30		morning rise	16230 Aug 17 20:42	29°♄21'38		
morning max el	16229 Sep 22 06:06	20°♄36'54	26°28'57	direct	16230 Aug 23 16:17	26°♄50'11		

desc. node	16230 Aug 24 22:14	26°♎56'21		minimum elong	16231 Jul 27 17:47	19°♎48'49	3°06'28
	16230 Aug 31 04:41	0°♍		min. Earth dist.	16231 Jul 28 08:00	18°♎59'46	0.68652 AU
morning max el	16230 Sep 04 17:10	4°♍02'16	25°11'08	morning rise	16231 Aug 01 23:44	13°♎28'10	
	16230 Sep 24 15:40	0°♊		direct	16231 Aug 07 07:40	11°♎08'57	
morning set	16230 Oct 10 13:17	26°♊06'38		desc. node	16231 Aug 11 19:33	12°♎29'01	
	16230 Oct 12 16:56	0°♌		morning max el	16231 Aug 18 04:08	17°♎37'19	23°43'34
max. Earth dist.	16230 Oct 14 01:51	2°♌31'37	1.36599 AU		16231 Aug 28 12:24	0°♍	
asc. node	16230 Oct 19 09:28	12°♌40'21			16231 Sep 17 16:36	0°♊	
				morning set	16231 Sep 22 04:05	7°♊25'40	
superior conj	16230 Oct 20 15:13	15°♌06'51	0°11'11	max. Earth dist.	16231 Sep 26 00:45	14°♊04'39	1.38986 AU
minimum elong	16230 Oct 20 14:31	15°♌03'20	0°11'29				
behind sun begin	16230 Oct 20 09:58	14°♌40'49		superior conj	16231 Oct 03 15:32	27°♊54'44	-0°23'04
behind sun end	16230 Oct 20 19:04	15°♌25'53		minimum elong	16231 Oct 03 17:12	28°♊02'31	0°22'30
	16230 Oct 27 23:51	0°♌			16231 Oct 04 18:05	0°♌	
evening rise	16230 Oct 28 17:30	1°♌29'50		asc. node	16231 Oct 06 06:14	2°♌52'14	
	16230 Nov 14 22:21	0°♍		evening rise	16231 Oct 12 17:02	15°♌24'50	
evening max el	16230 Nov 15 02:39	0°♍10'49	19°46'54		16231 Oct 20 11:30	0°♌	
desc. node	16230 Nov 20 19:39	4°♍16'48		evening max el	16231 Oct 28 22:27	11°♌53'59	18°50'35
retrograde	16230 Nov 25 04:26	5°♍12'33		retrograde	16231 Nov 06 11:41	16°♌13'06	
evening set	16230 Nov 27 05:15	5°♍01'13		desc. node	16231 Nov 07 16:49	16°♌08'09	
inferior conj	16230 Dec 05 22:32	1°♍00'09	-4°30'59	evening set	16231 Nov 08 09:16	16°♌01'07	
minimum elong	16230 Dec 05 12:33	1°♍15'37	4°27'20	inferior conj	16231 Nov 16 14:26	11°♌40'43	-2°50'16
	16230 Dec 07 13:15	30°♌		minimum elong	16231 Nov 16 07:30	11°♌53'10	2°46'58
min. Earth dist.	16230 Dec 08 02:09	29°♌40'13	0.55161 AU	min. Earth dist.	16231 Nov 19 14:13	9°♌32'29	0.56699 AU
morning rise	16230 Dec 13 18:26	26°♌46'30		morning rise	16231 Nov 24 02:48	6°♌52'06	
direct	16230 Dec 18 22:04	25°♌47'57		direct	16231 Nov 30 01:07	5°♌27'59	
	16230 Dec 29 14:11	0°♍		morning max el	16231 Dec 14 05:12	12°♌46'36	26°21'55
morning max el	16231 Jan 01 17:30	2°♍41'37	24°44'41		16231 Dec 27 16:26	0°♍	
asc. node	16231 Jan 15 08:59	20°♍41'03		asc. node	16232 Jan 02 06:09	9°♍24'26	
	16231 Jan 20 13:59	0°♎		morning set	16232 Jan 11 22:20	28°♍39'39	
morning set	16231 Jan 27 11:31	14°♎05'30			16232 Jan 12 13:13	0°♎	
superior conj	16231 Feb 03 05:39	28°♎55'03	1°33'38	superior conj	16232 Jan 18 16:08	13°♎33'43	1°38'01
minimum elong	16231 Feb 03 06:56	29°♎02'01	1°33'58	minimum elong	16232 Jan 18 16:22	13°♎35'02	1°38'34
	16231 Feb 03 17:29	0°♏		max. Earth dist.	16232 Jan 19 13:18	15°♎31'49	1.31290 AU
max. Earth dist.	16231 Feb 05 07:42	3°♏28'35	1.32126 AU	evening rise	16232 Jan 25 15:44	28°♎48'48	
evening rise	16231 Feb 10 15:11	14°♏41'39			16232 Jan 26 05:19	0°♏	
desc. node	16231 Feb 16 19:44	26°♏45'58		desc. node	16232 Feb 03 16:29	16°♏30'37	
	16231 Feb 18 14:11	0°♐			16232 Feb 11 18:59	0°♐	
	16231 Mar 10 14:34	0°♑		evening max el	16232 Feb 26 08:55	18°♐18'58	27°25'17
evening max el	16231 Mar 16 00:49	5°♑50'09	27°35'58	retrograde	16232 Mar 11 09:09	25°♐41'41	
retrograde	16231 Mar 29 21:53	13°♑20'42		evening set	16232 Mar 18 03:21	23°♐36'54	
evening set	16231 Apr 05 17:06	10°♑59'34		min. Earth dist.	16232 Mar 21 22:52	20°♐48'03	0.60931 AU
min. Earth dist.	16231 Apr 09 11:31	7°♑49'20	0.63142 AU	inferior conj	16232 Mar 25 03:07	18°♐00'43	-1°36'48
inferior conj	16231 Apr 12 08:19	4°♑57'41	-0°17'30	minimum elong	16232 Mar 25 06:39	17°♐52'55	1°35'32
minimum elong	16231 Apr 12 08:53	4°♑56'16	0°17'36	asc. node	16232 Mar 30 03:39	14°♐09'44	
asc. node	16231 Apr 13 06:22	4°♑02'59		morning rise	16232 Apr 01 13:19	13°♐06'30	
	16231 Apr 18 12:59	30°♑		direct	16232 Apr 03 16:12	12°♐47'40	
morning rise	16231 Apr 19 03:19	29°♐44'52		morning max el	16232 Apr 10 16:35	16°♐18'38	17°53'37
direct	16231 Apr 21 12:48	29°♐17'18			16232 Apr 20 07:48	0°♑	
	16231 Apr 24 11:51	0°♑		morning set	16232 Apr 26 07:36	10°♑40'16	
morning max el	16231 Apr 28 00:15	2°♑34'48	17°46'15	desc. node	16232 May 01 17:43	20°♑26'42	
morning set	16231 May 14 07:59	27°♑22'22					
desc. node	16231 May 15 20:53	0°♒01'22		superior conj	16232 May 07 01:39	29°♑48'13	-0°42'46
	16231 May 15 20:34	0°♒		minimum elong	16232 May 06 21:51	29°♑31'51	0°42'44
					16232 May 07 04:23	0°♒	
superior conj	16231 May 26 17:48	18°♒21'08	-1°20'29	max. Earth dist.	16232 May 14 11:05	12°♒13'47	1.43060 AU
minimum elong	16231 May 26 10:25	17°♒50'48	1°20'14	evening rise	16232 May 20 17:13	22°♒15'59	
max. Earth dist.	16231 Jun 01 20:21	28°♒13'33	1.44692 AU		16232 May 25 17:00	0°♓	
	16231 Jun 02 23:10	0°♓			16232 Jun 15 21:27	0°♒	
evening rise	16231 Jun 10 21:11	12°♓20'20		evening max el	16232 Jun 21 21:27	6°♒49'30	21°55'01
	16231 Jun 22 15:33	0°♒		asc. node	16232 Jun 26 02:02	10°♒23'05	
evening max el	16231 Jul 10 02:02	22°♒55'30	20°40'43	retrograde	16232 Jul 01 04:55	12°♒15'21	
asc. node	16231 Jul 10 05:08	23°♒03'12		evening set	16232 Jul 05 21:05	10°♒18'39	
retrograde	16231 Jul 18 06:38	27°♒37'09		inferior conj	16232 Jul 11 02:50	4°♒01'32	3°07'06
evening set	16231 Jul 22 11:33	25°♒57'31		minimum elong	16232 Jul 11 02:23	4°♒03'06	3°06'27
inferior conj	16231 Jul 27 17:17	19°♒50'33	3°07'00	min. Earth dist.	16232 Jul 11 04:14	3°♒56'38	0.69112 AU

	16232 Jul 14 03:35	30°R☿		min. Earth dist.	16233 Jun 25 01:09	18°☿57'45	0.69081 AU
morning rise	16232 Jul 16 07:30	27°☿45'31		inferior conj	16233 Jun 25 12:46	18°☿17'36	2°56'41
direct	16232 Jul 21 03:11	25°☿42'55		minimum elong	16233 Jun 25 11:27	18°☿22'07	2°55'49
desc. node	16232 Jul 28 16:51	29°☿27'13		morning rise	16233 Jun 30 18:09	12°☿09'26	
	16232 Jul 29 07:30	0°♊		direct	16233 Jul 05 01:40	10°☿25'46	
morning max el	16232 Jul 30 17:06	1°♊20'39	22°15'05	morning max el	16233 Jul 13 10:45	15°☿13'48	20°53'18
	16232 Aug 21 08:50	0°♊		desc. node	16233 Jul 15 14:05	17°☿29'53	
morning set	16232 Sep 01 19:36	17°♊45'13			16233 Jul 25 06:43	0°♊	
max. Earth dist.	16232 Sep 07 02:32	26°♊25'55	1.41351 AU	morning set	16233 Aug 12 12:34	27°♊08'43	
	16232 Sep 09 05:20	0°♊			16233 Aug 14 08:29	0°♊	
				max. Earth dist.	16233 Aug 20 10:06	9°♊38'58	1.43422 AU
superior conj	16232 Sep 14 22:27	9°♊55'34	-0°59'56				
minimum elong	16232 Sep 15 03:18	10°♊17'06	0°59'07	superior conj	16233 Aug 27 07:47	21°♊01'01	-1°35'15
asc. node	16232 Sep 22 02:57	22°♊59'58		minimum elong	16233 Aug 27 15:20	21°♊32'49	1°34'34
evening rise	16232 Sep 25 06:57	28°♊53'51			16233 Sep 01 14:08	0°♊	
	16232 Sep 25 21:09	0°♋		evening rise	16233 Sep 08 06:55	11°♊45'59	
evening max el	16232 Oct 11 04:44	24°♋21'04	18°16'06	asc. node	16233 Sep 08 23:39	13°♊00'10	
retrograde	16232 Oct 18 14:21	28°♋07'43			16233 Sep 18 23:48	0°♋	
evening set	16232 Oct 20 16:04	27°♋50'35		evening max el	16233 Sep 24 17:18	7°♋22'42	18°01'50
desc. node	16232 Oct 24 14:04	25°♋55'50		retrograde	16233 Oct 01 09:37	10°♋49'36	
inferior conj	16232 Oct 28 04:10	23°♋08'49	-1°09'16	evening set	16233 Oct 03 18:38	10°♋23'17	
minimum elong	16232 Oct 28 01:35	23°♋14'15	1°07'42	inferior conj	16233 Oct 10 13:54	5°♋21'37	0°16'45
min. Earth dist.	16232 Oct 31 10:13	20°♋26'00	0.58757 AU	minimum elong	16233 Oct 10 14:26	5°♋20'20	0°16'54
morning rise	16232 Nov 04 07:38	17°♋43'44		desc. node	16233 Oct 11 11:20	4°♋29'28	
direct	16232 Nov 10 18:03	15°♋53'00		min. Earth dist.	16233 Oct 13 15:52	2°♋23'46	0.61043 AU
morning max el	16232 Nov 25 01:01	23°♋32'24	27°29'18		16233 Oct 16 12:35	30°R♊	
	16232 Nov 30 21:05	0°♋		morning rise	16233 Oct 17 07:13	29°♊27'26	
asc. node	16232 Dec 19 03:16	28°♋39'09		direct	16233 Oct 23 23:20	27°♊13'28	
	16232 Dec 19 20:12	0°♌			16233 Oct 31 23:51	0°♋	
morning set	16232 Dec 26 06:08	13°♌01'04		morning max el	16233 Nov 07 04:24	5°♋07'11	27°58'09
					16233 Nov 25 19:44	0°♋	
superior conj	16233 Jan 02 03:35	28°♌11'37	1°36'21	asc. node	16233 Dec 06 00:19	18°♋16'42	
minimum elong	16233 Jan 02 02:47	28°♌07'05	1°36'59	morning set	16233 Dec 10 08:56	27°♋05'01	
max. Earth dist.	16233 Jan 01 21:01	27°♌34'51	1.30984 AU		16233 Dec 11 18:12	0°♌	
	16233 Jan 02 22:55	0°♍		max. Earth dist.	16233 Dec 16 03:03	9°♌29'01	1.31229 AU
evening rise	16233 Jan 08 21:36	13°♍07'08					
	16233 Jan 17 07:29	0°♎		superior conj	16233 Dec 17 14:10	12°♌43'48	1°28'40
desc. node	16233 Jan 20 13:16	5°♎47'12		minimum elong	16233 Dec 17 12:28	12°♌34'21	1°29'13
	16233 Feb 07 11:29	0°♏		evening rise	16233 Dec 24 06:47	27°♌32'13	
evening max el	16233 Feb 07 10:14	29°♎57'02	26°39'30		16233 Dec 25 10:17	0°♍	
retrograde	16233 Feb 21 10:36	7°♏09'04		desc. node	16234 Jan 07 10:05	24°♍25'37	
evening set	16233 Feb 27 20:44	5°♏27'12			16234 Jan 11 03:01	0°♎	
min. Earth dist.	16233 Mar 03 23:54	2°♏49'02	0.58679 AU	evening max el	16234 Jan 20 03:13	10°♎42'42	25°21'31
inferior conj	16233 Mar 07 04:27	0°♏23'09	-3°06'21	retrograde	16234 Feb 03 00:17	17°♎41'00	
minimum elong	16233 Mar 07 11:36	0°♏09'29	3°03'40	evening set	16234 Feb 08 17:42	16°♎26'39	
	16233 Mar 07 16:35	30°R♏		min. Earth dist.	16234 Feb 13 15:53	13°♎44'29	0.56649 AU
morning rise	16233 Mar 15 06:00	25°♎50'07		inferior conj	16234 Feb 16 09:14	11°♎56'22	-4°35'20
direct	16233 Mar 17 05:03	25°♎36'32		minimum elong	16234 Feb 16 18:40	11°♎40'44	4°32'24
asc. node	16233 Mar 17 00:58	25°♎36'38		morning rise	16234 Feb 24 22:25	7°♎44'32	
morning max el	16233 Mar 25 03:57	29°♎32'34	18°20'27	direct	16234 Feb 26 23:27	7°♎32'18	
	16233 Mar 25 14:52	0°♏		asc. node	16234 Mar 03 22:18	8°♎49'06	
morning set	16233 Apr 09 21:37	24°♏36'39		morning max el	16234 Mar 08 06:07	12°♎04'23	19°08'33
	16233 Apr 12 17:43	0°♐			16234 Mar 20 06:31	0°♏	
desc. node	16233 Apr 18 14:31	10°♐57'36		morning set	16234 Mar 24 21:28	8°♏57'47	
superior conj	16233 Apr 19 07:20	12°♐14'21	-0°05'52	superior conj	16234 Apr 02 06:32	25°♏26'42	0°26'51
minimum elong	16233 Apr 19 06:51	12°♐12'12	0°06'12	minimum elong	16234 Apr 02 08:09	25°♏34'26	0°26'19
behind sun begin	16233 Apr 19 00:02	11°♐41'07			16234 Apr 04 16:03	0°♐	
behind sun end	16233 Apr 19 13:40	12°♐43'12		desc. node	16234 Apr 05 11:14	1°♐29'45	
max. Earth dist.	16233 Apr 26 20:44	25°♐33'56	1.40985 AU	max. Earth dist.	16234 Apr 09 02:50	8°♐10'34	1.38703 AU
	16233 Apr 29 11:53	0°♑		evening rise	16234 Apr 12 21:10	14°♐47'55	
evening rise	16233 May 01 08:34	3°♑04'36			16234 Apr 22 03:00	0°♑	
	16233 May 18 23:43	0°☿			16234 May 13 18:37	0°☿	
evening max el	16233 Jun 04 12:46	20°☿43'56	23°15'43	evening max el	16234 May 18 02:23	4°☿39'14	24°36'37
asc. node	16233 Jun 12 22:59	26°☿35'38		retrograde	16234 May 29 17:36	11°☿26'57	
retrograde	16233 Jun 15 01:00	26°☿54'16		asc. node	16234 May 30 20:00	11°☿21'51	
evening set	16233 Jun 20 04:43	24°☿42'41		evening set	16234 Jun 04 08:46	9°☿03'44	

min. Earth dist.	16234 Jun 08 20:34	3°☿56'02	0.68565 AU	inferior conj	16235 May 25 02:01	16°♊45'50	2°03'42
inferior conj	16234 Jun 09 21:09	2°☿33'51	2°35'44	minimum elong	16235 May 24 23:50	16°♊52'46	2°02'25
minimum elong	16234 Jun 09 19:13	2°☿40'21	2°34'37	morning rise	16235 May 30 16:42	10°♊57'26	
	16234 Jun 11 20:30	30°♋♊		direct	16235 Jun 03 01:49	9°♊52'09	
morning rise	16234 Jun 15 05:49	26°♊34'53		morning max el	16235 Jun 09 18:34	13°♊28'12	18°49'00
direct	16234 Jun 19 01:47	25°♊10'46		desc. node	16235 Jun 19 08:20	25°♊43'58	
morning max el	16234 Jun 26 11:04	29°♊16'52	19°43'33		16235 Jun 22 05:03	0°☿	
	16234 Jun 27 04:08	0°☿		greatest brilliancy	16235 Jun 23 11:34	1°☿55'41	-0.8m
desc. node	16234 Jul 02 11:15	6°☿19'37		morning set	16235 Jul 02 04:06	15°☿20'16	
	16234 Jul 18 17:57	0°♌			16235 Jul 11 14:30	0°♌	
morning set	16234 Jul 22 16:56	6°♌02'37		max. Earth dist.	16235 Jul 16 18:35	8°♌03'19	1.45855 AU
max. Earth dist.	16234 Aug 02 23:54	23°♌35'53	1.44975 AU				
	16234 Aug 07 00:33	0°♍		superior conj	16235 Jul 18 08:28	10°♌31'19	-2°14'15
				minimum elong	16235 Jul 18 09:19	10°♌34'38	2°14'49
superior conj	16234 Aug 07 17:36	1°♍08'20	-2°02'32		16235 Jul 30 16:22	0°♍	
minimum elong	16234 Aug 08 00:32	1°♍36'10	2°02'30	evening rise	16235 Aug 02 16:20	4°♍48'04	
evening rise	16234 Aug 21 11:36	23°♍47'32		asc. node	16235 Aug 13 17:01	22°♍18'55	
	16234 Aug 25 04:08	0°♎			16235 Aug 19 01:08	0°♎	
asc. node	16234 Aug 26 20:19	2°♎48'07		evening max el	16235 Aug 22 22:05	4°♎30'52	18°28'34
evening max el	16234 Sep 08 08:12	20°♎48'46	18°06'19	retrograde	16235 Aug 29 08:51	7°♎58'13	
retrograde	16234 Sep 14 17:07	24°♎09'14		evening set	16235 Sep 01 11:33	7°♎03'46	
evening set	16234 Sep 17 10:41	23°♎30'11		inferior conj	16235 Sep 07 05:55	1°♎28'53	2°11'37
inferior conj	16234 Sep 23 15:47	18°♎10'50	1°23'27	minimum elong	16235 Sep 07 08:13	1°♎21'56	2°10'57
minimum elong	16234 Sep 23 17:49	18°♎05'19	1°22'56		16235 Sep 08 11:23	30°♋♍	
min. Earth dist.	16234 Sep 26 07:24	15°♎18'08	0.63291 AU	min. Earth dist.	16235 Sep 09 08:15	28°♍58'02	0.65303 AU
desc. node	16234 Sep 28 08:39	13°♎16'56		morning rise	16235 Sep 13 03:37	25°♍05'18	
morning rise	16234 Sep 29 22:49	11°♎57'32		desc. node	16235 Sep 15 05:59	23°♍38'40	
direct	16234 Oct 06 14:33	9°♎27'45		direct	16235 Sep 19 13:57	22°♍28'36	
morning max el	16234 Oct 20 12:53	17°♎26'18	27°48'25		16235 Oct 02 15:48	0°♎	
	16234 Oct 31 01:08	0°♏		morning max el	16235 Oct 02 23:54	0°♎20'12	27°05'29
	16234 Nov 18 15:19	0°♐			16235 Oct 25 01:10	0°♏	
asc. node	16234 Nov 22 21:16	8°♐10'09		morning set	16235 Nov 07 13:53	23°♏57'24	
morning set	16234 Nov 24 04:27	10°♐46'03		asc. node	16235 Nov 09 18:09	28°♏13'47	
max. Earth dist.	16234 Nov 29 03:42	21°♐06'38	1.32043 AU		16235 Nov 10 15:24	0°♐	
				max. Earth dist.	16235 Nov 11 19:50	2°♐23'55	1.33429 AU
superior conj	16234 Dec 01 21:57	27°♐04'54	1°14'52				
minimum elong	16234 Dec 01 19:40	26°♐52'30	1°15'15	superior conj	16235 Nov 16 00:40	11°♐08'34	0°54'51
	16234 Dec 03 05:55	0°♑		minimum elong	16235 Nov 15 22:22	10°♐56'20	0°55'06
evening rise	16234 Dec 08 17:28	11°♑59'44		evening rise	16235 Nov 23 03:49	26°♐24'36	
	16234 Dec 17 16:50	0°♒			16235 Nov 24 20:40	0°♑	
desc. node	16234 Dec 25 06:57	12°♒12'11		desc. node	16235 Dec 12 03:54	28°♑47'46	
evening max el	16235 Jan 01 13:47	20°♒49'08	23°42'27		16235 Dec 13 06:48	0°♒	
retrograde	16235 Jan 15 00:12	27°♒28'19		evening max el	16235 Dec 14 00:52	0°♒45'26	21°59'37
evening set	16235 Jan 19 16:05	26°♒41'19		retrograde	16235 Dec 26 12:25	6°♒55'40	
min. Earth dist.	16235 Jan 26 01:05	23°♒37'38	0.55140 AU	evening set	16235 Dec 29 21:39	6°♒30'08	
inferior conj	16235 Jan 27 17:23	22°♒38'23	-5°42'26	inferior conj	16236 Jan 07 10:41	2°♒39'31	-6°01'03
minimum elong	16235 Jan 28 00:03	22°♒28'35	5°41'02	minimum elong	16236 Jan 07 08:38	2°♒42'23	6°00'21
morning rise	16235 Feb 05 09:33	18°♒43'50		min. Earth dist.	16236 Jan 07 06:24	2°♒45'31	0.54413 AU
direct	16235 Feb 07 22:42	18°♒27'44			16236 Jan 12 14:22	30°♋♑	
asc. node	16235 Feb 18 19:38	23°♒44'34		morning rise	16236 Jan 15 20:26	28°♑52'10	
morning max el	16235 Feb 18 19:00	23°♒43'01	20°19'43	direct	16236 Jan 19 08:19	28°♑25'13	
	16235 Feb 24 01:35	0°♒			16236 Jan 25 16:29	0°♒	
morning set	16235 Mar 09 03:48	23°♒34'08		morning max el	16236 Jan 31 16:39	4°♒23'45	21°53'24
	16235 Mar 12 06:42	0°♓		asc. node	16236 Feb 05 16:56	10°♒05'37	
					16236 Feb 17 13:16	0°♓	
superior conj	16235 Mar 16 19:04	9°♓14'03	0°53'41	morning set	16236 Feb 21 13:58	8°♓17'01	
minimum elong	16235 Mar 16 21:32	9°♓26'29	0°53'15				
max. Earth dist.	16235 Mar 22 10:00	20°♓16'04	1.36459 AU	superior conj	16236 Feb 28 17:12	23°♓25'22	1°14'11
desc. node	16235 Mar 23 07:55	21°♓59'48		minimum elong	16236 Feb 28 19:37	23°♓38'04	1°14'01
evening rise	16235 Mar 26 04:51	27°♓18'50			16236 Mar 02 21:22	0°♓	
	16235 Mar 27 16:37	0°♔		max. Earth dist.	16236 Mar 03 22:21	2°♓06'45	1.34452 AU
	16235 Apr 15 12:23	0°♕		evening rise	16236 Mar 08 04:01	10°♓26'32	
evening max el	16235 Apr 30 16:02	18°♕32'56	25°50'26	desc. node	16236 Mar 09 04:35	12°♓23'13	
retrograde	16235 May 13 05:32	25°♕46'41			16236 Mar 19 04:36	0°♔	
asc. node	16235 May 17 17:06	24°♕26'08			16236 Apr 10 00:05	0°♕	
evening set	16235 May 19 07:33	23°♕16'07		evening max el	16236 Apr 12 05:50	2°♕17'03	26°49'42
min. Earth dist.	16235 May 23 12:23	18°♕44'54	0.67582 AU	retrograde	16236 Apr 25 11:55	9°♕45'22	

evening set	16236 May 01 23:12	7° Π 12'52		evening set	16237 Apr 15 05:32	20° \mathcal{B} 46'16	
asc. node	16236 May 03 14:16	5° Π 46'19		min. Earth dist.	16237 Apr 19 00:52	17° \mathcal{B} 20'51	0.64328 AU
min. Earth dist.	16236 May 05 22:26	3° Π 16'17	0.66151 AU	asc. node	16237 Apr 20 11:31	15° \mathcal{B} 49'24	
inferior conj	16236 May 08 01:06	0° Π 47'51	1°19'32	inferior conj	16237 Apr 21 15:46	14° \mathcal{B} 33'31	0°22'02
minimum elong	16236 May 07 23:16	0° Π 53'15	1°18'19	minimum elong	16237 Apr 21 15:09	14° \mathcal{B} 35'11	0°21'20
	16236 May 08 17:29	30° \mathcal{R} 8		morning rise	16237 Apr 28 02:57	9° \mathcal{B} 11'46	
morning rise	16236 May 14 00:37	25° \mathcal{B} 11'45		direct	16237 Apr 30 17:01	8° \mathcal{B} 37'39	
direct	16236 May 16 23:45	24° \mathcal{B} 23'25		morning max el	16237 May 07 00:59	11° \mathcal{B} 52'22	17°50'19
morning max el	16236 May 23 07:59	27° \mathcal{B} 42'30	18°11'06		16237 May 19 16:42	0° Π	
	16236 May 25 11:05	0° Π		desc. node	16237 May 23 02:18	5° Π 41'05	
desc. node	16236 Jun 05 05:21	15° Π 33'27		morning set	16237 May 24 03:42	7° Π 27'41	
morning set	16236 Jun 11 14:16	25° Π 45'14					
	16236 Jun 14 05:51	0° \mathcal{E}		superior conj	16237 Jun 06 14:28	29° Π 35'43	-1°40'17
superior conj	16236 Jun 26 17:48	19° \mathcal{E} 45'55	-2°05'59	minimum elong	16237 Jun 06 05:56	29° Π 01'29	1°40'08
minimum elong	16236 Jun 26 11:22	19° \mathcal{E} 20'44	2°06'21		16237 Jun 06 20:32	0° \mathcal{E}	
max. Earth dist.	16236 Jun 28 15:19	22° \mathcal{E} 43'37	1.45978 AU	max. Earth dist.	16237 Jun 11 11:06	7° \mathcal{E} 19'05	1.45356 AU
	16236 Jul 03 07:27	0° \mathcal{Q}		evening rise	16237 Jun 22 08:59	24° \mathcal{E} 14'09	
evening rise	16236 Jul 12 20:39	14° \mathcal{Q} 48'54			16237 Jun 26 03:52	0° \mathcal{Q}	
	16236 Jul 22 17:18	0° \mathcal{M}		greatest brilliancy	16237 Jul 07 03:42	16° \mathcal{Q} 20'45	-0.6m
greatest brilliancy	16236 Jul 24 03:18	2° \mathcal{M} 08'24	-0.7m	asc. node	16237 Jul 17 10:33	0° \mathcal{M} 00'54	
asc. node	16236 Jul 30 13:45	11° \mathcal{M} 26'12			16237 Jul 17 10:14	0° \mathcal{M}	
evening max el	16236 Aug 05 08:17	18° \mathcal{M} 21'49	19°07'49	evening max el	16237 Jul 19 12:54	2° \mathcal{M} 15'33	20°02'51
retrograde	16236 Aug 12 05:31	22° \mathcal{M} 09'18		retrograde	16237 Jul 27 04:22	6° \mathcal{M} 35'04	
evening set	16236 Aug 15 17:50	20° \mathcal{M} 57'46		evening set	16237 Jul 31 02:57	5° \mathcal{M} 05'46	
inferior conj	16236 Aug 21 04:53	15° \mathcal{M} 09'11	2°43'39		16237 Aug 04 17:32	30° \mathcal{R} 8	
minimum elong	16236 Aug 21 06:45	15° \mathcal{M} 03'10	2°43'03	inferior conj	16237 Aug 05 09:49	29° \mathcal{Q} 05'02	3°01'59
min. Earth dist.	16236 Aug 22 17:14	13° \mathcal{M} 11'54	0.66948 AU	minimum elong	16237 Aug 05 10:52	29° \mathcal{Q} 01'29	3°01'26
morning rise	16236 Aug 26 18:57	8° \mathcal{M} 42'16		min. Earth dist.	16237 Aug 06 08:19	27° \mathcal{Q} 48'40	0.68161 AU
desc. node	16236 Sep 01 03:19	6° \mathcal{M} 08'59		morning rise	16237 Aug 10 18:22	22° \mathcal{Q} 39'46	
direct	16236 Sep 01 20:26	6° \mathcal{M} 07'00		direct	16237 Aug 16 08:58	20° \mathcal{Q} 13'01	
morning max el	16236 Sep 14 11:28	13° \mathcal{M} 37'58	25°57'44	desc. node	16237 Aug 19 00:41	20° \mathcal{Q} 40'59	
	16236 Sep 27 19:03	0° \mathcal{L}		morning max el	16237 Aug 27 22:34	27° \mathcal{Q} 08'31	24°34'31
	16236 Oct 16 18:49	0° \mathcal{M}			16237 Aug 30 14:46	0° \mathcal{M}	
morning set	16236 Oct 20 09:59	6° \mathcal{M} 32'45		morning set	16237 Sep 21 09:46	0° \mathcal{L}	
max. Earth dist.	16236 Oct 24 02:35	13° \mathcal{M} 29'31	1.35327 AU	max. Earth dist.	16237 Oct 02 12:41	18° \mathcal{L} 22'16	
asc. node	16236 Oct 26 14:58	18° \mathcal{M} 23'43			16237 Oct 06 02:18	24° \mathcal{L} 42'35	1.37597 AU
					16237 Oct 08 23:26	0° \mathcal{M}	
superior conj	16236 Oct 29 19:48	24° \mathcal{M} 49'07	0°28'46	superior conj	16237 Oct 13 04:02	7° \mathcal{M} 58'13	-0°02'54
minimum elong	16236 Oct 29 18:14	24° \mathcal{M} 41'06	0°29'00	minimum elong	16237 Oct 13 04:12	7° \mathcal{M} 59'00	0°02'29
	16236 Nov 01 08:20	0° \mathcal{A}		behind sun begin	16237 Oct 12 21:33	7° \mathcal{M} 26'46	
evening rise	16236 Nov 06 11:54	10° \mathcal{A} 42'46		behind sun end	16237 Oct 13 10:52	8° \mathcal{M} 31'17	
	16236 Nov 16 13:58	0° \mathcal{B}		asc. node	16237 Oct 13 11:44	8° \mathcal{M} 35'33	
evening max el	16236 Nov 24 22:09	11° \mathcal{B} 09'52	20°29'23	evening rise	16237 Oct 21 15:21	24° \mathcal{M} 47'39	
desc. node	16236 Nov 28 00:55	13° \mathcal{B} 50'00			16237 Oct 24 06:16	0° \mathcal{A}	
retrograde	16236 Dec 05 22:52	16° \mathcal{B} 38'55		evening max el	16237 Nov 07 10:06	22° \mathcal{A} 23'25	19°20'10
evening set	16236 Dec 08 07:14	16° \mathcal{B} 25'08		desc. node	16237 Nov 14 22:03	26° \mathcal{A} 55'03	
inferior conj	16236 Dec 17 02:28	12° \mathcal{B} 31'01	-5°18'16	retrograde	16237 Nov 16 19:49	27° \mathcal{A} 06'21	
minimum elong	16236 Dec 16 17:14	12° \mathcal{B} 44'28	5°15'35	evening set	16237 Nov 18 17:44	26° \mathcal{A} 55'30	
min. Earth dist.	16236 Dec 18 11:52	11° \mathcal{B} 42'14	0.54621 AU	inferior conj	16237 Nov 27 06:56	22° \mathcal{A} 46'58	-3°49'48
morning rise	16236 Dec 25 02:54	8° \mathcal{B} 32'15		minimum elong	16237 Nov 26 21:48	23° \mathcal{A} 02'01	3°46'00
direct	16236 Dec 29 16:41	7° \mathcal{B} 47'13		min. Earth dist.	16237 Nov 29 20:59	21° \mathcal{A} 05'03	0.55729 AU
morning max el	16237 Jan 12 03:21	14° \mathcal{B} 23'14	23°41'54	morning rise	16237 Dec 04 23:36	18° \mathcal{A} 18'55	
asc. node	16237 Jan 22 14:12	27° \mathcal{B} 34'04		direct	16237 Dec 10 11:50	17° \mathcal{A} 09'45	
	16237 Jan 24 02:42	0° \approx		morning max el	16237 Dec 24 12:17	24° \mathcal{A} 15'35	25°28'50
morning set	16237 Feb 05 01:50	23° \approx 00'16			16237 Dec 29 18:12	0° \mathcal{B}	
	16237 Feb 08 07:19	0° \mathcal{H}		asc. node	16238 Jan 09 11:25	15° \mathcal{B} 53'39	
					16238 Jan 16 22:18	0° \approx	
superior conj	16237 Feb 11 22:00	7° \mathcal{H} 52'32	1°28'19	morning set	16238 Jan 20 13:31	7° \approx 38'45	
minimum elong	16237 Feb 11 23:47	8° \mathcal{H} 02'13	1°28'30				
max. Earth dist.	16237 Feb 14 18:00	13° \mathcal{H} 57'29	1.32835 AU	superior conj	16238 Jan 27 07:00	22° \approx 28'37	1°36'13
evening rise	16237 Feb 19 15:18	24° \mathcal{H} 02'36		minimum elong	16238 Jan 27 07:51	22° \approx 33'17	1°36'41
	16237 Feb 22 16:22	0° \mathcal{Y}		max. Earth dist.	16238 Jan 28 20:27	25° \approx 55'23	1.31698 AU
desc. node	16237 Feb 24 01:16	2° \mathcal{Y} 35'43			16238 Jan 30 17:15	0° \mathcal{H}	
	16237 Mar 12 18:30	0° \mathcal{B}		evening rise	16238 Feb 03 11:44	8° \mathcal{H} 00'01	
evening max el	16237 Mar 25 18:51	15° \mathcal{B} 41'12	27°27'04	desc. node	16238 Feb 10 22:00	22° \mathcal{H} 32'12	
retrograde	16237 Apr 08 11:58	23° \mathcal{B} 14'00			16238 Feb 15 03:12	0° \mathcal{Y}	

evening max el	16238 Mar 08 05:25	28° Υ 33'45	27°35'40	desc. node	16239 Jan 28 18:44	12° X 05'37	
	16238 Mar 09 18:55	0° B			16239 Feb 09 05:31	0° Υ	
retrograde	16238 Mar 22 04:38	6° B 02'35		evening max el	16239 Feb 18 11:04	10° Υ 42'15	27°10'17
evening set	16238 Mar 29 00:02	3° B 47'20		retrograde	16239 Mar 04 12:05	18° Υ 00'49	
min. Earth dist.	16238 Apr 01 18:14	0° B 47'16	0.62210 AU	evening set	16239 Mar 11 03:32	16° Υ 05'27	
	16238 Apr 02 14:36	30° K Υ		min. Earth dist.	16239 Mar 15 01:24	13° Υ 22'21	0.59954 AU
inferior conj	16238 Apr 04 18:53	27° Υ 55'06	-0°49'32	inferior conj	16239 Mar 18 06:44	10° Υ 42'06	-2°14'01
minimum elong	16238 Apr 04 20:35	27° Υ 51'04	0°49'08	minimum elong	16239 Mar 18 11:47	10° Υ 31'34	2°12'05
asc. node	16238 Apr 07 08:48	25° Υ 34'45		asc. node	16239 Mar 25 06:08	6° Υ 09'40	
morning rise	16238 Apr 11 20:13	22° Υ 50'04		morning rise	16239 Mar 25 23:35	5° Υ 56'24	
direct	16238 Apr 14 02:30	22° Υ 26'47		direct	16239 Mar 28 00:16	5° Υ 40'17	
morning max el	16238 Apr 20 18:33	25° Υ 48'53	17°47'09	morning max el	16239 Apr 04 09:13	9° Υ 20'59	18°02'32
	16238 Apr 24 08:18	0° B			16239 Apr 17 20:34	0° B	
morning set	16238 May 06 16:38	20° B 16'18		morning set	16239 Apr 19 23:02	3° B 52'22	
desc. node	16238 May 09 23:11	26° B 01'28		desc. node	16239 Apr 26 20:00	16° B 29'20	
	16238 May 12 05:56	0° II					
				superior conj	16239 Apr 30 02:20	22° B 19'14	-0°26'46
superior conj	16238 May 18 08:49	10° II 26'20	-1°04'44	minimum elong	16239 Apr 30 00:05	22° B 09'16	0°26'54
minimum elong	16238 May 18 02:52	10° II 01'22	1°04'32		16239 May 04 12:32	0° II	
max. Earth dist.	16238 May 25 03:43	21° II 34'50	1.44059 AU	max. Earth dist.	16239 May 07 16:08	5° II 18'23	1.42220 AU
	16238 May 30 11:06	0° B		evening rise	16239 May 13 01:26	14° II 05'24	
evening rise	16238 Jun 01 21:50	3° B 48'20			16239 May 23 08:59	0° B	
	16238 Jun 19 14:01	0° Ω		evening max el	16239 Jun 15 05:04	0° Ω 04'40	22°28'55
evening max el	16238 Jul 02 11:30	16° Ω 10'05	21°11'10		16239 Jun 15 03:12	0° Ω	
asc. node	16238 Jul 04 07:24	17° Ω 52'23		asc. node	16239 Jun 21 04:20	4° Ω 45'51	
retrograde	16238 Jul 11 03:19	21° Ω 10'24		retrograde	16239 Jun 25 00:43	5° Ω 49'22	
evening set	16238 Jul 15 12:51	19° Ω 23'34		evening set	16239 Jun 29 21:46	3° Ω 46'13	
inferior conj	16238 Jul 20 18:18	13° Ω 12'04	3°08'22		16239 Jul 03 07:08	30° K B	
minimum elong	16238 Jul 20 18:24	13° Ω 11'44	3°07'47	inferior conj	16239 Jul 05 04:15	27° B 25'39	3°03'56
min. Earth dist.	16238 Jul 21 03:23	12° Ω 40'28	0.68910 AU	minimum elong	16239 Jul 05 03:25	27° B 28'33	3°03'12
morning rise	16238 Jul 25 23:41	6° Ω 51'54		min. Earth dist.	16239 Jul 05 00:10	27° B 39'51	0.69166 AU
direct	16238 Jul 31 02:26	4° Ω 39'08		morning rise	16239 Jul 10 08:55	21° B 12'46	
desc. node	16238 Aug 05 22:00	6° Ω 52'49		direct	16239 Jul 14 23:29	19° B 17'47	
morning max el	16238 Aug 10 10:01	10° Ω 46'52	23°05'23	desc. node	16239 Jul 23 19:16	24° B 20'31	
	16238 Aug 25 16:35	0° M		morning max el	16239 Jul 24 00:28	24° B 33'25	21°39'00
morning set	16238 Sep 13 17:50	29° M 16'20			16239 Jul 28 20:50	0° Ω	
	16238 Sep 14 04:22	0° B			16239 Aug 19 01:46	0° M	
max. Earth dist.	16238 Sep 18 01:09	6° B 31'30	1.40014 AU	morning set	16239 Aug 24 23:13	9° M 10'20	
				max. Earth dist.	16239 Aug 31 05:17	19° M 15'34	1.42291 AU
					16239 Sep 06 14:35	0° B	
superior conj	16238 Sep 25 21:28	20° B 26'56	-0°38'36				
minimum elong	16238 Sep 26 00:25	20° B 40'29	0°37'55				
asc. node	16238 Sep 30 08:28	28° B 45'45		superior conj	16239 Sep 07 19:42	2° B 05'38	-1°15'26
	16238 Oct 01 00:08	0° M		minimum elong	16239 Sep 08 01:54	2° B 32'28	1°14'37
evening rise	16238 Oct 05 11:13	8° M 32'07		asc. node	16239 Sep 17 05:10	18° B 50'50	
	16238 Oct 17 18:17	0° B		evening rise	16239 Sep 18 19:46	21° B 46'54	
evening max el	16238 Oct 21 10:57	4° B 26'25	18°33'22		16239 Sep 23 08:34	0° M	
retrograde	16238 Oct 29 11:04	8° B 29'49		evening max el	16239 Oct 04 20:29	17° M 09'52	18°07'39
evening set	16238 Oct 31 09:52	8° B 16'08		retrograde	16239 Oct 11 21:14	20° M 46'11	
desc. node	16238 Nov 01 19:14	7° B 50'40		evening set	16239 Oct 14 02:00	20° M 25'28	
inferior conj	16238 Nov 08 08:03	3° B 46'59	-2°06'10	desc. node	16239 Oct 19 16:28	16° M 58'13	
minimum elong	16238 Nov 08 03:01	3° B 56'38	2°03'34	inferior conj	16239 Oct 21 06:41	15° M 34'50	-0°30'29
min. Earth dist.	16238 Nov 11 12:16	1° B 21'39	0.57532 AU	minimum elong	16239 Oct 21 05:38	15° M 37'11	0°29'36
	16238 Nov 13 11:19	30° K M		min. Earth dist.	16239 Oct 24 12:00	12° M 43'18	0.59724 AU
morning rise	16238 Nov 15 16:50	28° M 42'27		morning rise	16239 Oct 28 05:59	9° M 56'35	
direct	16238 Nov 21 21:22	27° M 06'26		direct	16239 Nov 03 19:46	7° M 55'22	
	16238 Nov 30 11:27	0° B		morning max el	16239 Nov 18 02:05	15° M 40'51	27°46'29
morning max el	16238 Dec 06 03:00	4° B 34'49	26°54'55		16239 Nov 29 19:02	0° B	
	16238 Dec 24 15:40	0° B		asc. node	16239 Dec 14 05:38	24° B 16'51	
asc. node	16238 Dec 27 08:34	4° B 51'19			16239 Dec 17 03:14	0° B	
morning set	16239 Jan 04 23:13	22° B 07'25		morning set	16239 Dec 20 05:07	6° B 22'02	
	16239 Jan 08 13:36	0° \approx		max. Earth dist.	16239 Dec 26 10:49	19° B 59'37	1.31023 AU
superior conj	16239 Jan 11 18:05	7° \approx 07'19	1°38'03	superior conj	16239 Dec 27 05:24	21° B 43'32	1°33'51
minimum elong	16239 Jan 11 17:53	7° \approx 06'07	1°38'39	minimum elong	16239 Dec 27 04:11	21° B 36'44	1°34'27
max. Earth dist.	16239 Jan 12 03:12	7° \approx 58'20	1.31088 AU		16239 Dec 30 22:17	0° \approx	
evening rise	16239 Jan 18 14:47	22° \approx 12'20		evening rise	16240 Jan 02 22:18	6° \approx 34'32	
	16239 Jan 22 09:14	0° X			16240 Jan 14 23:30	0° X	

desc. node	16240 Jan 15 15:30	1° H 07'30		16240 Dec 21 14:52	0° \approx	
evening max el	16240 Jan 31 09:09	21° H 58'22	26°09'54	desc. node	16241 Jan 01 12:20	19° \approx 25'37
retrograde	16240 Feb 14 08:22	29° H 03'58		16241 Jan 09 14:29	0° H	
evening set	16240 Feb 20 12:35	27° H 33'40		evening max el	16241 Jan 11 22:41	2° H 23'34 24°40'53
min. Earth dist.	16240 Feb 24 22:19	24° H 55'48	0.57775 AU	retrograde	16241 Jan 25 16:00	9° H 14'41
inferior conj	16240 Feb 27 23:37	22° H 44'32	-3°45'11	evening set	16241 Jan 30 23:53	8° H 11'57
minimum elong	16240 Feb 28 08:05	22° H 29'19	3°42'09	min. Earth dist.	16241 Feb 05 10:40	5° H 23'12 0.55930 AU
morning rise	16240 Mar 07 06:48	18° H 20'21		inferior conj	16241 Feb 07 19:14	3° H 54'48 -5°08'03
direct	16240 Mar 09 05:56	18° H 07'44		minimum elong	16241 Feb 08 04:19	3° H 40'35 5°05'38
asc. node	16240 Mar 11 03:26	18° H 20'02		16241 Feb 15 19:43	30° R \approx	
morning max el	16240 Mar 17 17:05	22° H 17'48	18°38'09	morning rise	16241 Feb 16 11:02	29° \approx 51'29
	16240 Mar 23 17:29	0° Y		direct	16241 Feb 18 15:54	29° \approx 38'19
morning set	16240 Apr 02 17:41	18° Y 00'33		16241 Feb 21 09:56	0° H	
	16240 Apr 08 23:00	0° B		asc. node	16241 Feb 26 00:45	2° H 17'22
				morning max el	16241 Feb 28 13:59	4° H 27'38 19°36'03
superior conj	16240 Apr 11 15:58	5° B 06'00	0°08'41	16241 Mar 16 14:53	0° Y	
minimum elong	16240 Apr 11 16:33	5° B 08'40	0°08'14	morning set	16241 Mar 17 20:38	2° Y 29'00
behind sun begin	16240 Apr 11 10:31	4° B 40'31				
behind sun end	16240 Apr 11 22:35	5° B 36'45		superior conj	16241 Mar 25 21:20	18° Y 34'34 0°39'00
desc. node	16240 Apr 12 16:45	7° B 00'56		minimum elong	16241 Mar 25 23:27	18° Y 44'54 0°38'28
max. Earth dist.	16240 Apr 19 00:24	18° B 21'13	1.40031 AU	desc. node	16241 Mar 30 13:27	27° Y 32'34
evening rise	16240 Apr 23 01:54	25° B 17'21		16241 Mar 31 21:09	0° B	
	16240 Apr 25 22:19	0° II		max. Earth dist.	16241 Apr 01 06:28	0° B 42'56 1.37726 AU
	16240 May 16 02:12	0° E		evening rise	16241 Apr 04 22:56	7° B 21'27
evening max el	16240 May 27 19:29	13° E 59'32	23°50'30	16241 Apr 18 19:19	0° II	
asc. node	16240 Jun 07 01:18	20° E 23'49		evening max el	16241 May 10 08:49	27° II 54'08 25°09'18
retrograde	16240 Jun 07 19:18	20° E 26'13		16241 May 12 14:48	0° E	
evening set	16240 Jun 13 04:03	18° E 09'06		retrograde	16241 May 22 10:04	4° E 54'42
min. Earth dist.	16240 Jun 17 20:35	12° E 40'18	0.68927 AU	asc. node	16241 May 24 22:21	4° E 28'33
inferior conj	16240 Jun 18 13:44	11° E 41'46	2°49'04	evening set	16241 May 28 06:07	2° E 27'26
minimum elong	16240 Jun 18 12:07	11° E 47'15	2°48'07	16241 May 30 16:03	30° R II	
morning rise	16240 Jun 23 20:12	5° E 37'35		min. Earth dist.	16241 Jun 01 14:38	27° II 35'41 0.68200 AU
direct	16240 Jun 27 22:48	4° E 02'11		inferior conj	16241 Jun 02 20:52	25° II 56'44 2°23'33
morning max el	16240 Jul 05 20:47	8° E 30'34	20°21'56	minimum elong	16241 Jun 02 18:46	26° II 03'38 2°22'21
desc. node	16240 Jul 09 16:29	12° E 44'39		morning rise	16241 Jun 08 07:47	20° II 02'22
	16240 Jul 22 05:58	0° O		direct	16241 Jun 11 22:59	18° II 46'36
morning set	16240 Aug 03 08:58	18° O 16'12		morning max el	16241 Jun 19 00:22	22° II 38'19 19°18'29
	16240 Aug 10 21:13	0° P		16241 Jun 25 05:10	0° E	
max. Earth dist.	16240 Aug 12 16:16	2° P 51'14	1.44162 AU	desc. node	16241 Jun 26 13:37	1° E 50'36
				greatest brilliancy	16241 Jul 01 17:04	9° E 14'21 -0.7m
superior conj	16240 Aug 18 19:00	12° P 45'52	-1°48'15	morning set	16241 Jul 13 13:50	27° E 14'15
minimum elong	16240 Aug 19 02:55	13° P 18'25	1°47'48	16241 Jul 15 08:55	0° O	
	16240 Aug 29 00:13	0° A		max. Earth dist.	16241 Jul 26 08:32	17° O 03'50 1.45432 AU
evening rise	16240 Aug 31 12:13	4° A 19'24				
asc. node	16240 Sep 03 01:50	8° A 46'22		superior conj	16241 Jul 29 19:44	22° O 31'37 -2°09'48
	16240 Sep 17 01:27	0° M		minimum elong	16241 Jul 30 00:42	22° O 51'16 2°10'05
evening max el	16240 Sep 17 10:27	0° M 22'45	18°01'26	16241 Aug 03 12:16	0° P	
retrograde	16240 Sep 23 22:26	3° M 45'27		evening rise	16241 Aug 13 07:18	15° P 56'58
evening set	16240 Sep 26 11:00	3° M 14'03		asc. node	16241 Aug 20 22:32	28° P 28'15
	16240 Oct 01 00:56	30° R A		16241 Aug 21 21:25	0° A	
inferior conj	16240 Oct 02 23:47	28° A 04'13	0°47'27	evening max el	16241 Sep 01 01:16	13° A 56'51 18°13'34
minimum elong	16240 Oct 03 01:08	28° A 00'46	0°47'13	retrograde	16241 Sep 07 10:03	17° A 19'02
desc. node	16240 Oct 05 13:45	25° A 26'08		evening set	16241 Sep 10 07:19	16° A 33'50
min. Earth dist.	16240 Oct 05 21:43	25° A 06'31	0.62017 AU	inferior conj	16241 Sep 16 07:26	11° A 07'33 1°45'59
morning rise	16240 Oct 09 12:41	22° A 00'39		minimum elong	16241 Sep 16 09:42	11° A 01'06 1°45'21
direct	16240 Oct 16 05:10	19° A 39'18		min. Earth dist.	16241 Sep 18 17:35	8° A 22'16 0.64181 AU
morning max el	16240 Oct 30 08:07	27° A 35'54	27°58'36	morning rise	16241 Sep 22 10:18	4° A 48'33
	16240 Nov 01 15:26	0° M		desc. node	16241 Sep 22 11:04	4° A 47'02
	16240 Nov 22 13:07	0° J		direct	16241 Sep 29 00:06	2° A 14'45
asc. node	16240 Nov 30 02:38	14° J 01'47		morning max el	16241 Oct 12 18:17	10° A 12'40 27°33'45
morning set	16240 Dec 03 05:06	20° J 16'45		16241 Oct 28 08:36	0° M	
	16240 Dec 07 19:17	0° Z		16241 Nov 14 22:31	0° J	
max. Earth dist.	16240 Dec 08 15:12	1° Z 48'26	1.31510 AU	morning set	16241 Nov 16 20:45	3° J 46'24
				asc. node	16241 Nov 16 23:34	4° J 00'24
superior conj	16240 Dec 10 15:00	6° Z 11'14	1°23'34	max. Earth dist.	16241 Nov 21 12:36	13° J 17'41 1.32567 AU
minimum elong	16240 Dec 10 13:00	6° Z 00'12	1°24'03			
evening rise	16240 Dec 17 08:20	21° Z 00'59		superior conj	16241 Nov 24 20:55	20° J 25'38 1°07'08

minimum elong	16241 Nov 24 18:34	20° ♁ 12'53	1°07'27	superior conj	16242 Nov 08 20:50	4° ♁ 20'52	0°44'31
	16241 Nov 29 06:33	0° ♁		minimum elong	16242 Nov 08 18:43	4° ♁ 09'53	0°44'45
evening rise	16241 Dec 01 19:07	5° ♁ 27'50		evening rise	16242 Nov 16 04:47	19° ♁ 50'41	
	16241 Dec 14 16:22	0° ♁			16242 Nov 21 03:54	0° ♁	
desc. node	16241 Dec 19 09:13	6° ♁ 44'33		evening max el	16242 Dec 05 22:44	22° ♁ 25'56	21°19'04
evening max el	16241 Dec 24 08:04	12° ♁ 20'15	22°57'55	desc. node	16242 Dec 06 06:12	22° ♁ 44'05	
retrograde	16242 Jan 06 10:49	18° ♁ 49'27		retrograde	16242 Dec 17 20:50	28° ♁ 19'34	
evening set	16242 Jan 10 13:36	18° ♁ 12'39		evening set	16242 Dec 20 17:47	28° ♁ 00'30	
min. Earth dist.	16242 Jan 17 17:52	14° ♁ 53'37	0.54719 AU	inferior conj	16242 Dec 29 10:48	24° ♁ 10'25	-5°50'09
inferior conj	16242 Jan 18 19:50	14° ♁ 16'35	-5°57'38	minimum elong	16242 Dec 29 04:56	24° ♁ 18'40	5°48'47
minimum elong	16242 Jan 18 23:16	14° ♁ 11'42	5°56'52	min. Earth dist.	16242 Dec 29 23:16	23° ♁ 52'52	0.54384 AU
morning rise	16242 Jan 27 10:11	10° ♁ 26'55		morning rise	16243 Jan 06 16:25	20° ♁ 20'21	
direct	16242 Jan 30 07:43	10° ♁ 07'21		direct	16243 Jan 10 15:29	19° ♁ 46'22	
morning max el	16242 Feb 10 20:29	15° ♁ 41'41	20°57'10	morning max el	16243 Jan 23 12:40	26° ♁ 02'34	22°38'26
asc. node	16242 Feb 12 22:06	17° ♁ 51'28			16243 Jan 27 04:51	0° ♁	
	16242 Feb 21 08:25	0° ♁		asc. node	16243 Jan 30 19:24	4° ♁ 44'03	
morning set	16242 Mar 02 04:51	17° ♁ 08'39			16243 Feb 13 18:40	0° ♁	
	16242 Mar 08 08:38	0° ♁		morning set	16243 Feb 14 16:01	1° ♁ 52'52	
superior conj	16242 Mar 09 14:22	2° ♁ 33'19	1°03'10	superior conj	16243 Feb 21 15:43	16° ♁ 52'57	1°20'56
minimum elong	16242 Mar 09 16:54	2° ♁ 46'20	1°02'50	minimum elong	16243 Feb 21 17:55	17° ♁ 04'42	1°20'55
max. Earth dist.	16242 Mar 14 14:57	12° ♁ 37'57	1.35556 AU	max. Earth dist.	16243 Feb 25 06:14	24° ♁ 27'23	1.33710 AU
desc. node	16242 Mar 17 10:07	18° ♁ 00'14			16243 Feb 27 23:43	0° ♁	
evening rise	16242 Mar 18 13:37	20° ♁ 09'01		evening rise	16243 Mar 01 18:26	3° ♁ 30'51	
	16242 Mar 24 01:19	0° ♁		desc. node	16243 Mar 04 06:48	8° ♁ 20'08	
	16242 Apr 12 18:53	0° ♁			16243 Mar 16 21:31	0° ♁	
evening max el	16242 Apr 22 22:23	11° ♁ 44'16	26°17'57	evening max el	16243 Apr 05 12:11	25° ♁ 22'11	27°08'48
retrograde	16242 May 05 19:59	19° ♁ 06'36			16243 Apr 11 02:01	0° ♁	
asc. node	16242 May 11 19:29	16° ♁ 47'42		retrograde	16243 Apr 18 23:54	2° ♁ 53'42	
evening set	16242 May 12 02:08	16° ♁ 34'19		evening set	16243 Apr 25 14:07	0° ♁ 22'38	
min. Earth dist.	16242 May 16 04:18	12° ♁ 18'07	0.67014 AU		16243 Apr 26 01:29	30° ♁	
inferior conj	16242 May 17 23:34	10° ♁ 05'12	1°46'32	asc. node	16243 Apr 28 16:41	27° ♁ 30'17	
minimum elong	16242 May 17 21:27	10° ♁ 11'45	1°45'15	min. Earth dist.	16243 Apr 29 11:32	26° ♁ 39'30	0.65416 AU
morning rise	16242 May 23 17:40	4° ♁ 21'51		inferior conj	16243 May 01 19:28	24° ♁ 01'40	0°56'53
direct	16242 May 26 22:19	3° ♁ 24'14		minimum elong	16243 May 01 18:01	24° ♁ 05'46	0°55'50
morning max el	16242 Jun 02 10:39	6° ♁ 51'55	18°30'51	morning rise	16243 May 07 23:35	18° ♁ 31'07	
desc. node	16242 Jun 13 10:41	21° ♁ 26'39		direct	16243 May 10 18:41	17° ♁ 49'13	
	16242 Jun 18 23:18	0° ♁		morning max el	16243 May 17 01:52	21° ♁ 05'13	18°00'05
morning set	16242 Jun 23 09:23	6° ♁ 56'29			16243 May 24 01:57	0° ♁	
	16242 Jul 08 03:02	0° ♁		desc. node	16243 May 31 07:41	11° ♁ 24'52	
superior conj	16242 Jul 09 06:13	1° ♁ 45'54	-2°13'13	morning set	16243 Jun 04 07:16	17° ♁ 54'55	
minimum elong	16242 Jul 09 03:39	1° ♁ 35'54	2°13'48		16243 Jun 11 17:59	0° ♁	
max. Earth dist.	16242 Jul 09 03:53	1° ♁ 36'48	1.45993 AU	superior conj	16243 Jun 18 18:29	11° ♁ 10'38	-1°56'50
evening rise	16242 Jul 25 01:15	26° ♁ 30'25		minimum elong	16243 Jun 18 10:23	10° ♁ 38'41	1°56'57
	16242 Jul 27 06:21	0° ♁		max. Earth dist.	16243 Jun 22 00:14	16° ♁ 15'53	1.45805 AU
greatest brilliancy	16242 Aug 02 07:05	9° ♁ 28'36	-0.8m		16243 Jun 30 20:35	0° ♁	
asc. node	16242 Aug 07 19:15	17° ♁ 50'06		evening rise	16243 Jul 04 21:01	6° ♁ 11'03	
evening max el	16242 Aug 15 13:54	27° ♁ 43'36	18°43'16	greatest brilliancy	16243 Jul 18 02:49	26° ♁ 14'28	-0.7m
	16242 Aug 18 07:56	0° ♁			16243 Jul 20 16:59	0° ♁	
retrograde	16242 Aug 22 04:13	1° ♁ 18'04		asc. node	16243 Jul 25 16:00	6° ♁ 44'40	
evening set	16242 Aug 25 10:52	0° ♁ 16'42		evening max el	16243 Jul 29 21:57	11° ♁ 36'31	19°29'29
	16242 Aug 25 21:01	30° ♁		retrograde	16243 Aug 06 01:58	15° ♁ 35'53	
inferior conj	16242 Aug 31 01:45	24° ♁ 36'01	2°26'59	evening set	16243 Aug 09 18:37	14° ♁ 16'50	
minimum elong	16242 Aug 31 03:56	24° ♁ 29'14	2°26'20	inferior conj	16243 Aug 15 03:33	8° ♁ 23'10	2°52'57
min. Earth dist.	16242 Sep 01 22:16	22° ♁ 17'57	0.66051 AU	minimum elong	16243 Aug 15 05:06	8° ♁ 18'04	2°52'23
morning rise	16242 Sep 05 19:57	18° ♁ 10'10		min. Earth dist.	16243 Aug 16 10:01	6° ♁ 42'31	0.67524 AU
desc. node	16242 Sep 09 08:26	16° ♁ 02'12		morning rise	16243 Aug 20 15:01	1° ♁ 56'39	
direct	16242 Sep 12 02:56	15° ♁ 32'46			16243 Aug 23 14:26	30° ♁	
morning max el	16242 Sep 25 05:42	23° ♁ 18'05	26°39'04	direct	16243 Aug 26 12:12	29° ♁ 24'01	
	16242 Oct 01 04:59	0° ♁		desc. node	16243 Aug 27 05:48	29° ♁ 26'08	
	16242 Oct 21 16:27	0° ♁			16243 Aug 29 14:48	0° ♁	
morning set	16242 Oct 31 01:02	16° ♁ 44'01		morning max el	16243 Sep 07 16:50	6° ♁ 41'09	25°23'36
asc. node	16242 Nov 03 20:27	24° ♁ 07'33			16243 Sep 25 20:30	0° ♁	
max. Earth dist.	16242 Nov 04 00:23	24° ♁ 27'06	1.34176 AU	morning set	16243 Oct 13 14:14	29° ♁ 00'53	
	16242 Nov 06 18:21	0° ♁			16243 Oct 14 03:19	0° ♁	
				max. Earth dist.	16243 Oct 17 03:22	5° ♁ 31'44	1.36258 AU





















































































































asc. node	16243 Oct 21 17:15	14°♍18'51			16244 Aug 28 12:08	0°♎	
					16244 Sep 18 00:35	0°♏	
superior conj	16243 Oct 23 11:48	17°♍49'27	0°15'59	morning set	16244 Sep 24 08:15	10°♏28'06	
minimum elong	16243 Oct 23 10:50	17°♍44'37	0°16'17	max. Earth dist.	16244 Sep 28 02:28	16°♏59'38	1.38624 AU
	16243 Oct 29 11:35	0°♐			16244 Oct 05 05:11	0°♍	
evening rise	16243 Oct 31 11:13	4°♐04'07					
	16243 Nov 15 06:41	0°♑		superior conj	16244 Oct 05 14:18	0°♍43'06	-0°17'38
evening max el	16243 Nov 18 02:17	3°♑10'48	19°57'14	minimum elong	16244 Oct 05 15:32	0°♍48'55	0°17'06
desc. node	16243 Nov 23 03:17	6°♑59'45		asc. node	16244 Oct 07 13:59	4°♍30'46	
retrograde	16243 Nov 28 09:55	8°♑19'33		evening rise	16244 Oct 14 11:52	18°♍02'01	
evening set	16243 Nov 30 12:18	8°♑07'45			16244 Oct 20 18:02	0°♐	
inferior conj	16243 Dec 09 06:29	4°♑08'45	-4°44'32	evening max el	16244 Oct 30 20:05	14°♐46'08	18°57'32
minimum elong	16243 Dec 08 20:27	4°♑24'00	4°41'05	retrograde	16244 Nov 08 14:25	19°♐11'19	
min. Earth dist.	16243 Dec 11 05:44	2°♑56'52	0.54995 AU	desc. node	16244 Nov 09 00:25	19°♐10'44	
morning rise	16243 Dec 17 03:30	29°♐59'37		evening set	16244 Nov 10 11:48	18°♐59'46	
	16243 Dec 17 03:05	30°♐♐		inferior conj	16244 Nov 18 19:15	14°♐42'26	-3°06'04
direct	16243 Dec 22 03:48	29°♐04'43		minimum elong	16244 Nov 18 11:39	14°♐55'45	3°02'34
	16243 Dec 27 02:23	0°♑		min. Earth dist.	16244 Nov 21 16:53	12°♐40'43	0.56428 AU
morning max el	16244 Jan 04 21:11	5°♑53'47	24°28'39	morning rise	16244 Nov 26 08:44	9°♐59'13	
asc. node	16244 Jan 17 16:40	22°♑36'24		direct	16244 Dec 02 04:34	8°♐39'09	
	16244 Jan 21 22:28	0°♒		morning max el	16244 Dec 16 08:01	15°♐54'33	26°09'01
morning set	16244 Jan 30 04:03	16°♒34'57			16244 Dec 27 17:35	0°♑	
	16244 Feb 05 07:08	0°♒		asc. node	16245 Jan 03 13:52	11°♑13'52	
					16245 Jan 13 02:03	0°♒	
superior conj	16244 Feb 05 22:34	1°♒24'45	1°32'25	morning set	16245 Jan 13 15:08	1°♒10'12	
minimum elong	16244 Feb 05 23:59	1°♒32'30	1°32'43				
max. Earth dist.	16244 Feb 08 05:14	6°♒22'15	1.32297 AU	superior conj	16245 Jan 20 08:42	16°♒02'38	1°37'44
evening rise	16244 Feb 13 09:59	17°♒17'13		minimum elong	16245 Jan 20 09:05	16°♒04'51	1°38'16
desc. node	16244 Feb 19 03:29	28°♒26'42		max. Earth dist.	16245 Jan 21 10:07	18°♒24'03	1.31380 AU
	16244 Feb 19 23:40	0°♓			16245 Jan 26 18:00	0°♒	
	16244 Mar 10 08:18	0°♓		evening rise	16245 Jan 27 09:30	1°♒21'38	
evening max el	16244 Mar 18 00:40	8°♓35'14	27°34'35	desc. node	16245 Feb 05 00:11	18°♒14'20	
retrograde	16244 Mar 31 20:44	16°♓06'15			16245 Feb 11 22:31	0°♓	
evening set	16244 Apr 07 15:42	13°♓43'12		evening max el	16245 Feb 28 09:23	21°♓10'02	27°29'02
min. Earth dist.	16244 Apr 11 10:17	10°♓29'16	0.63462 AU	retrograde	16245 Mar 14 09:22	28°♓34'34	
inferior conj	16244 Apr 14 05:38	7°♓38'21	-0°06'34	evening set	16245 Mar 21 04:09	26°♓26'46	
minimum elong	16244 Apr 14 05:51	7°♓37'48	0°06'52	min. Earth dist.	16245 Mar 24 23:07	23°♓35'24	0.61265 AU
transit middle	16244 Apr 14 05:51	7°♓37'48	0°06'52	inferior conj	16245 Mar 28 02:41	20°♓46'12	-1°24'01
transit begin	16244 Apr 14 03:00	7°♓45'06		minimum elong	16245 Mar 28 05:42	20°♓39'24	1°22'58
transit end	16244 Apr 14 08:43	7°♓30'31		asc. node	16245 Apr 01 11:16	17°♓15'43	
asc. node	16244 Apr 14 13:57	7°♓17'12		morning rise	16245 Apr 04 10:34	15°♓49'14	
morning rise	16244 Apr 20 22:33	2°♓23'06		direct	16245 Apr 06 14:15	15°♓29'22	
direct	16244 Apr 23 09:13	1°♓53'52		morning max el	16245 Apr 13 12:11	18°♓57'34	17°51'22
morning max el	16244 Apr 29 19:26	5°♓10'10	17°46'44		16245 Apr 21 14:05	0°♓	
morning set	16244 May 16 07:24	0°♐07'49		morning set	16245 Apr 29 04:24	13°♓18'33	
	16244 May 16 05:34	0°♐		desc. node	16245 May 04 01:27	22°♓02'43	
desc. node	16244 May 17 04:37	1°♐38'37			16245 May 08 14:18	0°♐	
superior conj	16244 May 28 23:36	21°♐24'12	-1°25'55	superior conj	16245 May 10 03:58	2°♐42'02	-0°48'33
minimum elong	16244 May 28 15:48	20°♐52'24	1°25'40	minimum elong	16245 May 09 23:36	2°♐23'22	0°48'29
	16244 Jun 03 07:42	0°♑		max. Earth dist.	16245 May 17 10:38	14°♐51'13	1.43333 AU
max. Earth dist.	16244 Jun 03 19:22	0°♑46'25	1.44886 AU	evening rise	16245 May 24 01:12	25°♐24'04	
evening rise	16244 Jun 13 07:28	15°♑34'59			16245 May 27 00:19	0°♑	
	16244 Jun 22 21:00	0°♒			16245 Jun 16 19:50	0°♒	
asc. node	16244 Jul 11 12:48	25°♒02'40		evening max el	16245 Jun 24 20:09	9°♒24'58	21°43'22
evening max el	16244 Jul 12 00:03	25°♒31'07	20°30'30	asc. node	16245 Jun 28 09:40	12°♒31'23	
	16244 Jul 18 21:47	0°♓		retrograde	16245 Jul 03 23:32	14°♒44'21	
retrograde	16244 Jul 20 01:01	0°♓06'44		evening set	16245 Jul 08 13:57	12°♒50'08	
	16244 Jul 21 03:36	30°♓♓		inferior conj	16245 Jul 13 19:32	6°♒34'19	3°07'46
evening set	16244 Jul 24 04:18	28°♒29'40		minimum elong	16245 Jul 13 19:14	6°♒35'24	3°07'09
inferior conj	16244 Jul 29 10:14	22°♒24'12	3°06'02	min. Earth dist.	16245 Jul 13 22:54	6°♒22'33	0.69075 AU
minimum elong	16244 Jul 29 10:53	22°♒21'58	3°05'31	morning rise	16245 Jul 19 00:19	0°♒17'07	
min. Earth dist.	16244 Jul 30 02:56	21°♒26'49	0.68539 AU		16245 Jul 19 08:30	30°♓♓	
morning rise	16244 Aug 03 17:10	16°♒01'03		direct	16245 Jul 23 21:47	28°♓11'52	
direct	16244 Aug 09 02:50	13°♒39'50			16245 Jul 28 23:54	0°♒	
desc. node	16244 Aug 13 03:09	14°♒43'44		desc. node	16245 Jul 31 00:28	1°♒30'28	
morning max el	16244 Aug 20 03:51	20°♒15'26	23°56'55	morning max el	16245 Aug 02 16:21	3°♒57'37	22°27'58

	16245 Aug 22 14:28	0°♎		direct	16246 Jul 07 19:58	12°♊53'58	
morning set	16245 Sep 05 03:17	20°♎56'32		morning max el	16246 Jul 16 09:03	17°♊49'04	21°04'42
max. Earth dist.	16245 Sep 10 03:12	29°♎11'34	1.41012 AU	desc. node	16246 Jul 17 21:42	19°♊24'38	
	16245 Sep 10 14:41	0°♏			16246 Jul 26 08:49	0°♏	
				morning set	16246 Aug 15 23:10	0°♎27'06	
superior conj	16245 Sep 17 24:00	12°♏51'03	-0°54'20		16246 Aug 15 16:13	0°♎	
minimum elong	16245 Sep 18 04:21	13°♏10'32	0°53'33	max. Earth dist.	16246 Aug 23 09:35	12°♎16'23	1.43149 AU
asc. node	16245 Sep 24 10:40	24°♏39'01					
	16245 Sep 27 07:10	0°♌		superior conj	16246 Aug 30 12:43	24°♎05'08	-1°30'15
evening rise	16245 Sep 28 03:24	1°♌35'06		minimum elong	16246 Aug 30 20:00	24°♎35'59	1°29'31
evening max el	16245 Oct 14 01:03	27°♌06'56	18°19'57		16246 Sep 02 23:41	0°♏	
	16245 Oct 17 19:55	0°♐		evening rise	16246 Sep 11 05:42	14°♏33'11	
retrograde	16245 Oct 21 14:11	0°♐57'37		asc. node	16246 Sep 11 07:19	14°♏40'25	
evening set	16245 Oct 23 14:57	0°♐41'33			16246 Sep 20 02:48	0°♌	
	16245 Oct 25 12:08	30°♋♌		evening max el	16246 Sep 27 12:55	10°♌03'57	18°02'45
desc. node	16245 Oct 26 21:39	29°♌14'54		retrograde	16246 Oct 04 07:04	13°♌32'46	
inferior conj	16245 Oct 31 05:41	26°♌03'07	-1°23'50	evening set	16246 Oct 06 14:57	13°♌08'00	
minimum elong	16245 Oct 31 02:30	26°♌09'39	1°21'59	inferior conj	16246 Oct 13 12:36	8°♌09'13	0°04'58
min. Earth dist.	16245 Nov 03 11:40	23°♌24'06	0.58428 AU	minimum elong	16246 Oct 13 12:46	8°♌08'49	0°05'17
morning rise	16245 Nov 07 10:33	20°♌43'04		transit middle	16246 Oct 13 12:46	8°♌08'49	0°05'17
direct	16245 Nov 13 19:40	18°♌55'58		transit begin	16246 Oct 13 09:40	8°♌16'10	
morning max el	16245 Nov 28 02:30	26°♌33'01	27°21'38	transit end	16246 Oct 13 15:52	8°♌01'27	
	16245 Dec 01 09:23	0°♐		desc. node	16246 Oct 13 18:54	7°♌54'13	
asc. node	16245 Dec 21 10:58	0°♊24'22		min. Earth dist.	16246 Oct 16 15:43	5°♌12'16	0.60703 AU
	16245 Dec 21 05:47	0°♊		morning rise	16246 Oct 20 07:28	2°♌18'56	
morning set	16245 Dec 28 23:27	15°♊33'45		direct	16246 Oct 26 23:16	0°♌07'54	
				morning max el	16246 Nov 10 04:43	7°♌59'49	27°56'24
superior conj	16246 Jan 04 20:06	0°♋41'05	1°37'01		16246 Nov 27 00:30	0°♐	
minimum elong	16246 Jan 04 19:27	0°♋37'25	1°37'38	asc. node	16246 Dec 08 07:59	19°♐58'45	
max. Earth dist.	16246 Jan 04 17:36	0°♋27'07	1.30988 AU	morning set	16246 Dec 13 03:05	29°♐40'23	
	16246 Jan 04 12:46	0°♋			16246 Dec 13 06:50	0°♊	
evening rise	16246 Jan 11 14:40	15°♋38'35		max. Earth dist.	16246 Dec 19 00:04	12°♊22'54	1.31151 AU
	16246 Jan 18 16:39	0°♋					
desc. node	16246 Jan 22 20:56	7°♋35'49		superior conj	16246 Dec 20 06:54	15°♊14'22	1°30'15
	16246 Feb 07 14:45	0°♐		minimum elong	16246 Dec 20 05:19	15°♊05'33	1°30'48
evening max el	16246 Feb 10 11:50	2°♐56'26	26°48'38	evening rise	16246 Dec 26 23:26	0°♋02'57	
retrograde	16246 Feb 24 12:38	10°♐10'36			16246 Dec 26 22:53	0°♋	
evening set	16246 Mar 03 00:21	8°♐25'03		desc. node	16247 Jan 09 17:43	26°♋20'48	
min. Earth dist.	16246 Mar 07 01:46	5°♐46'00	0.59001 AU		16247 Jan 12 01:52	0°♋	
inferior conj	16246 Mar 10 06:53	3°♐15'44	-2°52'30	evening max el	16247 Jan 23 06:13	13°♋50'07	25°35'01
minimum elong	16246 Mar 10 13:30	3°♐02'47	2°49'59	retrograde	16247 Feb 06 04:08	20°♋50'25	
	16246 Mar 14 22:56	30°♋♋		evening set	16247 Feb 12 00:33	19°♋31'59	
morning rise	16246 Mar 18 06:16	28°♋39'27		min. Earth dist.	16247 Feb 16 19:04	16°♋51'27	0.56923 AU
asc. node	16246 Mar 19 08:36	28°♋28'10		inferior conj	16247 Feb 19 14:52	14°♋56'57	-4°22'39
direct	16246 Mar 20 05:32	28°♋25'22		minimum elong	16247 Feb 20 00:11	14°♋41'12	4°19'38
	16246 Mar 25 04:52	0°♐		morning rise	16247 Feb 28 02:44	10°♋41'52	
morning max el	16246 Mar 28 00:34	2°♐17'10	18°15'08	direct	16247 Mar 02 02:56	10°♋29'41	
morning set	16246 Apr 12 16:35	27°♐10'24		asc. node	16247 Mar 06 05:57	11°♋24'17	
	16246 Apr 14 04:32	0°♋		morning max el	16247 Mar 11 04:21	14°♋55'58	18°59'54
desc. node	16246 Apr 20 22:13	12°♋33'05			16247 Mar 21 14:50	0°♐	
				morning set	16247 Mar 27 15:13	11°♐28'41	
superior conj	16246 Apr 22 06:38	15°♋00'20	-0°11'15				
minimum elong	16246 Apr 22 05:44	14°♋56'15	0°11'33	superior conj	16247 Apr 05 03:30	28°♐06'28	0°22'13
behind sun begin	16246 Apr 22 00:32	14°♋32'42		minimum elong	16247 Apr 05 04:53	28°♐13'02	0°21'43
behind sun end	16246 Apr 22 10:56	15°♋19'44			16247 Apr 06 03:25	0°♋	
max. Earth dist.	16246 Apr 29 20:47	28°♋17'11	1.41314 AU	desc. node	16247 Apr 07 18:55	3°♋05'13	
	16246 Apr 30 21:11	0°♏		max. Earth dist.	16247 Apr 12 03:21	11°♋00'34	1.39051 AU
evening rise	16246 May 04 13:26	6°♏04'45		evening rise	16247 Apr 15 22:58	17°♋40'24	
	16246 May 20 04:00	0°♏			16247 Apr 23 10:28	0°♏	
evening max el	16246 Jun 07 11:58	23°♏19'39	23°03'28		16247 May 14 13:39	0°♏	
asc. node	16246 Jun 15 06:37	28°♏55'33		evening max el	16247 May 21 01:49	7°♏15'15	24°24'48
retrograde	16246 Jun 17 20:01	29°♏23'38		retrograde	16247 Jun 01 13:08	13°♏57'38	
evening set	16246 Jun 22 21:57	27°♏14'13		asc. node	16247 Jun 02 03:39	13°♏56'05	
inferior conj	16246 Jun 28 05:32	20°♏50'10	2°58'54	evening set	16247 Jun 07 02:39	11°♏35'58	
minimum elong	16246 Jun 28 04:21	20°♏54'17	2°58'06	min. Earth dist.	16247 Jun 11 15:40	6°♏22'45	0.68679 AU
min. Earth dist.	16246 Jun 27 19:53	21°♏23'36	0.69122 AU	inferior conj	16247 Jun 12 14:17	5°♏06'41	2°39'36
morning rise	16246 Jul 03 10:38	14°♏40'38		minimum elong	16247 Jun 12 12:25	5°♏12'57	2°38'32

	16247 Jun 16 20:46	30° $\mathbb{R}\mathbb{I}$		minimum elong	16248 May 26 17:38	19° \mathbb{I} 26'32	2°08'04
morning rise	16247 Jun 17 22:17	29° \mathbb{I} 06'16		morning rise	16248 Jun 01 09:26	13° \mathbb{I} 29'36	
direct	16247 Jun 21 19:58	27° \mathbb{I} 39'10		direct	16248 Jun 04 20:08	12° \mathbb{I} 21'36	
	16247 Jun 27 06:41	0° \mathbb{S}		morning max el	16248 Jun 11 14:48	16° \mathbb{I} 01'08	18°56'07
morning max el	16247 Jun 29 08:17	1° \mathbb{S} 50'36	19°52'59	desc. node	16248 Jun 20 15:59	27° \mathbb{I} 27'52	
desc. node	16247 Jul 04 18:52	8° \mathbb{S} 08'06			16248 Jun 22 09:35	0° \mathbb{S}	
	16247 Jul 20 00:27	0° \mathbb{Q}		greatest brilliancy	16248 Jun 24 21:59	3° \mathbb{S} 45'51	-0.7m
morning set	16247 Jul 26 04:24	9° \mathbb{Q} 22'54		morning set	16248 Jul 04 13:21	18° \mathbb{S} 33'59	
max. Earth dist.	16247 Aug 05 22:50	26° \mathbb{Q} 09'00	1.44789 AU		16248 Jul 11 22:21	0° \mathbb{Q}	
	16247 Aug 08 08:56	0° \mathbb{P}		max. Earth dist.	16248 Jul 18 17:11	10° \mathbb{Q} 33'57	1.45769 AU
superior conj	16247 Aug 11 02:03	4° \mathbb{P} 21'22	-1°59'15	superior conj	16248 Jul 20 19:04	13° \mathbb{Q} 49'11	-2°13'44
minimum elong	16247 Aug 11 09:25	4° \mathbb{P} 51'09	1°59'05	minimum elong	16248 Jul 20 21:07	13° \mathbb{Q} 57'12	2°14'15
evening rise	16247 Aug 24 13:39	26° \mathbb{P} 43'41			16248 Jul 31 00:18	0° \mathbb{P}	
	16247 Aug 26 11:57	0° \mathbb{A}		evening rise	16248 Aug 04 22:13	7° \mathbb{P} 54'11	
asc. node	16247 Aug 29 04:01	4° \mathbb{A} 30'56		asc. node	16248 Aug 15 00:43	24° \mathbb{P} 05'04	
evening max el	16247 Sep 11 03:44	23° \mathbb{A} 27'32	18°04'27		16248 Aug 18 23:35	0° \mathbb{A}	
retrograde	16247 Sep 17 13:04	26° \mathbb{A} 48'01		evening max el	16248 Aug 24 18:00	7° \mathbb{A} 08'02	18°24'07
evening set	16247 Sep 20 05:22	26° \mathbb{A} 11'00		retrograde	16248 Aug 31 03:57	10° \mathbb{A} 33'42	
inferior conj	16247 Sep 26 12:21	20° \mathbb{A} 54'01	1°14'35	evening set	16248 Sep 03 05:14	9° \mathbb{A} 41'41	
minimum elong	16247 Sep 26 14:15	20° \mathbb{A} 48'56	1°14'07	inferior conj	16248 Sep 09 00:58	4° \mathbb{A} 08'51	2°05'24
min. Earth dist.	16247 Sep 29 05:42	17° \mathbb{A} 59'33	0.62970 AU	minimum elong	16248 Sep 09 03:17	4° \mathbb{A} 01'57	2°04'43
desc. node	16247 Sep 30 16:12	16° \mathbb{A} 34'17		min. Earth dist.	16248 Sep 11 05:19	1° \mathbb{A} 33'58	0.65023 AU
morning rise	16247 Oct 02 20:54	14° \mathbb{A} 43'02			16248 Sep 12 15:11	30° $\mathbb{R}\mathbb{P}$	
direct	16247 Oct 09 13:03	12° \mathbb{A} 15'13		morning rise	16248 Sep 14 23:57	27° \mathbb{P} 46'13	
morning max el	16247 Oct 23 12:37	20° \mathbb{A} 13'17	27°52'10	desc. node	16248 Sep 16 13:34	26° \mathbb{P} 38'57	
	16247 Oct 31 22:49	0° \mathbb{M}		direct	16248 Sep 21 11:15	25° \mathbb{P} 10'08	
	16247 Nov 20 01:04	0° \mathbb{J}			16248 Oct 01 16:18	0° \mathbb{A}	
asc. node	16247 Nov 25 04:57	9° \mathbb{J} 50'14		morning max el	16248 Oct 04 23:34	3° \mathbb{A} 03'38	27°13'41
morning set	16247 Nov 26 23:51	13° \mathbb{J} 25'13			16248 Oct 25 07:06	0° \mathbb{M}	
max. Earth dist.	16247 Dec 02 01:49	24° \mathbb{J} 03'48	1.31888 AU	morning set	16248 Nov 09 11:00	26° \mathbb{M} 41'47	
				asc. node	16248 Nov 11 01:50	29° \mathbb{M} 52'53	
superior conj	16247 Dec 04 15:14	29° \mathbb{J} 37'32	1°17'22		16248 Nov 11 03:16	0° \mathbb{J}	
minimum elong	16247 Dec 04 13:01	29° \mathbb{J} 25'25	1°17'47	max. Earth dist.	16248 Nov 13 19:31	5° \mathbb{J} 24'55	1.33192 AU
	16247 Dec 04 19:20	0° \mathbb{Z}					
evening rise	16247 Dec 11 10:02	14° \mathbb{Z} 30'34		superior conj	16248 Nov 17 18:53	13° \mathbb{J} 44'20	0°58'17
	16247 Dec 19 00:31	0° \mathbb{X}		minimum elong	16248 Nov 17 16:32	13° \mathbb{J} 31'49	0°58'34
desc. node	16247 Dec 27 14:35	14° \mathbb{X} 16'09		evening rise	16248 Nov 24 20:35	28° \mathbb{J} 56'22	
evening max el	16248 Jan 04 17:22	24° \mathbb{X} 00'28	23°57'52		16248 Nov 25 08:33	0° \mathbb{Z}	
	16248 Jan 13 21:37	0° \mathbb{K}			16248 Dec 12 14:10	0° \mathbb{X}	
retrograde	16248 Jan 18 05:47	0° \mathbb{K} 42'47		desc. node	16248 Dec 13 11:32	1° \mathbb{X} 03'51	
	16248 Jan 22 16:08	30° $\mathbb{R}\mathbb{X}$		evening max el	16248 Dec 16 03:37	3° \mathbb{X} 55'17	22°14'19
evening set	16248 Jan 23 02:08	29° \mathbb{X} 51'50		retrograde	16248 Dec 28 19:29	10° \mathbb{X} 10'58	
min. Earth dist.	16248 Jan 29 04:55	26° \mathbb{X} 52'43	0.55321 AU	evening set	16249 Jan 01 09:14	9° \mathbb{X} 42'46	
inferior conj	16248 Jan 31 01:48	25° \mathbb{X} 45'50	-5°34'48	inferior conj	16249 Jan 09 20:34	5° \mathbb{X} 51'10	-6°02'12
minimum elong	16248 Jan 31 09:20	25° \mathbb{X} 34'35	5°33'08	minimum elong	16249 Jan 09 19:59	5° \mathbb{X} 51'59	6°01'34
morning rise	16248 Feb 08 18:13	21° \mathbb{X} 49'15		min. Earth dist.	16249 Jan 09 10:28	6° \mathbb{X} 05'17	0.54464 AU
direct	16248 Feb 11 04:56	21° \mathbb{X} 34'05		morning rise	16249 Jan 18 07:41	2° \mathbb{X} 03'52	
asc. node	16248 Feb 21 03:17	26° \mathbb{X} 04'43		direct	16249 Jan 21 15:39	1° \mathbb{X} 39'07	
morning max el	16248 Feb 21 19:20	26° \mathbb{X} 42'30	20°07'41	morning max el	16249 Feb 02 19:13	7° \mathbb{X} 31'26	21°38'22
	16248 Feb 24 19:03	0° \mathbb{K}		asc. node	16249 Feb 07 00:35	12° \mathbb{X} 13'53	
morning set	16248 Mar 10 20:47	26° \mathbb{K} 03'17			16249 Feb 17 23:14	0° \mathbb{K}	
	16248 Mar 12 19:02	0° \mathbb{Y}		morning set	16249 Feb 23 06:33	10° \mathbb{K} 45'38	
superior conj	16248 Mar 18 14:18	11° \mathbb{Y} 49'09	0°50'00	superior conj	16249 Mar 02 11:14	25° \mathbb{K} 57'38	1°11'29
minimum elong	16248 Mar 18 16:42	12° \mathbb{Y} 01'11	0°49'32	minimum elong	16249 Mar 02 13:42	26° \mathbb{K} 10'31	1°11'16
max. Earth dist.	16248 Mar 24 10:12	23° \mathbb{Y} 10'09	1.36783 AU		16249 Mar 04 10:01	0° \mathbb{Y}	
desc. node	16248 Mar 24 15:37	23° \mathbb{Y} 35'42		max. Earth dist.	16249 Mar 06 21:28	5° \mathbb{Y} 01'29	1.34721 AU
evening rise	16248 Mar 28 04:00	0° \mathbb{B} 04'32		evening rise	16249 Mar 11 01:05	13° \mathbb{Y} 07'17	
	16248 Mar 28 03:00	0° \mathbb{B}		desc. node	16249 Mar 11 12:19	14° \mathbb{Y} 00'29	
	16248 Apr 15 15:47	0° \mathbb{I}			16249 Mar 20 12:22	0° \mathbb{B}	
evening max el	16248 May 02 15:23	21° \mathbb{I} 09'27	25°40'10		16249 Apr 10 14:12	0° \mathbb{I}	
retrograde	16248 May 15 01:46	28° \mathbb{I} 19'53		evening max el	16249 Apr 15 05:08	4° \mathbb{I} 55'43	26°42'09
asc. node	16248 May 19 00:46	27° \mathbb{I} 16'30		retrograde	16249 Apr 28 09:10	12° \mathbb{I} 22'58	
evening set	16248 May 21 02:21	25° \mathbb{I} 50'00		evening set	16249 May 04 19:15	9° \mathbb{I} 50'11	
min. Earth dist.	16248 May 25 08:06	21° \mathbb{I} 13'34	0.67759 AU	asc. node	16249 May 05 21:56	8° \mathbb{I} 52'17	
inferior conj	16248 May 26 19:49	19° \mathbb{I} 19'32	2°09'20	min. Earth dist.	16249 May 08 19:08	5° \mathbb{I} 48'46	0.66386 AU

inferior conj	16249 May 10 19:58	3°♊23'53	1°27'08	inferior conj	16250 Apr 24 12:04	17°♏12'43	0°31'42
minimum elong	16249 May 10 18:01	3°♊29'40	1°25'53	minimum elong	16250 Apr 24 11:12	17°♏15'06	0°30'54
	16249 May 13 21:22	30°♏♏		morning rise	16250 Apr 30 21:20	11°♏48'39	
morning rise	16249 May 16 17:59	27°♏46'00		direct	16250 May 03 12:37	11°♏12'41	
direct	16249 May 19 18:31	26°♏55'22		morning max el	16250 May 09 20:12	14°♏27'29	17°52'20
	16249 May 25 20:45	0°♊			16250 May 20 23:29	0°♊	
morning max el	16249 May 26 03:34	0°♊16'13	18°15'43	desc. node	16250 May 25 10:00	7°♊19'58	
desc. node	16249 Jun 07 13:02	17°♊14'29		morning set	16250 May 27 05:05	10°♊19'26	
morning set	16249 Jun 14 19:35	28°♊47'57			16250 Jun 08 04:58	0°♏	
	16249 Jun 15 13:39	0°♏					
superior conj	16249 Jun 30 04:13	23°♏02'48	-2°08'30	superior conj	16250 Jun 09 22:20	2°♏45'35	-1°45'03
minimum elong	16249 Jun 29 22:38	22°♏41'02	2°08'57	minimum elong	16250 Jun 09 13:44	2°♏11'15	1°44'56
max. Earth dist.	16249 Jul 01 13:45	25°♏13'35	1.46005 AU	max. Earth dist.	16250 Jun 14 09:34	9°♏50'01	1.45493 AU
	16249 Jul 04 15:18	0°♏		evening rise	16250 Jun 25 19:41	27°♏31'28	
evening rise	16249 Jul 16 05:56	18°♏03'24			16250 Jun 27 10:36	0°♏	
	16249 Jul 23 22:44	0°♏		greatest brilliancy	16250 Jul 10 12:10	19°♏32'21	-0.6m
greatest brilliancy	16249 Jul 26 18:51	4°♏20'23	-0.8m		16250 Jul 18 03:38	0°♏	
asc. node	16249 Aug 01 21:28	13°♏16'46		asc. node	16250 Jul 19 18:16	1°♏57'21	
evening max el	16249 Aug 08 04:53	20°♏58'17	19°00'55	evening max el	16250 Jul 22 10:25	4°♏52'05	19°53'43
retrograde	16249 Aug 15 00:08	24°♏42'08		retrograde	16250 Jul 29 22:45	9°♏06'07	
evening set	16249 Aug 18 10:56	23°♏33'19		evening set	16250 Aug 02 19:45	7°♏39'34	
inferior conj	16249 Aug 23 22:52	17°♏46'41	2°39'40	inferior conj	16250 Aug 08 03:04	1°♏40'39	2°59'56
minimum elong	16249 Aug 24 00:50	17°♏40'24	2°39'04	minimum elong	16250 Aug 08 04:15	1°♏36'40	2°59'24
min. Earth dist.	16249 Aug 25 13:19	15°♏43'43	0.66728 AU	min. Earth dist.	16250 Aug 09 03:39	0°♏17'43	0.68013 AU
morning rise	16249 Aug 29 13:56	11°♏19'44		morning rise	16250 Aug 09 08:58	30°♏♏	
desc. node	16249 Sep 03 10:56	8°♏49'48		direct	16250 Aug 13 12:17	25°♏14'52	
direct	16249 Sep 04 16:52	8°♏43'44		direct	16250 Aug 19 04:39	22°♏46'17	
morning max el	16249 Sep 17 11:16	16°♏19'09	26°08'58	desc. node	16250 Aug 21 08:18	23°♏04'41	
	16249 Sep 28 20:04	0°♏		morning max el	16250 Aug 30 22:20	29°♏48'01	24°47'25
	16249 Oct 18 04:03	0°♏			16250 Aug 31 03:03	0°♏	
morning set	16249 Oct 23 09:21	9°♏23'21		morning set	16250 Sep 22 16:05	0°♏	
max. Earth dist.	16249 Oct 27 03:32	16°♏31'06	1.35018 AU	max. Earth dist.	16250 Oct 05 14:56	21°♏20'35	
asc. node	16249 Oct 28 22:41	20°♏02'23			16250 Oct 09 03:42	27°♏40'19	1.37242 AU
					16250 Oct 10 10:06	0°♏	
superior conj	16249 Nov 01 15:20	27°♏28'57	0°33'06	asc. node	16250 Oct 15 19:27	10°♏14'23	
minimum elong	16249 Nov 01 13:36	27°♏20'00	0°33'20	superior conj	16250 Oct 16 01:27	10°♏43'42	0°02'16
	16249 Nov 02 20:42	0°♏		minimum elong	16250 Oct 16 01:17	10°♏42'50	0°02'38
evening rise	16249 Nov 09 05:10	13°♏15'58		behind sun begin	16250 Oct 15 18:44	10°♏10'55	
	16249 Nov 17 18:26	0°♏		behind sun end	16250 Oct 16 07:49	11°♏14'49	
evening max el	16249 Nov 27 22:58	14°♏14'03	20°41'33	evening rise	16250 Oct 24 09:27	27°♏23'29	
desc. node	16249 Nov 30 08:34	16°♏22'02			16250 Oct 25 16:39	0°♏	
retrograde	16249 Dec 09 05:32	19°♏49'47		evening max el	16250 Nov 10 08:50	25°♏20'47	19°29'06
evening set	16249 Dec 11 16:37	19°♏34'59		desc. node	16250 Nov 17 05:39	29°♏46'51	
inferior conj	16249 Dec 20 11:39	15°♏42'16	-5°28'17		16250 Nov 18 04:05	0°♏	
minimum elong	16249 Dec 20 03:03	15°♏54'39	5°25'58	retrograde	16250 Nov 20 00:05	0°♏10'09	
min. Earth dist.	16249 Dec 21 15:53	15°♏01'31	0.54530 AU	evening set	16250 Nov 21 22:45	29°♏59'15	
morning rise	16249 Dec 28 13:21	11°♏46'16			16250 Nov 21 21:06	30°♏♏	
direct	16250 Jan 01 23:21	11°♏04'18		inferior conj	16250 Nov 30 13:36	25°♏53'35	-4°04'52
morning max el	16250 Jan 15 07:06	17°♏35'43	23°25'24	minimum elong	16250 Nov 30 04:03	26°♏08'57	4°01'04
asc. node	16250 Jan 24 21:52	29°♏33'33		min. Earth dist.	16250 Dec 03 00:21	24°♏19'08	0.55515 AU
	16250 Jan 25 04:46	0°♏		morning rise	16250 Dec 08 07:22	21°♏30'46	
morning set	16250 Feb 07 18:15	25°♏29'14		direct	16250 Dec 13 16:45	20°♏25'18	
	16250 Feb 09 20:30	0°♏		morning max el	16250 Dec 27 15:37	27°♏27'09	25°13'43
superior conj	16250 Feb 14 15:12	10°♏23'07	1°26'35		16250 Dec 30 03:25	0°♏	
minimum elong	16250 Feb 14 17:06	10°♏33'25	1°26'42	asc. node	16251 Jan 11 19:05	17°♏47'00	
max. Earth dist.	16250 Feb 17 15:52	16°♏51'07	1.33041 AU	morning set	16251 Jan 18 09:04	0°♏	
evening rise	16250 Feb 22 10:45	26°♏39'53			16251 Jan 23 06:04	10°♏09'11	
	16250 Feb 24 03:31	0°♏		superior conj	16251 Jan 29 23:42	24°♏58'44	1°35'26
desc. node	16250 Feb 26 08:59	4°♏15'06		minimum elong	16251 Jan 30 00:42	25°♏04'15	1°35'50
	16250 Mar 13 20:19	0°♏		max. Earth dist.	16251 Jan 31 17:27	28°♏48'32	1.31838 AU
evening max el	16250 Mar 28 18:20	18°♏23'38	27°23'17		16251 Feb 01 06:32	0°♏	
retrograde	16250 Apr 11 10:20	25°♏56'50		evening rise	16251 Feb 06 06:01	10°♏35'12	
evening set	16250 Apr 18 03:08	23°♏27'56		desc. node	16251 Feb 13 05:40	24°♏14'40	
min. Earth dist.	16250 Apr 21 22:53	19°♏58'07	0.64614 AU		16251 Feb 16 10:40	0°♏	
asc. node	16250 Apr 22 19:11	19°♏04'04			16251 Mar 09 20:18	0°♏	

evening max el	16251 Mar 11 05:29	1°♄22'08	27°36'28	retrograde	16252 Mar 06 12:50	20°♄57'51	
retrograde	16251 Mar 25 04:08	8°♄51'45		evening set	16252 Mar 13 05:22	18°♄59'09	
evening set	16251 Mar 31 23:30	6°♄34'23		min. Earth dist.	16252 Mar 17 02:20	16°♄14'13	0.60297 AU
min. Earth dist.	16251 Apr 04 17:43	3°♄30'50	0.62539 AU	inferior conj	16252 Mar 20 07:24	13°♄31'13	-2°00'34
inferior conj	16251 Apr 07 17:05	0°♄38'30	-0°37'48	minimum elong	16252 Mar 20 11:55	13°♄21'39	1°58'52
minimum elong	16251 Apr 07 18:21	0°♄35'26	0°37'35	asc. node	16252 Mar 26 13:45	9°♄10'44	
	16251 Apr 08 09:04	30°♄		morning rise	16252 Mar 27 21:56	8°♄42'23	
asc. node	16251 Apr 09 16:26	28°♄47'19		direct	16252 Mar 29 23:20	8°♄25'23	
morning rise	16251 Apr 14 16:10	25°♄30'39		morning max el	16252 Apr 06 05:04	12°♄02'26	17°59'00
direct	16251 Apr 16 23:31	25°♄05'56			16252 Apr 18 05:30	0°♄	
morning max el	16251 Apr 23 13:49	28°♄26'18	17°46'27	morning set	16252 Apr 21 18:56	6°♄29'08	
	16251 Apr 25 01:11	0°♄		desc. node	16252 Apr 28 03:41	18°♄05'39	
morning set	16251 May 09 14:50	22°♄59'12					
desc. node	16251 May 12 06:53	27°♄38'44		superior conj	16252 May 02 03:14	25°♄09'53	-0°32'25
	16251 May 13 15:25	0°♄		minimum elong	16252 May 02 00:27	24°♄57'40	0°32'31
					16252 May 04 22:12	0°♄	
superior conj	16251 May 21 13:06	13°♄26'03	-1°10'25	max. Earth dist.	16252 May 09 16:02	7°♄59'20	1.42522 AU
minimum elong	16251 May 21 06:36	12°♄59'01	1°10'12	evening rise	16252 May 15 08:06	17°♄10'43	
max. Earth dist.	16251 May 28 02:45	24°♄09'27	1.44294 AU		16252 May 23 15:08	0°♄	
	16251 May 31 19:03	0°♄			16252 Jun 14 15:17	0°♄	
evening rise	16251 Jun 05 07:20	7°♄01'31		evening max el	16252 Jun 17 04:05	2°♄41'22	22°16'58
	16251 Jun 20 17:24	0°♄		asc. node	16252 Jun 22 11:59	6°♄59'49	
evening max el	16251 Jul 05 09:55	18°♄46'45	21°00'18	retrograde	16252 Jun 26 19:23	8°♄19'22	
asc. node	16251 Jul 06 15:05	19°♄56'16		evening set	16252 Jul 01 14:45	6°♄18'23	
retrograde	16251 Jul 13 21:42	23°♄40'17		inferior conj	16252 Jul 06 20:56	29°♄59'03	3°05'17
evening set	16251 Jul 18 05:36	21°♄55'59		minimum elong	16252 Jul 06 20:14	0°♄01'29	3°04'35
inferior conj	16251 Jul 23 11:06	15°♄46'07	3°08'04		16252 Jul 06 20:40	30°♄	
minimum elong	16251 Jul 23 11:21	15°♄45'16	3°07'31	min. Earth dist.	16252 Jul 06 18:46	0°♄06'36	0.69158 AU
min. Earth dist.	16251 Jul 23 22:11	15°♄07'41	0.68832 AU	morning rise	16252 Jul 12 01:33	23°♄45'06	
morning rise	16251 Jul 28 16:49	9°♄25'06		direct	16252 Jul 16 17:56	21°♄47'24	
direct	16251 Aug 02 21:25	7°♄09'57		desc. node	16252 Jul 25 02:55	26°♄20'51	
desc. node	16251 Aug 08 05:38	9°♄02'57		morning max el	16252 Jul 25 23:20	27°♄10'35	21°51'30
morning max el	16251 Aug 13 09:28	13°♄24'56	23°18'40		16252 Jul 28 14:34	0°♄	
	16251 Aug 26 19:20	0°♄			16252 Aug 19 08:12	0°♄	
	16251 Sep 15 12:53	0°♄		morning set	16252 Aug 27 08:24	12°♄26'34	
morning set	16251 Sep 16 23:29	2°♄23'22		max. Earth dist.	16252 Sep 02 05:51	22°♄00'18	1.41972 AU
max. Earth dist.	16251 Sep 21 02:23	9°♄23'08	1.39657 AU		16252 Sep 06 23:53	0°♄	
superior conj	16251 Sep 28 21:22	23°♄19'17	-0°33'01	superior conj	16252 Sep 09 22:44	5°♄06'16	-1°09'58
minimum elong	16251 Sep 28 23:50	23°♄30'44	0°32'22	minimum elong	16252 Sep 10 04:28	5°♄31'20	1°09'08
	16251 Oct 02 10:51	0°♄		asc. node	16252 Sep 18 12:51	20°♄31'33	
asc. node	16251 Oct 02 16:10	0°♄25'15		evening rise	16252 Sep 20 17:11	24°♄31'59	
evening rise	16251 Oct 08 06:39	11°♄11'40			16252 Sep 23 16:45	0°♄	
	16251 Oct 18 16:48	0°♄		evening max el	16252 Oct 06 16:27	19°♄54'55	18°10'10
evening max el	16251 Oct 24 07:58	7°♄16'56	18°38'57	retrograde	16252 Oct 13 20:04	23°♄34'35	
retrograde	16251 Nov 01 12:25	11°♄25'29		evening set	16252 Oct 15 23:43	23°♄15'11	
evening set	16251 Nov 03 10:43	11°♄12'28		desc. node	16252 Oct 21 00:04	20°♄22'55	
desc. node	16251 Nov 04 02:50	11°♄02'06		inferior conj	16252 Oct 23 06:58	18°♄27'31	-0°43'58
inferior conj	16251 Nov 11 11:24	6°♄46'25	-2°21'46	minimum elong	16252 Oct 23 05:24	18°♄30'56	0°42'51
minimum elong	16251 Nov 11 05:41	6°♄57'07	2°18'53	min. Earth dist.	16252 Oct 26 12:41	15°♄38'42	0.59385 AU
min. Earth dist.	16251 Nov 14 14:21	4°♄26'46	0.57231 AU	morning rise	16252 Oct 30 07:45	12°♄53'42	
morning rise	16251 Nov 18 21:27	1°♄47'33		direct	16252 Nov 05 20:29	10°♄56'08	
direct	16251 Nov 25 00:02	0°♄15'39		morning max el	16252 Nov 20 03:06	18°♄39'25	27°41'19
morning max el	16251 Dec 09 05:07	7°♄40'34	26°44'05		16252 Nov 29 17:06	0°♄	
	16251 Dec 25 21:15	0°♄		asc. node	16252 Dec 15 13:18	26°♄01'37	
asc. node	16251 Dec 29 16:14	6°♄39'48			16252 Dec 17 14:14	0°♄	
morning set	16252 Jan 07 16:10	24°♄39'44		morning set	16252 Dec 21 22:45	8°♄56'41	
	16252 Jan 10 02:56	0°♄					
				superior conj	16252 Dec 28 21:57	24°♄14'06	1°34'52
superior conj	16252 Jan 14 10:34	9°♄37'24	1°38'10	minimum elong	16252 Dec 28 20:52	24°♄08'06	1°35'29
minimum elong	16252 Jan 14 10:31	9°♄37'07	1°38'45	max. Earth dist.	16252 Dec 28 07:37	22°♄53'56	1.30998 AU
max. Earth dist.	16252 Jan 14 23:53	10°♄51'53	1.31149 AU		16252 Dec 31 11:45	0°♄	
evening rise	16252 Jan 21 08:12	24°♄45'45		evening rise	16253 Jan 04 15:09	9°♄06'30	
	16252 Jan 23 20:35	0°♄			16253 Jan 15 05:34	0°♄	
desc. node	16252 Jan 31 02:22	13°♄52'07		desc. node	16253 Jan 16 23:07	2°♄59'22	
	16252 Feb 10 03:28	0°♄		evening max el	16253 Feb 02 11:16	25°♄01'36	26°20'53
evening max el	16252 Feb 21 12:04	13°♄38'00	27°16'15		16253 Feb 08 23:52	0°♄	

retrograde	16253 Feb 16 10:52	2°  09'25		desc. node	16254 Jan 03 19:58	21°  25'15	
evening set	16253 Feb 22 17:24	0°  35'00			16254 Jan 10 00:02	0° 	
	16253 Feb 23 20:05	30°  18'		evening max el	16254 Jan 15 01:58	5°  33'48	24°55'31
min. Earth dist.	16253 Feb 27 00:35	27°  57'24	0.58086 AU	retrograde	16254 Jan 28 20:50	12°  27'47	
inferior conj	16253 Mar 02 03:18	25°  40'41	-3°31'27	evening set	16254 Feb 03 08:13	11°  20'58	
minimum elong	16253 Mar 02 11:20	25°  25'55	3°28'31	min. Earth dist.	16254 Feb 08 14:10	8°  34'56	0.56165 AU
morning rise	16253 Mar 10 08:37	21°  13'28		inferior conj	16254 Feb 11 02:10	6°  59'21	-4°57'01
direct	16253 Mar 12 07:38	21°  00'35		minimum elong	16254 Feb 11 11:30	6°  44'27	4°54'23
asc. node	16253 Mar 13 11:06	21°  05'09		morning rise	16254 Feb 19 17:17	2°  53'16	
morning max el	16253 Mar 20 14:14	25°  05'23	18°31'30	direct	16254 Feb 21 20:31	2°  40'34	
	16253 Mar 24 16:52	0° 		asc. node	16254 Feb 28 08:26	4°  47'04	
morning set	16253 Apr 05 12:01	20°  33'19		morning max el	16254 Mar 03 13:09	7°  23'44	19°25'57
	16253 Apr 10 10:08	0° 			16254 Mar 18 01:29	0° 	
				morning set	16254 Mar 20 14:00	4°  59'50	
superior conj	16253 Apr 14 14:08	7°  49'33	0°03'36	superior conj	16254 Mar 28 17:31	21°  13'16	0°34'45
minimum elong	16253 Apr 14 14:22	7°  50'35	0°03'12	minimum elong	16254 Mar 28 19:28	21°  22'46	0°34'14
behind sun begin	16253 Apr 14 07:22	7°  18'13		desc. node	16254 Apr 01 21:06	29°  08'55	
behind sun end	16253 Apr 14 21:21	8°  22'52			16254 Apr 02 08:03	0° 	
desc. node	16253 Apr 15 00:23	8°  36'51		max. Earth dist.	16254 Apr 04 06:48	3°  35'25	1.38065 AU
max. Earth dist.	16253 Apr 22 00:46	21°  08'20	1.40367 AU	evening rise	16254 Apr 07 23:32	10°  11'45	
evening rise	16253 Apr 26 05:18	28°  14'13			16254 Apr 20 01:17	0° 	
	16253 Apr 27 06:53	0° 			16254 May 12 19:48	0° 	
	16253 May 17 03:47	0° 		evening max el	16254 May 13 08:08	0°  30'48	24°58'01
evening max el	16253 May 30 18:43	16°  35'50	23°38'23	retrograde	16254 May 25 06:01	7°  27'17	
asc. node	16253 Jun 09 08:58	22°  50'33		asc. node	16254 May 27 06:03	7°  10'34	
retrograde	16253 Jun 10 14:31	22°  57'02		evening set	16254 May 31 00:22	5°  01'17	
evening set	16253 Jun 15 21:33	20°  41'41			16254 Jun 04 11:12	30°  11'	
min. Earth dist.	16253 Jun 20 15:22	15°  07'18	0.68990 AU	min. Earth dist.	16254 Jun 04 09:59	0°  03'59	0.68339 AU
inferior conj	16253 Jun 21 06:36	14°  15'03	2°52'03	inferior conj	16254 Jun 05 14:15	28°  10'42	2°28'11
minimum elong	16253 Jun 21 05:06	14°  20'13	2°51'07	minimum elong	16254 Jun 05 12:12	28°  17'29	2°27'00
morning rise	16253 Jun 26 12:39	8°  09'32		morning rise	16254 Jun 11 00:19	22°  13'41	
direct	16253 Jun 30 16:56	6°  31'18		direct	16254 Jun 14 17:08	21°  16'03	
morning max el	16253 Jul 08 18:42	11°  06'21	20°32'41	morning max el	16254 Jun 21 21:11	25°  12'40	19°26'54
desc. node	16253 Jul 12 00:08	14°  37'33			16254 Jun 26 02:47	0° 	
	16253 Jul 23 10:21	0° 		desc. node	16254 Jun 28 21:16	3°  37'53	
morning set	16253 Aug 06 20:25	21°  03'75		greatest brilliancy	16254 Jul 04 13:15	11°  41'45	-0.7m
	16253 Aug 12 05:05	0° 			16254 Jul 16 16:00	0° 	
max. Earth dist.	16253 Aug 15 15:42	5°  28'30	1.43915 AU	morning set	16254 Jul 17 00:39	0°  33'12	
				max. Earth dist.	16254 Jul 29 07:01	19°  35'22	1.45287 AU
superior conj	16253 Aug 22 01:33	15°  27'55	-1°43'50	superior conj	16254 Aug 02 05:19	25°  04'01	-2°07'34
minimum elong	16253 Aug 22 09:25	16°  27'55	1°43'16	minimum elong	16254 Aug 02 11:06	26°  01'02	2°07'45
	16253 Aug 30 09:04	0° 			16254 Aug 04 20:27	0° 	
evening rise	16253 Sep 03 12:23	7°  11'47		evening rise	16254 Aug 16 10:56	18°  27'51	
asc. node	16253 Sep 05 09:31	10°  28'55		asc. node	16254 Aug 23 06:14	0°  13'06	
	16253 Sep 17 13:34	0° 			16254 Aug 23 03:01	0° 	
evening max el	16253 Sep 20 05:59	3°  04'02	18°01'09	evening max el	16254 Sep 03 20:56	16°  35'28	18°10'40
retrograde	16253 Sep 26 19:20	6°  28'02		retrograde	16254 Sep 10 05:36	19°  56'47	
evening set	16253 Sep 29 06:36	5°  15'31		evening set	16254 Sep 13 01:32	19°  56'47	
inferior conj	16253 Oct 05 21:36	0°  15'26	0°36'53	inferior conj	16254 Sep 19 03:20	13°  50'00	1°38'17
minimum elong	16253 Oct 05 22:42	0°  14'48	0°36'46	minimum elong	16254 Sep 19 05:32	13°  43'49	1°37'40
	16253 Oct 06 17:59	30°  18'13		min. Earth dist.	16254 Sep 21 15:28	11°  01'44	0.63876 AU
desc. node	16253 Oct 07 21:23	28°  51'07		desc. node	16254 Sep 24 18:44	7°  58'41	
min. Earth dist.	16253 Oct 08 21:02	27°  53'16	0.61680 AU	morning rise	16254 Sep 25 07:38	7°  32'46	
morning rise	16253 Oct 12 12:02	24°  50'52		direct	16254 Oct 01 22:12	5°  00'06	
direct	16253 Oct 19 04:28	22°  31'56		morning max el	16254 Oct 15 17:59	12°  58'41	27°39'29
	16253 Nov 01 20:59	0° 			16254 Oct 29 10:45	0° 	
morning max el	16253 Nov 02 08:21	0°  27'49	27°59'13		16254 Nov 16 09:13	0° 	
	16253 Nov 23 20:16	0° 		asc. node	16254 Nov 19 07:15	5°  40'43	
asc. node	16253 Dec 02 10:18	15°  43'57		morning set	16254 Nov 19 16:53	6°  28'40	
morning set	16253 Dec 05 23:48	22° 47'52		max. Earth dist.	16254 Nov 24 11:14	16° 16'41	1.32371 AU
	16253 Dec 09 08:18	0°					
max. Earth dist.	16253 Dec 11 12:41	4° 34'50	1.31398 AU				
				superior conj	16254 Nov 27 14:37	23° 00'27	1°10'02
superior conj	16253 Dec 13 07:58	8° 34'31	1°25'31	minimum elong	16254 Nov 27 12:16	22° 47'45	1°10'23
minimum elong	16253 Dec 13 06:04	8° 33'01	1°26'02		16254 Nov 30 19:33	0°	
evening rise	16253 Dec 20 00:57	23° 32'36		evening rise	16254 Dec 04 11:46	7° 59'42	
	16253 Dec 23 01:56	0°					

	16254 Dec 15 18:54	0°♊			16255 Nov 22 13:49	0°♊	
desc. node	16254 Dec 21 16:54	8°♊54'24		desc. node	16255 Dec 08 13:54	25°♊07'36	
evening max el	16254 Dec 27 11:36	15°♊33'00	23°13'29	evening max el	16255 Dec 09 00:53	25°♊35'06	21°32'54
retrograde	16255 Jan 09 17:24	22°♊05'58			16255 Dec 14 22:25	0°♊	
evening set	16255 Jan 14 00:45	21°♊25'49		retrograde	16255 Dec 21 03:49	1°♊34'33	
min. Earth dist.	16255 Jan 20 22:06	18°♊12'29	0.54845 AU	evening set	16255 Dec 24 04:57	1°♊13'26	
inferior conj	16255 Jan 22 05:13	17°♊27'42	-5°53'27		16255 Dec 27 19:51	30°♊♊	
minimum elong	16255 Jan 22 09:55	17°♊20'56	5°52'29	inferior conj	16256 Jan 01 20:44	27°♊23'34	-5°55'17
morning rise	16255 Jan 30 20:24	13°♊36'30		minimum elong	16256 Jan 01 16:08	27°♊30'01	5°54'14
direct	16255 Feb 02 14:42	13°♊18'19		min. Earth dist.	16256 Jan 02 03:26	27°♊14'11	0.54377 AU
morning max el	16255 Feb 13 21:55	18°♊46'15	20°43'39	morning rise	16256 Jan 10 03:48	23°♊34'48	
asc. node	16255 Feb 15 05:46	20°♊07'31		direct	16256 Jan 13 23:01	23°♊03'22	
	16255 Feb 22 12:27	0°♊		morning max el	16256 Jan 26 15:52	29°♊13'34	22°22'25
morning set	16255 Mar 04 21:39	19°♊38'24			16256 Jan 27 10:47	0°♊	
	16255 Mar 09 21:12	0°♊		asc. node	16256 Feb 02 03:03	6°♊49'07	
					16256 Feb 15 06:27	0°♊	
superior conj	16255 Mar 12 09:04	5°♊08'10	0°59'53	morning set	16256 Feb 17 08:31	4°♊22'08	
minimum elong	16255 Mar 12 11:36	5°♊21'04	0°59'30				
max. Earth dist.	16255 Mar 17 14:40	15°♊33'15	1.35865 AU	superior conj	16256 Feb 24 09:21	19°♊24'50	1°18'39
desc. node	16255 Mar 19 17:47	19°♊37'25		minimum elong	16256 Feb 24 11:38	19°♊36'59	1°18'34
evening rise	16255 Mar 21 11:53	22°♊53'45		max. Earth dist.	16256 Feb 28 04:54	27°♊22'39	1.33962 AU
	16255 Mar 25 10:38	0°♊			16256 Feb 29 11:51	0°♊	
	16255 Apr 13 18:39	0°♊		evening rise	16256 Mar 03 14:48	6°♊10'40	
evening max el	16255 Apr 25 21:44	14°♊22'18	26°08'39	desc. node	16256 Mar 05 14:28	9°♊58'32	
retrograde	16255 May 08 16:42	21°♊41'56			16256 Mar 17 03:19	0°♊	
asc. node	16255 May 14 03:12	19°♊45'41		evening max el	16256 Apr 07 11:38	28°♊02'44	27°02'37
evening set	16255 May 14 21:25	19°♊10'12			16256 Apr 09 14:31	0°♊	
min. Earth dist.	16255 May 19 00:30	14°♊48'42	0.67224 AU	retrograde	16256 Apr 20 21:28	5°♊33'08	
inferior conj	16255 May 20 17:47	12°♊40'29	1°52'58	evening set	16256 Apr 27 10:42	3°♊01'30	
minimum elong	16255 May 20 15:37	12°♊47'14	1°51'41	asc. node	16256 Apr 30 00:24	0°♊40'47	
morning rise	16255 May 26 10:37	6°♊55'16			16256 Apr 30 15:52	30°♊♊	
direct	16255 May 29 16:48	5°♊55'00		min. Earth dist.	16256 May 01 08:45	29°♊13'44	0.65682 AU
morning max el	16255 Jun 05 06:31	9°♊25'23	18°36'48	inferior conj	16256 May 03 14:51	26°♊39'00	1°05'17
desc. node	16255 Jun 15 18:20	23°♊09'45		minimum elong	16256 May 03 13:15	26°♊43'37	1°04'11
	16255 Jun 20 05:38	0°♊		morning rise	16256 May 09 17:17	21°♊06'24	
morning set	16255 Jun 26 16:58	10°♊05'49		direct	16256 May 12 13:48	20°♊22'16	
	16255 Jul 09 10:54	0°♊		morning max el	16256 May 18 21:09	23°♊39'02	18°03'33
max. Earth dist.	16255 Jul 12 02:02	4°♊05'59	1.45961 AU		16256 May 24 03:07	0°♊	
				desc. node	16256 Jun 01 15:19	13°♊04'49	
superior conj	16255 Jul 12 17:00	5°♊04'21	-2°14'01	morning set	16256 Jun 06 10:45	20°♊52'32	
minimum elong	16255 Jul 12 15:38	4°♊59'01	2°14'37		16256 Jun 12 02:14	0°♊	
evening rise	16255 Jul 28 08:36	29°♊40'24					
	16255 Jul 28 13:33	0°♊		superior conj	16256 Jun 21 03:53	14°♊24'28	-2°00'26
greatest brilliancy	16255 Aug 04 15:16	11°♊12'05	-0.9m	minimum elong	16256 Jun 20 20:14	13°♊54'26	2°00'37
asc. node	16255 Aug 10 02:58	19°♊38'22		max. Earth dist.	16256 Jun 23 22:43	18°♊46'20	1.45883 AU
	16255 Aug 18 01:46	0°♊			16256 Jul 01 04:05	0°♊	
evening max el	16255 Aug 18 10:04	0°♊20'50	18°37'50	evening rise	16256 Jul 07 07:06	9°♊27'16	
retrograde	16255 Aug 24 22:58	3°♊52'31		greatest brilliancy	16256 Jul 19 21:10	28°♊36'21	-0.7m
evening set	16255 Aug 28 04:14	2°♊53'36			16256 Jul 20 19:51	0°♊	
	16255 Aug 31 12:08	30°♊♊		asc. node	16256 Jul 26 23:43	8°♊37'32	
inferior conj	16255 Sep 02 20:16	27°♊14'59	2°21'45	evening max el	16256 Jul 31 18:54	14°♊12'59	19°21'37
minimum elong	16255 Sep 02 22:30	27°♊08'06	2°21'06	retrograde	16256 Aug 07 20:20	18°♊07'52	
min. Earth dist.	16255 Sep 04 18:51	24°♊52'12	0.65795 AU	evening set	16256 Aug 11 11:30	16°♊51'24	
morning rise	16255 Sep 08 15:39	20°♊49'52		inferior conj	16256 Aug 16 21:07	10°♊59'30	2°49'50
desc. node	16255 Sep 11 16:05	18°♊54'34		minimum elong	16256 Aug 16 22:46	10°♊54'02	2°49'17
direct	16255 Sep 14 23:55	18°♊12'29		min. Earth dist.	16256 Aug 18 05:37	9°♊12'57	0.67331 AU
morning max el	16255 Sep 28 05:16	26°♊00'16	26°48'48	morning rise	16256 Aug 22 09:27	4°♊32'48	
	16255 Oct 01 21:55	0°♊		direct	16256 Aug 28 08:10	1°♊59'11	
	16255 Oct 22 23:59	0°♊		desc. node	16256 Aug 28 13:26	1°♊59'22	
morning set	16255 Nov 02 23:05	19°♊31'39		morning max el	16256 Sep 09 16:31	9°♊21'17	25°35'50
asc. node	16255 Nov 06 04:07	25°♊46'54			16256 Sep 26 00:17	0°♊	
max. Earth dist.	16255 Nov 07 00:35	27°♊29'03	1.33904 AU		16256 Oct 14 13:17	0°♊	
	16255 Nov 08 06:29	0°♊		morning set	16256 Oct 15 14:43	1°♊54'45	
superior conj	16255 Nov 11 15:36	6°♊59'15	0°48'22	max. Earth dist.	16256 Oct 19 04:51	8°♊33'35	1.35924 AU
minimum elong	16255 Nov 11 13:24	6°♊47'43	0°48'36	asc. node	16256 Oct 23 00:54	15°♊57'36	
evening rise	16255 Nov 18 21:45	22°♊23'47					
				superior conj	16256 Oct 25 08:03	20°♊31'55	0°20'42

minimum elong	16256 Oct 25 06:51	20° \mathbb{M} 25'50	0°20'57	superior conj	16257 Oct 08 12:34	3° \mathbb{M} 30'32	-0°12'17
	16256 Oct 29 23:25	0° \mathbb{A}		minimum elong	16257 Oct 08 13:24	3° \mathbb{M} 34'29	0°11'49
evening rise	16256 Nov 02 04:46	6° \mathbb{A} 38'47		behind sun begin	16257 Oct 08 08:38	3° \mathbb{M} 11'43	
	16256 Nov 15 00:18	0° \mathbb{B}		behind sun end	16257 Oct 08 18:10	3° \mathbb{M} 57'17	
evening max el	16256 Nov 20 02:10	6° \mathbb{B} 12'24	20°08'02	asc. node	16257 Oct 09 21:39	6° \mathbb{M} 09'19	
desc. node	16256 Nov 24 10:58	9° \mathbb{B} 40'24		evening rise	16257 Oct 17 06:24	20° \mathbb{M} 38'49	
retrograde	16256 Nov 30 15:44	11° \mathbb{B} 28'16			16257 Oct 22 01:57	0° \mathbb{A}	
evening set	16256 Dec 02 19:59	11° \mathbb{B} 15'54		evening max el	16257 Nov 02 17:54	17° \mathbb{A} 39'31	19°05'01
inferior conj	16256 Dec 11 14:46	7° \mathbb{B} 18'45	-4°57'18	desc. node	16257 Nov 11 08:05	22° \mathbb{A} 10'23	
minimum elong	16256 Dec 11 04:53	7° \mathbb{B} 33'34	4°54'06	retrograde	16257 Nov 11 17:32	22° \mathbb{A} 10'53	
min. Earth dist.	16256 Dec 13 09:22	6° \mathbb{B} 14'58	0.54848 AU	evening set	16257 Nov 13 14:51	21° \mathbb{A} 59'42	
morning rise	16256 Dec 19 12:58	3° \mathbb{B} 13'40		inferior conj	16257 Nov 22 00:27	17° \mathbb{A} 45'29	-3°21'47
direct	16256 Dec 24 09:43	2° \mathbb{B} 22'21		minimum elong	16257 Nov 21 16:16	17° \mathbb{A} 59'32	3°18'08
morning max el	16257 Jan 07 00:56	9° \mathbb{B} 06'47	24°12'24	min. Earth dist.	16257 Nov 24 19:42	15° \mathbb{A} 50'28	0.56168 AU
asc. node	16257 Jan 19 00:17	24° \mathbb{B} 33'07		morning rise	16257 Nov 29 15:03	13° \mathbb{A} 07'39	
	16257 Jan 22 05:31	0° \approx		direct	16257 Dec 05 08:17	11° \mathbb{A} 51'27	
morning set	16257 Jan 31 20:30	19° \approx 04'41		morning max el	16257 Dec 19 10:57	19° \mathbb{A} 03'43	25°55'31
	16257 Feb 05 20:36	0° \mathbb{H}			16257 Dec 28 15:53	0° \mathbb{B}	
				asc. node	16258 Jan 05 21:27	13° \mathbb{B} 04'11	
superior conj	16257 Feb 07 15:30	3° \mathbb{H} 54'59	1°31'05		16258 Jan 14 14:20	0° \approx	
minimum elong	16257 Feb 07 17:03	4° \mathbb{H} 03'28	1°31'19	morning set	16258 Jan 16 07:48	3° \approx 41'04	
max. Earth dist.	16257 Feb 10 02:49	9° \mathbb{H} 16'20	1.32476 AU				
evening rise	16257 Feb 15 04:53	19° \mathbb{H} 53'28		superior conj	16258 Jan 23 01:15	18° \approx 32'16	1°37'20
desc. node	16257 Feb 20 11:10	0° \mathbb{Y} 07'21		minimum elong	16258 Jan 23 01:48	18° \approx 35'23	1°37'50
	16257 Feb 20 09:36	0° \mathbb{Y}		max. Earth dist.	16258 Jan 24 06:53	21° \approx 16'44	1.31479 AU
	16257 Mar 11 04:52	0° \mathbb{B}			16258 Jan 28 06:50	0° \mathbb{H}	
evening max el	16257 Mar 21 00:22	11° \mathbb{B} 20'00	27°32'36	evening rise	16258 Jan 30 03:20	3° \mathbb{H} 55'21	
retrograde	16257 Apr 03 19:23	18° \mathbb{B} 51'43		desc. node	16258 Feb 07 07:52	19° \mathbb{H} 58'14	
evening set	16257 Apr 10 14:01	16° \mathbb{B} 26'50			16258 Feb 13 03:15	0° \mathbb{Y}	
min. Earth dist.	16257 Apr 14 08:47	13° \mathbb{B} 09'05	0.63770 AU	evening max el	16258 Mar 03 09:41	24° \mathbb{Y} 00'51	27°32'04
asc. node	16257 Apr 16 21:38	10° \mathbb{B} 32'13			16258 Mar 11 13:31	0° \mathbb{B}	
inferior conj	16257 Apr 17 02:40	10° \mathbb{B} 19'08	0°03'58	retrograde	16258 Mar 17 09:29	1° \mathbb{B} 27'11	
minimum elong	16257 Apr 17 02:33	10° \mathbb{B} 19'25	0°03'32		16258 Mar 22 22:37	30° \mathbb{R} \mathbb{Y}	
transit middle	16257 Apr 17 02:33	10° \mathbb{B} 19'25	0°03'32	evening set	16258 Mar 24 04:37	29° \mathbb{Y} 16'33	
transit begin	16257 Apr 16 23:30	10° \mathbb{B} 27'22		min. Earth dist.	16258 Mar 27 23:10	26° \mathbb{Y} 22'24	0.61597 AU
transit end	16257 Apr 17 05:37	10° \mathbb{B} 11'29		inferior conj	16258 Mar 31 01:53	23° \mathbb{Y} 31'42	-1°11'26
morning rise	16257 Apr 23 17:30	5° \mathbb{B} 01'35		minimum elong	16258 Mar 31 04:24	23° \mathbb{Y} 25'54	1°10'38
direct	16257 Apr 26 05:22	4° \mathbb{B} 30'41		asc. node	16258 Apr 03 18:55	20° \mathbb{Y} 24'13	
morning max el	16257 May 02 14:35	7° \mathbb{B} 46'05	17°47'39	morning rise	16258 Apr 07 07:27	18° \mathbb{Y} 31'57	
	16257 May 17 13:59	0° \mathbb{II}		direct	16258 Apr 09 12:00	18° \mathbb{Y} 10'59	
morning set	16257 May 19 07:17	2° \mathbb{II} 55'31		morning max el	16258 Apr 16 07:41	21° \mathbb{Y} 36'47	17°49'32
desc. node	16257 May 19 12:15	3° \mathbb{II} 16'37			16258 Apr 22 18:14	0° \mathbb{B}	
				morning set	16258 May 02 01:33	15° \mathbb{B} 58'33	
superior conj	16257 Jun 01 05:57	24° \mathbb{II} 29'50	-1°31'12	desc. node	16258 May 06 09:05	23° \mathbb{B} 39'14	
minimum elong	16257 May 31 21:49	23° \mathbb{II} 56'52	1°30'59		16258 May 10 00:01	0° \mathbb{II}	
	16257 Jun 04 16:03	0° \mathbb{B}					
max. Earth dist.	16257 Jun 06 18:20	3° \mathbb{B} 19'50	1.45065 AU	superior conj	16258 May 13 06:49	5° \mathbb{II} 38'06	-0°54'21
evening rise	16257 Jun 16 17:56	18° \mathbb{B} 51'17		minimum elong	16258 May 13 01:53	5° \mathbb{II} 17'08	0°54'14
	16257 Jun 24 02:42	0° \mathbb{Q}		max. Earth dist.	16258 May 20 09:58	17° \mathbb{II} 28'07	1.43596 AU
asc. node	16257 Jul 13 20:32	27° \mathbb{Q} 01'56		evening rise	16258 May 27 09:40	28° \mathbb{II} 34'17	
evening max el	16257 Jul 14 21:52	28° \mathbb{Q} 07'22	20°20'30		16258 May 28 07:44	0° \mathbb{B}	
	16257 Jul 16 23:22	0° \mathbb{M}			16258 Jun 17 19:54	0° \mathbb{Q}	
retrograde	16257 Jul 22 19:22	2° \mathbb{M} 37'10		evening max el	16258 Jun 27 18:47	12° \mathbb{Q} 01'18	21°31'51
evening set	16257 Jul 26 21:00	1° \mathbb{M} 02'46		asc. node	16258 Jun 30 17:24	14° \mathbb{Q} 39'05	
	16257 Jul 28 01:24	30° \mathbb{R} \mathbb{Q}		retrograde	16258 Jul 06 18:05	17° \mathbb{Q} 14'04	
inferior conj	16257 Aug 01 03:12	24° \mathbb{Q} 58'50	3°04'46	evening set	16258 Jul 11 06:47	15° \mathbb{Q} 22'24	
minimum elong	16257 Aug 01 04:00	24° \mathbb{Q} 56'07	3°04'15	inferior conj	16258 Jul 16 12:15	9° \mathbb{Q} 08'02	3°08'11
min. Earth dist.	16257 Aug 01 21:54	23° \mathbb{Q} 54'49	0.68420 AU	minimum elong	16258 Jul 16 12:06	9° \mathbb{Q} 08'35	3°07'35
morning rise	16257 Aug 06 10:40	18° \mathbb{Q} 34'52		min. Earth dist.	16258 Jul 16 17:38	8° \mathbb{Q} 49'17	0.69029 AU
direct	16257 Aug 11 22:03	16° \mathbb{Q} 11'42		morning rise	16258 Jul 21 17:12	2° \mathbb{Q} 49'38	
desc. node	16257 Aug 15 10:45	17° \mathbb{Q} 01'09		direct	16258 Jul 26 16:29	0° \mathbb{Q} 41'43	
morning max el	16257 Aug 23 03:34	22° \mathbb{Q} 54'27	24°10'06	desc. node	16258 Aug 02 08:03	3° \mathbb{Q} 35'47	
	16257 Aug 29 09:41	0° \mathbb{M}		morning max el	16258 Aug 05 15:40	6° \mathbb{Q} 35'20	22°40'55
	16257 Sep 19 08:02	0° \mathbb{B}			16258 Aug 23 19:23	0° \mathbb{M}	
morning set	16257 Sep 27 11:47	13° \mathbb{B} 29'25		morning set	16258 Sep 08 10:25	24° \mathbb{M} 06'58	
max. Earth dist.	16257 Oct 01 03:58	19° \mathbb{B} 55'13	1.38264 AU		16258 Sep 11 23:45	0° \mathbb{B}	
	16257 Oct 06 16:07	0° \mathbb{M}		max. Earth dist.	16258 Sep 13 03:51	1° \mathbb{B} 58'25	1.40668 AU

































































































































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minimum elong	16258 Sep 21 04:55	16° Ω 03'14	0°47'58	minimum elong	16259 Sep 03 00:10	27° Π 38'22	1°24'19
asc. node	16258 Sep 26 18:22	26° Ω 18'23			16259 Sep 04 09:10	0° Ω	
	16258 Sep 28 17:27	0° Π		asc. node	16259 Sep 13 15:04	16° Ω 21'09	
evening rise	16258 Sep 30 23:33	4° Π 15'56		evening rise	16259 Sep 14 04:10	17° Ω 20'05	
	16258 Oct 16 23:51	0° \mathcal{A}			16259 Sep 21 07:53	0° Π	
evening max el	16258 Oct 16 21:29	29° Π 54'07	18°24'14	evening max el	16259 Sep 30 08:40	12° Π 46'37	18°04'03
retrograde	16258 Oct 24 14:17	3° \mathcal{A} 49'01		retrograde	16259 Oct 07 04:52	16° Π 17'39	
evening set	16258 Oct 26 14:15	3° \mathcal{A} 33'55		evening set	16259 Oct 09 11:39	15° Π 54'22	
desc. node	16258 Oct 29 05:15	2° \mathcal{A} 32'05		inferior conj	16259 Oct 16 11:43	10° Π 58'25	-0°07'16
	16258 Nov 02 00:36	30° $\mathcal{R}\Pi$		minimum elong	16259 Oct 16 11:29	10° Π 58'57	0°06'47
inferior conj	16258 Nov 03 07:38	28° Π 58'49	-1°38'40	transit middle	16259 Oct 16 11:29	10° Π 58'57	0°06'47
minimum elong	16258 Nov 03 03:48	29° Π 06'29	1°36'32	transit begin	16259 Oct 16 08:29	11° Π 05'56	
min. Earth dist.	16258 Nov 06 13:17	26° Π 24'06	0.58104 AU	transit end	16259 Oct 16 14:30	10° Π 51'57	
morning rise	16258 Nov 10 13:52	23° Π 44'04		desc. node	16259 Oct 16 02:32	11° Π 19'41	
direct	16258 Nov 16 21:30	22° Π 00'43		min. Earth dist.	16259 Oct 19 15:47	8° Π 02'56	0.60361 AU
morning max el	16258 Dec 01 04:05	29° Π 35'08	27°13'08	morning rise	16259 Oct 23 08:09	5° Π 12'14	
	16258 Dec 01 14:14	0° \mathcal{A}		direct	16259 Oct 29 23:28	3° Π 04'25	
	16258 Dec 22 14:25	0° \mathcal{B}		morning max el	16259 Nov 13 05:12	10° Π 54'11	27°53'47
asc. node	16258 Dec 23 18:34	2° \mathcal{B} 10'18			16259 Nov 28 03:49	0° \mathcal{A}	
morning set	16258 Dec 31 16:40	18° \mathcal{B} 06'42		asc. node	16259 Dec 10 15:38	21° \mathcal{A} 41'20	
	16259 Jan 06 02:28	0° \approx			16259 Dec 14 19:06	0° \mathcal{B}	
				morning set	16259 Dec 15 21:08	2° \mathcal{B} 15'42	
superior conj	16259 Jan 07 12:36	3° \approx 11'09	1°37'31	max. Earth dist.	16259 Dec 21 21:03	15° \mathcal{B} 17'06	1.31092 AU
minimum elong	16259 Jan 07 12:06	3° \approx 08'22	1°38'08				
max. Earth dist.	16259 Jan 07 14:10	3° \approx 20'00	1.31007 AU	superior conj	16259 Dec 22 23:37	17° \mathcal{B} 45'08	1°31'39
evening rise	16259 Jan 14 07:49	18° \approx 11'00		minimum elong	16259 Dec 22 22:09	17° \mathcal{B} 37'01	1°32'15
	16259 Jan 20 02:30	0° \mathcal{H}			16259 Dec 28 11:49	0° \approx	
desc. node	16259 Jan 25 04:37	9° \mathcal{H} 24'15		evening rise	16259 Dec 29 16:11	2° \approx 34'16	
	16259 Feb 08 01:51	0° \mathcal{Y}		desc. node	16260 Jan 12 01:25	28° \approx 15'09	
evening max el	16259 Feb 13 13:19	5° \mathcal{Y} 55'22	26°56'57		16260 Jan 13 03:25	0° \mathcal{H}	
retrograde	16259 Feb 27 14:22	13° \mathcal{Y} 11'17		evening max el	16260 Jan 26 09:02	16° \mathcal{H} 56'38	25°47'51
evening set	16259 Mar 06 03:28	11° \mathcal{Y} 22'12		retrograde	16260 Feb 09 07:32	23° \mathcal{H} 58'45	
min. Earth dist.	16259 Mar 10 03:28	8° \mathcal{Y} 41'57	0.59334 AU	evening set	16260 Feb 15 06:50	22° \mathcal{H} 36'13	
inferior conj	16259 Mar 13 08:52	6° \mathcal{Y} 07'45	-2°38'37	min. Earth dist.	16260 Feb 19 22:03	19° \mathcal{H} 56'56	0.57211 AU
minimum elong	16259 Mar 13 14:56	5° \mathcal{Y} 55'36	2°36'19	inferior conj	16260 Feb 22 20:01	17° \mathcal{H} 56'22	-4°09'34
morning rise	16259 Mar 21 06:00	1° \mathcal{Y} 28'07		minimum elong	16260 Feb 23 05:06	17° \mathcal{H} 40'39	4°06'31
asc. node	16259 Mar 21 16:13	1° \mathcal{Y} 22'32		morning rise	16260 Mar 02 06:23	13° \mathcal{H} 38'02	
direct	16259 Mar 23 05:38	1° \mathcal{Y} 13'26		direct	16260 Mar 04 06:01	13° \mathcal{H} 25'48	
morning max el	16259 Mar 30 20:58	5° \mathcal{Y} 01'10	18°10'15	asc. node	16260 Mar 07 13:34	14° \mathcal{H} 01'52	
morning set	16259 Apr 15 11:48	29° \mathcal{Y} 45'02		morning max el	16260 Mar 13 02:16	17° \mathcal{H} 46'16	18°51'48
	16259 Apr 15 15:00	0° \mathcal{B}			16260 Mar 21 21:40	0° \mathcal{Y}	
desc. node	16259 Apr 23 05:52	14° \mathcal{B} 08'38		morning set	16260 Mar 29 09:09	14° \mathcal{Y} 00'00	
					16260 Apr 06 14:52	0° \mathcal{B}	
superior conj	16259 Apr 25 06:21	17° \mathcal{B} 47'32	-0°16'44				
minimum elong	16259 Apr 25 04:59	17° \mathcal{B} 41'25	0°16'58	superior conj	16260 Apr 07 00:47	0° \mathcal{B} 47'00	0°17'28
	16259 May 02 06:36	0° Π		minimum elong	16260 Apr 07 01:54	0° \mathcal{B} 52'17	0°16'59
max. Earth dist.	16259 May 02 20:45	0° Π 59'38	1.41640 AU	desc. node	16260 Apr 09 02:37	4° \mathcal{B} 40'30	
evening rise	16259 May 07 18:47	9° Π 06'19		max. Earth dist.	16260 Apr 14 03:54	13° \mathcal{B} 49'52	1.39398 AU
	16259 May 21 08:58	0° \mathcal{E}		evening rise	16260 Apr 18 01:12	20° \mathcal{B} 33'51	
evening max el	16259 Jun 10 11:11	25° \mathcal{E} 55'44	22°51'19		16260 Apr 23 18:21	0° Π	
	16259 Jun 15 07:29	0° \mathcal{Q}			16260 May 14 11:15	0° \mathcal{E}	
asc. node	16259 Jun 17 14:20	1° \mathcal{Q} 13'48		evening max el	16260 May 23 01:15	9° \mathcal{E} 51'18	24°12'55
retrograde	16259 Jun 20 14:57	1° \mathcal{Q} 53'03		retrograde	16260 Jun 03 08:35	16° \mathcal{E} 28'14	
	16259 Jun 25 08:22	30° $\mathcal{R}\mathcal{E}$		asc. node	16260 Jun 03 11:22	16° \mathcal{E} 28'10	
evening set	16259 Jun 25 15:08	29° \mathcal{E} 45'50		evening set	16260 Jun 08 20:28	14° \mathcal{E} 08'06	
inferior conj	16259 Jun 30 22:17	23° \mathcal{E} 22'57	3°00'57	min. Earth dist.	16260 Jun 13 10:42	8° \mathcal{E} 49'27	0.68776 AU
minimum elong	16259 Jun 30 21:14	23° \mathcal{E} 26'38	3°00'09	inferior conj	16260 Jun 14 07:23	7° \mathcal{E} 39'30	2°43'16
min. Earth dist.	16259 Jun 30 14:37	23° \mathcal{E} 49'37	0.69149 AU	minimum elong	16260 Jun 14 05:36	7° \mathcal{E} 45'32	2°42'13
morning rise	16259 Jul 06 03:11	17° \mathcal{E} 12'09		morning rise	16260 Jun 19 14:48	1° \mathcal{E} 37'45	
direct	16259 Jul 10 14:22	15° \mathcal{E} 22'30		direct	16260 Jun 23 14:12	0° \mathcal{E} 07'42	
morning max el	16259 Jul 19 07:30	20° \mathcal{E} 24'44	21°16'27	morning max el	16260 Jul 01 05:42	4° \mathcal{E} 24'43	20°02'49
desc. node	16259 Jul 20 05:18	21° \mathcal{E} 20'37		desc. node	16260 Jul 06 02:30	9° \mathcal{E} 57'23	
	16259 Jul 27 09:25	0° \mathcal{Q}			16260 Jul 20 06:31	0° \mathcal{Q}	
	16259 Aug 16 23:40	0° Π		morning set	16260 Jul 28 16:01	12° \mathcal{Q} 43'53	
morning set	16259 Aug 19 09:31	3° Π 45'19		max. Earth dist.	16260 Aug 07 22:02	28° \mathcal{Q} 43'32	1.44584 AU
max. Earth dist.	16259 Aug 26 09:26	14° Π 55'59	1.42860 AU		16260 Aug 08 17:16	0° Π	

























































































































superior conj	16260 Aug 13 10:04	7°♎33'33	-1°55'36	max. Earth dist.	16261 Jul 21 15:51	13°♊04'49	1.45668 AU
minimum elong	16260 Aug 13 17:45	8°♎04'47	1°55'20				
evening rise	16260 Aug 26 15:15	29°♎38'51		superior conj	16261 Jul 24 05:31	17°♊06'39	-2°12'44
	16260 Aug 26 20:12	0°♊		minimum elong	16261 Jul 24 08:41	17°♊19'05	2°13'12
asc. node	16260 Aug 30 11:47	6°♊13'46			16261 Aug 01 08:26	0°♎	
evening max el	16260 Sep 12 23:20	26°♊07'01	18°03'01	evening rise	16261 Aug 08 03:33	10°♎58'46	
retrograde	16260 Sep 19 09:21	29°♊27'57		asc. node	16261 Aug 17 08:30	25°♎50'41	
evening set	16260 Sep 22 00:21	28°♊52'55			16261 Aug 20 01:09	0°♊	
inferior conj	16260 Sep 28 09:18	23°♊38'18	1°05'14	evening max el	16261 Aug 27 13:50	9°♊45'08	18°20'03
minimum elong	16260 Sep 28 11:02	23°♊33'45	1°04'51	retrograde	16261 Sep 02 23:12	13°♊09'22	
min. Earth dist.	16260 Oct 01 04:17	20°♊42'28	0.62644 AU	evening set	16261 Sep 05 23:04	12°♊19'47	
desc. node	16260 Oct 01 23:51	19°♊54'04		inferior conj	16261 Sep 11 20:15	6°♊49'06	1°58'44
morning rise	16260 Oct 04 19:22	17°♊29'46		minimum elong	16261 Sep 11 22:34	6°♊42'19	1°58'05
direct	16260 Oct 11 11:44	15°♊04'06		min. Earth dist.	16261 Sep 14 02:38	4°♊10'22	0.64736 AU
morning max el	16260 Oct 25 12:32	23°♊01'33	27°55'07	morning rise	16261 Sep 17 20:34	0°♊27'32	
	16260 Oct 31 17:50	0°♌			16261 Sep 18 10:55	30°♌♎	
	16260 Nov 20 10:14	0°♌		desc. node	16261 Sep 18 21:12	29°♎41'53	
asc. node	16260 Nov 26 12:37	11°♌30'32		direct	16261 Sep 24 08:46	27°♎52'10	
morning set	16260 Nov 28 19:04	16°♌03'52			16261 Sep 30 22:01	0°♊	
max. Earth dist.	16260 Dec 03 23:50	27°♌00'50	1.31747 AU	morning max el	16261 Oct 07 23:19	5°♊47'29	27°21'15
	16260 Dec 05 08:46	0°♍			16261 Oct 26 12:20	0°♌	
				morning set	16261 Nov 12 07:52	29°♌25'07	
superior conj	16260 Dec 06 08:27	2°♍09'47	1°19'43		16261 Nov 12 14:59	0°♌	
minimum elong	16260 Dec 06 06:18	1°♍58'00	1°20'10	asc. node	16261 Nov 13 09:32	1°♌31'47	
evening rise	16260 Dec 13 02:39	17°♍01'23		max. Earth dist.	16261 Nov 16 18:57	8°♌25'00	1.32964 AU
	16260 Dec 19 09:29	0°♎					
desc. node	16260 Dec 28 22:17	16°♎18'37		superior conj	16261 Nov 20 12:57	16°♌19'15	1°01'36
evening max el	16261 Jan 06 20:55	27°♎11'08	24°13'06	minimum elong	16261 Nov 20 10:35	16°♌06'35	1°01'53
	16261 Jan 10 04:04	0°♏			16261 Nov 26 20:58	0°♍	
retrograde	16261 Jan 20 11:08	3°♏56'34		evening rise	16261 Nov 27 13:19	1°♍27'37	
evening set	16261 Jan 25 11:45	3°♏01'33			16261 Dec 13 06:06	0°♎	
min. Earth dist.	16261 Jan 31 08:36	0°♏06'31	0.55517 AU	desc. node	16261 Dec 15 19:14	3°♎17'53	
	16261 Jan 31 12:58	30°♏♎		evening max el	16261 Dec 19 06:36	7°♎05'34	22°29'21
inferior conj	16261 Feb 02 09:51	28°♎52'01	-5°26'12	retrograde	16262 Jan 01 02:35	13°♎26'24	
minimum elong	16261 Feb 02 18:05	28°♎39'33	5°24'14	evening set	16262 Jan 04 20:51	12°♎55'22	
morning rise	16261 Feb 11 02:18	24°♎53'18		min. Earth dist.	16262 Jan 12 14:37	9°♎24'41	0.54531 AU
direct	16261 Feb 13 10:46	24°♎38'57		inferior conj	16262 Jan 13 06:24	9°♎02'29	-6°01'53
asc. node	16261 Feb 22 10:54	28°♎26'41		minimum elong	16262 Jan 13 07:17	9°♎01'15	6°01'18
morning max el	16261 Feb 23 19:22	29°♎40'34	19°56'11	morning rise	16262 Jan 21 18:48	5°♎14'47	
	16261 Feb 24 03:14	0°♏		direct	16262 Jan 24 22:55	4°♎52'03	
morning set	16261 Mar 13 13:52	28°♏32'28		morning max el	16262 Feb 05 21:33	10°♎38'12	21°23'39
	16261 Mar 14 07:05	0°♐		asc. node	16262 Feb 09 08:12	14°♎23'38	
					16262 Feb 19 08:08	0°♏	
superior conj	16261 Mar 21 09:46	14°♐24'46	0°46'11	morning set	16262 Feb 25 23:08	13°♏14'07	
minimum elong	16261 Mar 21 12:05	14°♐36'17	0°45'41				
desc. node	16261 Mar 26 23:19	25°♐11'17		superior conj	16262 Mar 05 05:24	28°♏30'14	1°08'38
max. Earth dist.	16261 Mar 27 10:30	26°♐03'42	1.37108 AU	minimum elong	16262 Mar 05 07:55	28°♏43'14	1°08'21
	16261 Mar 29 13:40	0°♑			16262 Mar 05 22:45	0°♐	
evening rise	16261 Mar 31 03:30	2°♑50'56		max. Earth dist.	16262 Mar 09 20:44	7°♐56'06	1.35002 AU
	16261 Apr 16 20:07	0°♒		evening rise	16262 Mar 13 22:25	15°♐48'42	
evening max el	16261 May 05 14:45	23°♒45'46	25°29'37	desc. node	16262 Mar 13 20:00	15°♐37'17	
	16261 May 14 00:31	0°♓			16262 Mar 21 20:44	0°♑	
retrograde	16261 May 17 21:59	0°♓52'54			16262 Apr 11 08:13	0°♒	
asc. node	16261 May 21 08:28	0°♓04'40		evening max el	16262 Apr 18 04:22	7°♒33'31	26°34'03
	16261 May 21 12:16	30°♒♒		retrograde	16262 May 01 06:17	14°♒59'28	
evening set	16261 May 23 21:03	28°♒23'44		evening set	16262 May 07 15:04	12°♒26'38	
min. Earth dist.	16261 May 28 03:43	23°♒42'05	0.67925 AU	asc. node	16262 May 08 05:36	11°♒55'50	
inferior conj	16261 May 29 13:32	21°♒53'08	2°14'42	min. Earth dist.	16262 May 11 15:41	8°♒20'11	0.66617 AU
minimum elong	16261 May 29 11:22	22°♒00'08	2°13'27	inferior conj	16262 May 13 14:36	5°♒59'11	1°34'22
morning rise	16261 Jun 04 02:09	16°♒01'42		minimum elong	16262 May 13 12:35	6°♒05'18	1°33'07
direct	16261 Jun 07 14:26	14°♒51'00		morning rise	16262 May 19 11:12	0°♒19'24	
morning max el	16261 Jun 14 11:15	18°♒34'25	19°03'36		16262 May 20 02:20	30°♒♑	
desc. node	16261 Jun 22 23:37	29°♒12'15		direct	16262 May 22 13:08	29°♑26'25	
	16261 Jun 23 12:58	0°♓			16262 May 25 01:12	0°♒	
greatest brilliancy	16261 Jun 27 11:25	5°♓47'28	-0.7m	morning max el	16262 May 28 23:12	2°♒49'24	18°20'39
morning set	16261 Jul 07 23:07	21°♓49'11		desc. node	16262 Jun 09 20:40	18°♒55'17	
	16261 Jul 13 06:06	0°♊			16262 Jun 16 21:18	0°♓	

morning set	16262 Jun 18 01:28	1°☿51'45		superior conj	16263 Jun 13 06:36	5°☿55'36	-1°49'30
				minimum elong	16263 Jun 12 22:03	5°☿21'39	1°49'28
superior conj	16262 Jul 03 14:48	26°☿19'44	-2°10'36	max. Earth dist.	16263 Jun 17 07:50	12°☿19'15	1.45619 AU
minimum elong	16262 Jul 03 10:12	26°☿01'50	2°11'05		16263 Jun 28 17:48	0°☿	
max. Earth dist.	16262 Jul 04 11:58	27°☿42'15	1.46021 AU	evening rise	16263 Jun 29 06:16	0°☿47'43	
	16262 Jul 05 23:20	0°☿		greatest brilliancy	16263 Jul 13 13:06	22°☿16'29	-0.6m
evening rise	16262 Jul 19 14:45	21°☿16'09			16263 Jul 19 01:17	0°☿	
	16262 Jul 25 04:58	0°☿		asc. node	16263 Jul 22 01:59	3°☿52'06	
greatest brilliancy	16262 Jul 29 09:19	6°☿27'40	-0.8m	evening max el	16263 Jul 25 07:45	7°☿27'43	19°44'56
asc. node	16262 Aug 04 05:14	15°☿06'06		retrograde	16263 Aug 01 17:03	11°☿36'22	
evening max el	16262 Aug 11 01:19	23°☿33'55	18°54'22	evening set	16263 Aug 05 12:29	10°☿12'30	
retrograde	16262 Aug 17 18:43	27°☿14'18		inferior conj	16263 Aug 10 20:20	4°☿15'28	2°57'39
evening set	16262 Aug 21 04:01	26°☿08'10		minimum elong	16263 Aug 10 21:39	4°☿11'03	2°57'07
inferior conj	16262 Aug 26 16:56	20°☿23'34	2°35'23	min. Earth dist.	16263 Aug 11 23:00	2°☿46'07	0.67853 AU
minimum elong	16262 Aug 26 18:59	20°☿17'04	2°34'46		16263 Aug 14 03:41	30°☿☿	
min. Earth dist.	16262 Aug 28 09:31	18°☿15'05	0.66502 AU	morning rise	16263 Aug 16 06:18	27°☿49'19	
morning rise	16262 Sep 01 09:03	13°☿56'48		direct	16263 Aug 22 00:24	25°☿19'07	
desc. node	16262 Sep 05 18:33	11°☿32'31		desc. node	16263 Aug 23 15:53	25°☿29'52	
direct	16262 Sep 07 13:25	11°☿20'07			16263 Aug 31 08:08	0°☿	
morning max el	16262 Sep 20 10:57	18°☿59'31	26°19'49	morning max el	16263 Sep 02 21:59	2°☿26'34	25°00'14
	16262 Sep 29 19:44	0°☿			16263 Sep 23 22:01	0°☿	
	16262 Oct 19 13:03	0°☿		morning set	16263 Oct 08 16:40	24°☿16'51	
morning set	16262 Oct 26 08:21	12°☿12'19			16263 Oct 11 20:46	0°☿	
max. Earth dist.	16262 Oct 30 04:09	19°☿31'24	1.34712 AU	max. Earth dist.	16263 Oct 12 05:07	0°☿38'25	1.36892 AU
asc. node	16262 Oct 31 06:22	21°☿40'27		asc. node	16263 Oct 18 03:09	11°☿52'34	
superior conj	16262 Nov 04 10:38	0°☿07'31	0°37'19	superior conj	16263 Oct 18 22:31	13°☿27'31	0°07'17
minimum elong	16262 Nov 04 08:44	29°☿57'44	0°37'32	minimum elong	16263 Oct 18 22:02	13°☿25'10	0°07'37
	16262 Nov 04 09:11	0°☿		behind sun begin	16263 Oct 18 16:15	12°☿56'44	
evening rise	16262 Nov 11 22:17	15°☿48'12		behind sun end	16263 Oct 19 03:50	13°☿53'39	
	16262 Nov 19 01:07	0°☿		evening rise	16263 Oct 27 03:22	29°☿58'04	
evening max el	16262 Dec 01 00:08	17°☿19'04	20°54'17		16263 Oct 27 03:45	0°☿	
desc. node	16262 Dec 02 16:15	18°☿51'18		evening max el	16263 Nov 13 07:50	28°☿18'25	19°38'30
retrograde	16262 Dec 12 12:23	23°☿01'17			16263 Nov 15 04:33	0°☿	
evening set	16262 Dec 15 02:34	22°☿45'13		desc. node	16263 Nov 19 13:20	2°☿34'53	
inferior conj	16262 Dec 23 21:07	18°☿53'43	-5°37'12	retrograde	16263 Nov 23 04:41	3°☿14'22	
minimum elong	16262 Dec 23 13:20	19°☿04'49	5°35'15	evening set	16263 Nov 25 04:26	3°☿03'16	
min. Earth dist.	16262 Dec 24 20:01	18°☿21'00	0.54456 AU		16263 Dec 02 06:13	30°☿☿	
morning rise	16263 Jan 01 00:07	15°☿00'07		inferior conj	16263 Dec 03 20:41	29°☿00'12	-4°19'29
direct	16263 Jan 05 06:17	14°☿21'04		minimum elong	16263 Dec 03 10:51	29°☿15'42	4°15'45
morning max el	16263 Jan 18 10:45	20°☿47'35	23°08'55	min. Earth dist.	16263 Dec 06 03:46	27°☿33'28	0.55317 AU
	16263 Jan 26 03:45	0°☿		morning rise	16263 Dec 11 15:33	24°☿42'25	
asc. node	16263 Jan 27 05:28	1°☿33'51		direct	16263 Dec 16 21:58	23°☿40'40	
morning set	16263 Feb 10 10:39	27°☿57'44			16263 Dec 30 02:40	0°☿	
	16263 Feb 11 09:29	0°☿		morning max el	16263 Dec 30 19:02	0°☿38'12	24°58'14
				asc. node	16264 Jan 14 02:41	19°☿40'06	
superior conj	16263 Feb 17 08:28	12°☿53'33	1°24'41		16264 Jan 19 19:12	0°☿	
minimum elong	16263 Feb 17 10:29	13°☿04'25	1°24'45	morning set	16264 Jan 25 22:33	12°☿38'22	
max. Earth dist.	16263 Feb 20 13:53	19°☿44'37	1.33262 AU				
evening rise	16263 Feb 25 06:25	29°☿17'23		superior conj	16264 Feb 01 16:25	27°☿27'49	1°34'28
	16263 Feb 25 15:04	0°☿		minimum elong	16264 Feb 01 17:34	27°☿34'10	1°34'50
desc. node	16263 Feb 28 16:40	5°☿53'43			16264 Feb 02 20:06	0°☿	
	16263 Mar 14 23:38	0°☿		max. Earth dist.	16264 Feb 03 14:35	1°☿41'03	1.31989 AU
evening max el	16263 Mar 31 17:45	21°☿04'51	27°18'47	evening rise	16264 Feb 09 00:25	13°☿09'38	
retrograde	16263 Apr 14 08:29	28°☿37'53		desc. node	16264 Feb 15 13:22	25°☿55'58	
evening set	16263 Apr 21 00:24	26°☿08'06			16264 Feb 17 19:07	0°☿	
min. Earth dist.	16263 Apr 24 20:40	22°☿33'42	0.64900 AU		16264 Mar 09 06:21	0°☿	
asc. node	16263 Apr 25 02:48	22°☿17'15		evening max el	16264 Mar 13 05:28	4°☿08'38	27°36'31
inferior conj	16263 Apr 27 08:03	19°☿50'36	0°41'00	retrograde	16264 Mar 27 03:19	11°☿38'47	
minimum elong	16263 Apr 27 06:57	19°☿53'39	0°40'07	evening set	16264 Apr 02 22:37	9°☿19'23	
morning rise	16263 May 03 15:28	14°☿24'13		min. Earth dist.	16264 Apr 06 16:55	6°☿12'17	0.62865 AU
direct	16263 May 06 08:02	13°☿46'16		inferior conj	16264 Apr 09 14:56	3°☿20'09	-0°26'21
morning max el	16263 May 12 15:21	17°☿01'20	17°54'41	minimum elong	16264 Apr 09 15:48	3°☿18'01	0°26'20
	16263 May 22 05:26	0°☿		asc. node	16264 Apr 11 00:03	1°☿59'54	
desc. node	16263 May 27 17:36	8°☿58'07			16264 Apr 13 07:32	30°☿☿	
morning set	16263 May 30 06:56	13°☿11'43		morning rise	16264 Apr 16 11:47	28°☿09'34	
	16263 Jun 09 13:36	0°☿		direct	16264 Apr 18 20:16	27°☿43'21	

	16264 Apr 24 05:19	0°♄		morning set	16265 Apr 24 15:10	9°♄06'07	
morning max el	16264 Apr 25 08:57	1°♄02'05	17°46'10	desc. node	16265 Apr 30 11:19	19°♄41'16	
morning set	16264 May 11 13:24	25°♄42'12					
desc. node	16264 May 13 14:29	29°♄14'58		superior conj	16265 May 05 04:38	28°♄01'21	-0°38'10
	16264 May 14 00:54	0°♄		minimum elong	16265 May 05 01:18	27°♄46'51	0°38'11
					16265 May 06 08:05	0°♄	
superior conj	16264 May 23 17:49	16°♄26'07	-1°16'02	max. Earth dist.	16265 May 12 15:56	10°♄39'07	1.42813 AU
minimum elong	16264 May 23 10:49	15°♄57'12	1°15'47	evening rise	16265 May 18 15:16	20°♄16'47	
max. Earth dist.	16264 May 30 01:46	26°♄43'00	1.44513 AU		16265 May 24 21:51	0°♄	
	16264 Jun 01 03:21	0°♄			16265 Jun 15 08:49	0°♄	
evening rise	16264 Jun 07 17:06	10°♄14'38		evening max el	16265 Jun 20 03:02	5°♄17'20	22°05'03
	16264 Jun 20 21:49	0°♄		asc. node	16265 Jun 24 19:43	9°♄11'32	
evening max el	16264 Jul 07 08:10	21°♄22'36	20°49'39	retrograde	16265 Jun 29 14:04	10°♄48'46	
asc. node	16264 Jul 07 22:48	21°♄58'16		evening set	16265 Jul 04 07:43	8°♄50'00	
retrograde	16264 Jul 15 16:02	26°♄09'35		inferior conj	16265 Jul 09 13:38	2°♄31'53	3°06'23
evening set	16264 Jul 19 22:19	24°♄27'48		minimum elong	16265 Jul 09 13:05	2°♄33'50	3°05'43
inferior conj	16264 Jul 25 03:56	18°♄19'30	3°07'33	min. Earth dist.	16265 Jul 09 13:24	2°♄32'44	0.69140 AU
minimum elong	16264 Jul 25 04:19	18°♄18'09	3°07'01		16265 Jul 11 10:00	30°♄	
min. Earth dist.	16264 Jul 25 16:58	17°♄34'24	0.68741 AU	morning rise	16265 Jul 14 18:17	26°♄16'49	
morning rise	16264 Jul 30 10:02	11°♄57'44		direct	16265 Jul 19 12:26	24°♄16'28	
direct	16264 Aug 04 16:26	9°♄40'23		desc. node	16265 Jul 27 10:27	28°♄21'38	
desc. node	16264 Aug 09 13:11	11°♄14'11		morning max el	16265 Jul 28 22:23	29°♄47'25	22°04'08
morning max el	16264 Aug 15 09:00	16°♄02'34	23°32'02		16265 Jul 29 03:23	0°♄	
	16264 Aug 26 21:15	0°♄			16265 Aug 20 14:28	0°♄	
	16264 Sep 15 21:19	0°♄		morning set	16265 Aug 30 17:04	15°♄40'39	
morning set	16264 Sep 19 04:34	5°♄28'14		max. Earth dist.	16265 Sep 05 06:30	24°♄45'01	1.41648 AU
max. Earth dist.	16264 Sep 23 03:52	12°♄15'49	1.39300 AU		16265 Sep 08 09:21	0°♄	
superior conj	16264 Sep 30 20:49	26°♄09'43	-0°27'28	superior conj	16265 Sep 13 01:15	8°♄04'34	-1°04'25
minimum elong	16264 Sep 30 22:50	26°♄19'07	0°26'52	minimum elong	16265 Sep 13 06:30	8°♄27'43	1°03'36
	16264 Oct 02 21:48	0°♄		asc. node	16265 Sep 20 20:37	22°♄11'30	
asc. node	16264 Oct 03 23:53	2°♄03'59		evening rise	16265 Sep 23 14:16	27°♄15'16	
evening rise	16264 Oct 10 01:50	13°♄49'50			16265 Sep 25 01:52	0°♄	
	16264 Oct 18 19:31	0°♄		evening max el	16265 Oct 09 12:31	22°♄39'34	18°13'06
evening max el	16264 Oct 26 05:11	10°♄07'21	18°44'59	retrograde	16265 Oct 16 19:16	26°♄22'54	
retrograde	16264 Nov 03 14:13	14°♄21'26		evening set	16265 Oct 18 21:50	26°♄04'46	
desc. node	16264 Nov 05 10:30	14°♄09'50		desc. node	16265 Oct 23 07:42	23°♄45'17	
evening set	16264 Nov 05 12:06	14°♄09'00		inferior conj	16265 Oct 26 07:41	21°♄20'10	-0°57'49
inferior conj	16264 Nov 13 15:14	9°♄45'57	-2°37'25	minimum elong	16265 Oct 26 05:34	21°♄24'41	0°56'27
minimum elong	16264 Nov 13 08:50	9°♄57'39	2°34'18	min. Earth dist.	16265 Oct 29 13:40	18°♄34'24	0.59050 AU
min. Earth dist.	16264 Nov 16 16:36	7°♄32'20	0.56943 AU	morning rise	16265 Nov 02 09:54	15°♄50'58	
morning rise	16264 Nov 21 02:31	4°♄52'40		direct	16265 Nov 08 21:28	13°♄57'00	
direct	16264 Nov 27 02:57	3°♄24'55		morning max el	16265 Nov 23 04:19	21°♄38'11	27°35'15
morning max el	16264 Dec 11 07:29	10°♄46'23	26°32'29		16265 Nov 30 12:34	0°♄	
	16264 Dec 26 01:34	0°♄		asc. node	16265 Dec 17 20:57	27°♄45'40	
asc. node	16264 Dec 30 23:50	8°♄27'37			16265 Dec 19 00:53	0°♄	
morning set	16265 Jan 09 09:02	27°♄10'40		morning set	16265 Dec 24 16:19	11°♄30'09	
	16265 Jan 10 16:16	0°♄		max. Earth dist.	16265 Dec 31 04:23	25°♄46'56	1.30982 AU
superior conj	16265 Jan 16 03:04	12°♄06'17	1°38'08	superior conj	16265 Dec 31 14:31	26°♄34'43	1°35'46
minimum elong	16265 Jan 16 03:11	12°♄06'54	1°38'42	minimum elong	16265 Dec 31 13:36	26°♄38'32	1°36'23
max. Earth dist.	16265 Jan 16 20:36	13°♄44'12	1.31220 AU		16266 Jan 02 01:33	0°♄	
evening rise	16265 Jan 23 01:44	27°♄18'12		evening rise	16266 Jan 07 08:07	11°♄37'46	
	16265 Jan 24 08:39	0°♄			16266 Jan 16 13:07	0°♄	
desc. node	16265 Feb 01 10:07	15°♄37'25		desc. node	16266 Jan 19 06:53	4°♄50'00	
	16265 Feb 10 04:06	0°♄		evening max el	16266 Feb 05 13:15	28°♄03'08	26°31'16
evening max el	16265 Feb 23 12:54	16°♄31'35	27°21'30		16266 Feb 07 17:44	0°♄	
retrograde	16265 Mar 09 13:23	23°♄53'00		retrograde	16266 Feb 19 13:18	5°♄13'19	
evening set	16265 Mar 16 06:53	21°♄51'02		evening set	16266 Feb 25 21:51	3°♄34'52	
min. Earth dist.	16265 Mar 20 03:02	19°♄04'04	0.60634 AU	min. Earth dist.	16266 Mar 02 02:44	0°♄57'09	0.58398 AU
inferior conj	16265 Mar 23 07:43	16°♄18'37	-1°47'17		16266 Mar 03 09:44	30°♄	
minimum elong	16265 Mar 23 11:41	16°♄10'01	1°45'50	inferior conj	16266 Mar 05 06:35	28°♄35'18	-3°17'37
asc. node	16265 Mar 28 21:21	12°♄13'26		minimum elong	16266 Mar 05 14:09	28°♄21'06	3°14'49
morning rise	16265 Mar 30 19:54	11°♄26'52		morning rise	16266 Mar 13 09:55	24°♄05'01	
direct	16265 Apr 01 22:05	11°♄08'54		direct	16266 Mar 15 08:55	23°♄51'47	
morning max el	16265 Apr 09 00:50	14°♄42'33	17°55'57	asc. node	16266 Mar 15 18:42	23°♄52'23	
	16265 Apr 19 13:45	0°♄		morning max el	16266 Mar 23 11:15	27°♄51'45	18°25'23

	16266 Mar 25 10:26	0°♿		asc. node	16267 Mar 02 16:02	7°♿18'16	
morning set	16266 Apr 08 06:39	23°♿06'19		morning max el	16267 Mar 06 12:01	10°♿17'58	19°16'21
	16266 Apr 11 21:19	0°♿			16267 Mar 19 11:31	0°♿	
desc. node	16266 Apr 17 08:05	10°♿12'17		morning set	16267 Mar 23 07:32	7°♿30'17	
superior conj	16266 Apr 17 12:47	10°♿33'56	-0°01'39	superior conj	16267 Mar 31 14:00	23°♿51'57	0°30'23
minimum elong	16266 Apr 17 12:38	10°♿33'13	0°02'01	minimum elong	16267 Mar 31 15:46	24°♿00'29	0°29'51
behind sun begin	16266 Apr 17 05:27	10°♿00'13			16267 Apr 03 19:16	0°♿	
behind sun end	16266 Apr 17 19:49	11°♿06'08		desc. node	16267 Apr 04 04:50	0°♿44'49	
max. Earth dist.	16266 Apr 25 01:09	23°♿54'10	1.40699 AU	max. Earth dist.	16267 Apr 07 07:10	6°♿26'21	1.38409 AU
	16266 Apr 28 15:52	0°♿		evening rise	16267 Apr 11 00:34	13°♿02'25	
evening rise	16266 Apr 29 09:18	1°♿12'11			16267 Apr 21 08:02	0°♿	
	16266 May 18 06:38	0°♿			16267 May 13 08:20	0°♿	
evening max el	16266 Jun 02 18:00	19°♿11'42	23°26'10	evening max el	16267 May 16 07:29	3°♿06'46	24°46'34
asc. node	16266 Jun 11 16:41	25°♿14'38		retrograde	16267 May 28 01:51	9°♿58'43	
retrograde	16266 Jun 13 09:45	25°♿27'10		asc. node	16267 May 29 13:43	9°♿49'21	
evening set	16266 Jun 18 15:00	23°♿13'46		evening set	16267 Jun 02 18:31	7°♿34'08	
inferior conj	16266 Jun 23 23:29	16°♿47'55	2°54'43	min. Earth dist.	16267 Jun 07 05:17	2°♿31'13	0.68467 AU
minimum elong	16266 Jun 23 22:06	16°♿52'43	2°53'51	inferior conj	16267 Jun 08 07:34	1°♿03'51	2°32'31
min. Earth dist.	16266 Jun 23 10:11	17°♿33'44	0.69045 AU	minimum elong	16267 Jun 08 05:34	1°♿10'29	2°31'23
morning rise	16266 Jun 29 05:09	10°♿40'59			16267 Jun 09 02:53	30°♿♿	
direct	16266 Jul 03 11:10	8°♿59'51		morning rise	16267 Jun 13 16:51	25°♿06'12	
morning max el	16266 Jul 11 16:50	13°♿41'50	20°43'39	direct	16267 Jun 17 11:20	23°♿44'38	
desc. node	16266 Jul 14 07:41	16°♿30'33		morning max el	16267 Jun 24 18:09	27°♿46'18	19°35'40
	16266 Jul 24 14:09	0°♿			16267 Jun 26 20:31	0°♿	
morning set	16266 Aug 10 07:41	24°♿58'28		desc. node	16267 Jul 01 04:52	5°♿24'59	
	16266 Aug 13 13:00	0°♿		greatest brilliancy	16267 Jul 07 13:28	14°♿22'56	-0.6m
max. Earth dist.	16266 Aug 18 15:09	8°♿05'22	1.43658 AU		16267 Jul 17 23:02	0°♿	
				morning set	16267 Jul 20 11:44	3°♿52'16	
superior conj	16266 Aug 25 07:35	19°♿02'34	-1°39'10	max. Earth dist.	16267 Aug 01 05:33	22°♿06'34	1.45125 AU
minimum elong	16266 Aug 25 15:20	19°♿34'55	1°38'32				
	16266 Aug 31 18:20	0°♿		superior conj	16267 Aug 05 14:32	29°♿02'55	-2°04'58
evening rise	16266 Sep 06 12:06	10°♿02'05		minimum elong	16267 Aug 05 21:00	29°♿28'48	2°05'01
asc. node	16266 Sep 07 17:19	12°♿10'43			16267 Aug 06 04:48	0°♿	
	16266 Sep 18 10:11	0°♿		evening rise	16267 Aug 19 13:59	21°♿56'37	
evening max el	16266 Sep 23 01:35	5°♿45'03	18°01'18		16267 Aug 24 09:43	0°♿	
retrograde	16266 Sep 29 16:27	9°♿10'31		asc. node	16267 Aug 25 14:00	1°♿57'10	
evening set	16266 Oct 02 02:29	8°♿42'47		evening max el	16267 Sep 06 16:33	19°♿13'55	18°08'11
inferior conj	16266 Oct 08 19:46	3°♿38'36	0°25'49	retrograde	16267 Sep 13 01:17	22°♿34'40	
minimum elong	16266 Oct 08 20:33	3°♿36'40	0°25'51	evening set	16267 Sep 15 19:55	21°♿53'53	
desc. node	16266 Oct 10 04:58	2°♿16'24		inferior conj	16267 Sep 21 23:28	16°♿32'28	1°30'06
min. Earth dist.	16266 Oct 11 20:37	0°♿40'23	0.61339 AU	minimum elong	16267 Sep 22 01:35	16°♿26'37	1°29'33
	16266 Oct 12 14:09	30°♿♿		min. Earth dist.	16267 Sep 24 13:30	13°♿41'41	0.63563 AU
morning rise	16266 Oct 15 11:44	27°♿41'21		desc. node	16267 Sep 27 02:17	11°♿12'35	
direct	16266 Oct 22 04:03	25°♿25'00		morning rise	16267 Sep 28 05:14	10°♿17'17	
	16266 Nov 01 15:32	0°♿		direct	16267 Oct 04 20:30	7°♿46'03	
morning max el	16266 Nov 05 08:40	3°♿19'55	27°59'02	morning max el	16267 Oct 18 17:40	15°♿44'46	27°44'35
	16266 Nov 25 02:43	0°♿			16267 Oct 30 11:28	0°♿	
asc. node	16266 Dec 04 18:01	17°♿25'54			16267 Nov 17 19:36	0°♿	
morning set	16266 Dec 08 18:22	25°♿32'02		asc. node	16267 Nov 21 14:57	7°♿21'03	
	16266 Dec 10 21:16	0°♿		morning set	16267 Nov 22 12:45	9°♿09'51	
max. Earth dist.	16266 Dec 14 10:03	7°♿40'16	1.31298 AU	max. Earth dist.	16267 Nov 27 09:42	19°♿15'05	1.32190 AU
superior conj	16266 Dec 16 00:54	11°♿15'12	1°27'21	superior conj	16267 Nov 30 08:10	25°♿34'32	1°12'49
minimum elong	16266 Dec 15 23:07	11°♿05'16	1°27'53	minimum elong	16267 Nov 30 05:51	25°♿21'59	1°13'10
evening rise	16266 Dec 22 17:38	26°♿03'49			16267 Dec 02 08:44	0°♿	
	16266 Dec 24 13:46	0°♿		evening rise	16267 Dec 07 04:23	10°♿31'14	
desc. node	16267 Jan 06 03:42	23°♿23'15			16267 Dec 16 23:49	0°♿	
	16267 Jan 10 16:15	0°♿		desc. node	16267 Dec 24 00:36	11°♿02'09	
evening max el	16267 Jan 18 05:12	8°♿42'52	25°09'45	evening max el	16267 Dec 30 15:12	18°♿45'24	23°29'03
retrograde	16267 Feb 01 01:23	15°♿39'21		retrograde	16268 Jan 12 23:37	25°♿21'45	
evening set	16267 Feb 06 16:03	14°♿28'29		evening set	16268 Jan 17 11:35	24°♿38'00	
min. Earth dist.	16267 Feb 11 17:39	11°♿44'42	0.56417 AU	min. Earth dist.	16268 Jan 24 02:15	21°♿30'00	0.54996 AU
inferior conj	16267 Feb 14 08:41	10°♿02'15	-4°45'19	inferior conj	16268 Jan 25 14:20	20°♿37'30	-5°47'53
minimum elong	16267 Feb 14 18:08	9°♿46'53	4°42'30	minimum elong	16268 Jan 25 20:10	20°♿29'01	5°46'43
morning rise	16267 Feb 22 22:52	5°♿53'09		morning rise	16268 Feb 03 06:10	16°♿44'34	
direct	16267 Feb 25 00:45	5°♿40'47		direct	16268 Feb 05 21:33	16°♿27'36	

morning max el	16268 Feb 16 22:58	21°  48'51	20°30'34	morning rise	16269 Jan 12 15:11	26°  48'04	
asc. node	16268 Feb 17 13:22	22°  24'36		direct	16269 Jan 16 06:29	26°  19'06	
	16268 Feb 23 13:39	0°  ✠			16269 Jan 25 23:55	0°  ≈	
morning set	16268 Mar 06 14:30	22°  ✠07'32		morning max el	16269 Jan 28 18:49	2°  ≈23'05	22°06'41
	16268 Mar 10 09:47	0°  Υ		asc. node	16269 Feb 03 10:39	8°  ≈54'54	
					16269 Feb 15 17:39	0°  ✠	
superior conj	16268 Mar 14 03:56	7°  Υ42'38	0°56'28	morning set	16269 Feb 19 00:58	6°  ✠50'47	
minimum elong	16268 Mar 14 06:26	7°  Υ55'18	0°56'03				
max. Earth dist.	16268 Mar 19 14:30	18°  Υ27'36	1.36182 AU	superior conj	16269 Feb 26 03:03	21°  ✠56'25	1°16'12
desc. node	16268 Mar 21 01:32	21°  Υ14'10		minimum elong	16269 Feb 26 05:25	22°  ✠08'54	1°16'05
evening rise	16268 Mar 23 10:26	25°  Υ38'25		max. Earth dist.	16269 Mar 02 03:43	0°  Υ17'39	1.34222 AU
	16268 Mar 25 20:26	0°  ♄			16269 Mar 02 00:15	0°  Υ	
	16268 Apr 13 20:08	0°  ♂		evening rise	16269 Mar 06 11:20	8°  Υ50'26	
evening max el	16268 Apr 27 21:07	16°  ♂59'39	25°59'02	desc. node	16269 Mar 07 22:13	11°  Υ36'36	
retrograde	16268 May 10 13:14	24°  ♂16'14			16269 Mar 18 09:59	0°  ♄	
asc. node	16268 May 15 10:49	22°  ♂40'51			16269 Apr 09 17:49	0°  ♂	
evening set	16268 May 16 16:30	21°  ♂45'07		evening max el	16269 Apr 10 11:00	0°  ♂42'24	26°55'56
min. Earth dist.	16268 May 20 20:31	17°  ♂18'23	0.67420 AU	retrograde	16269 Apr 23 18:50	8°  ♂11'43	
inferior conj	16268 May 22 11:50	15°  ♂15'02	1°59'07	evening set	16269 Apr 30 07:04	5°  ♂39'34	
minimum elong	16268 May 22 09:39	15°  ♂21'54	1°57'50	asc. node	16269 May 02 07:59	3°  ♂49'43	
morning rise	16268 May 28 03:28	9°  ♂28'04		min. Earth dist.	16269 May 04 05:44	1°  ♂47'08	0.65937 AU
direct	16268 May 31 11:14	8°  ♂25'06			16269 May 05 18:49	30°  ♂	
morning max el	16268 Jun 07 02:30	11°  ♂58'24	18°43'12	inferior conj	16269 May 06 10:00	29°  ♂15'41	1°13'25
desc. node	16268 Jun 17 01:57	24°  ♂52'56		minimum elong	16269 May 06 08:15	29°  ♂20'46	1°12'14
	16268 Jun 20 11:25	0°  ♄		morning rise	16269 May 12 10:49	23°  ♂41'11	
greatest brilliancy	16268 Jun 21 23:04	2°  ♄16'40	-0.8m	direct	16269 May 15 08:45	22°  ♂54'47	
morning set	16268 Jun 29 01:11	13°  ♄16'47		morning max el	16269 May 21 16:29	26°  ♂12'39	18°07'28
	16268 Jul 09 18:48	0°  ♂			16269 May 25 00:48	0°  ♂	
max. Earth dist.	16268 Jul 14 00:25	6°  ♂35'53	1.45909 AU	desc. node	16269 Jun 03 22:59	14°  ♂45'12	
				morning set	16269 Jun 09 14:52	23°  ♂52'01	
superior conj	16268 Jul 15 03:48	8°  ♂22'45	-2°14'21		16269 Jun 13 10:19	0°  ♄	
minimum elong	16268 Jul 15 03:39	8°  ♂22'12	2°14'56				
	16268 Jul 28 21:03	0°  ♂		superior conj	16269 Jun 24 13:41	17°  ♄39'36	-2°03'39
evening rise	16268 Jul 30 15:28	2°  ♂49'03		minimum elong	16269 Jun 24 06:39	17°  ♄12'02	2°03'57
asc. node	16268 Aug 11 10:42	21°  ♂25'50		max. Earth dist.	16269 Jun 26 21:17	21°  ♄17'01	1.45943 AU
	16268 Aug 17 14:15	0°  ♄			16269 Jul 02 11:44	0°  ♂	
evening max el	16268 Aug 20 06:09	2°  ♄57'58	18°32'42	evening rise	16269 Jul 10 16:59	12°  ♂43'14	
retrograde	16268 Aug 26 17:47	6°  ♄27'10			16269 Jul 21 23:52	0°  ♂	
evening set	16268 Aug 29 21:40	5°  ♄30'40		greatest brilliancy	16269 Jul 22 14:19	0°  ♂54'03	-0.7m
inferior conj	16268 Sep 04 14:56	29°  ♂54'04	2°16'10	asc. node	16269 Jul 29 07:26	10°  ♂29'32	
minimum elong	16268 Sep 04 17:13	29°  ♂47'08	2°15'31	evening max el	16269 Aug 03 15:42	16°  ♂49'21	19°14'02
	16268 Sep 04 12:59	30°  ♂		retrograde	16269 Aug 10 14:46	20°  ♂40'05	
min. Earth dist.	16268 Sep 06 15:33	27°  ♂26'52	0.65533 AU	evening set	16269 Aug 14 04:24	19°  ♂26'16	
morning rise	16268 Sep 10 11:33	23°  ♂29'46		inferior conj	16269 Aug 19 14:46	13°  ♂36'06	2°46'29
desc. node	16268 Sep 12 23:37	21°  ♂49'41		minimum elong	16269 Aug 19 16:32	13°  ♂30'19	2°45'53
direct	16268 Sep 16 20:58	20°  ♂52'42		min. Earth dist.	16269 Aug 21 01:19	11°  ♂43'46	0.67130 AU
morning max el	16268 Sep 30 04:48	28°  ♂42'33	26°58'00	morning rise	16269 Aug 25 04:01	7°  ♂09'15	
	16268 Oct 01 10:47	0°  ♄		desc. node	16269 Aug 30 20:59	4°  ♂35'06	
	16268 Oct 23 06:59	0°  ♂		direct	16269 Aug 31 04:14	4°  ♂34'45	
morning set	16268 Nov 04 20:43	22°  ♂17'39		morning max el	16269 Sep 12 16:14	12°  ♂01'42	25°47'44
asc. node	16268 Nov 07 11:49	27°  ♂26'13			16269 Sep 27 03:11	0°  ♄	
	16268 Nov 08 18:32	0°  ♄			16269 Oct 15 23:00	0°  ♂	
max. Earth dist.	16268 Nov 09 00:35	0°  ♄30'33	1.33646 AU	morning set	16269 Oct 18 14:45	4°  ♂47'05	
				max. Earth dist.	16269 Oct 22 06:06	11°  ♂35'01	1.35600 AU
superior conj	16268 Nov 13 10:06	9°  ♄36'19	0°52'04	asc. node	16269 Oct 25 08:37	17°  ♂36'27	
minimum elong	16268 Nov 13 07:50	9°  ♄24'21	0°52'18				
evening rise	16268 Nov 20 14:34	24°  ♄56'03		superior conj	16269 Oct 28 03:59	23°  ♂13'01	0°25'15
	16268 Nov 23 00:36	0°  ♄		minimum elong	16269 Oct 28 02:34	23°  ♂05'49	0°25'30
desc. node	16268 Dec 09 21:32	27°  ♄28'05			16269 Oct 31 11:30	0°  ♄	
evening max el	16268 Dec 11 03:13	28°  ♄44'15	21°47'05	evening rise	16269 Nov 04 22:09	9°  ♄12'34	
	16268 Dec 12 11:52	0°  ≈			16269 Nov 15 23:29	0°  ♄	
retrograde	16268 Dec 23 10:48	4°  ≈49'27		evening max el	16269 Nov 23 02:17	9°  ♄14'28	20°19'20
evening set	16268 Dec 26 16:18	4°  ≈26'02		desc. node	16269 Nov 26 18:34	12°  ♄17'30	
inferior conj	16269 Jan 04 06:38	0°  ≈35'55	-5°59'02	retrograde	16269 Dec 03 21:53	14°  ♄37'28	
minimum elong	16269 Jan 04 03:24	0°  ≈40'26	5°58'12	evening set	16269 Dec 06 04:13	14°  ♄24'24	
min. Earth dist.	16269 Jan 04 07:28	0°  ≈34'46	0.54392 AU	inferior conj	16269 Dec 14 23:20	10°  ♄28'58	-5°09'15
	16269 Jan 05 08:26	30°  ♂		minimum elong	16269 Dec 14 13:44	10°  ♄43'08	5°06'19

min. Earth dist.	16269 Dec 16 13:04	9°  33'16	0.54716 AU	retrograde	16270 Nov 14 21:02	25°  11'49	
morning rise	16269 Dec 22 22:42	6°  27'31		evening set	16270 Nov 16 18:33	25°  00'53	
direct	16269 Dec 27 15:45	5°  39'38		inferior conj	16270 Nov 25 06:09	20°  49'47	-3°37'18
morning max el	16270 Jan 10 04:39	12°  19'37	23°56'04	minimum elong	16270 Nov 24 21:24	21°  04'27	3°33'34
asc. node	16270 Jan 21 07:54	26°  30'47		min. Earth dist.	16270 Nov 27 22:45	19°  01'41	0.55921 AU
	16270 Jan 23 10:58	0°  ≈		morning rise	16270 Dec 02 21:49	16°  17'17	
morning set	16270 Feb 03 12:54	21°  ≈34'18		direct	16270 Dec 08 12:24	15°  04'52	
	16270 Feb 07 09:57	0°  ✕		morning max el	16270 Dec 22 14:01	22°  13'53	25°41'28
					16270 Dec 29 10:31	0°  ≈	
superior conj	16270 Feb 10 08:29	6°  ✕25'29	1°29'35	asc. node	16271 Jan 08 05:07	14°  ≈55'50	
minimum elong	16270 Feb 10 10:11	6°  ✕34'40	1°29'48		16271 Jan 16 02:04	0°  ≈	
max. Earth dist.	16270 Feb 13 00:30	12°  ✕10'32	1.32664 AU	morning set	16271 Jan 19 00:26	6°  ≈12'03	
evening rise	16270 Feb 17 23:57	22°  ✕30'11					
	16270 Feb 21 20:00	0°  Υ		superior conj	16271 Jan 25 17:51	21°  ≈02'23	1°36'46
desc. node	16270 Feb 22 18:53	1°  Υ47'52		minimum elong	16271 Jan 25 18:34	21°  ≈06'22	1°37'14
	16270 Mar 12 03:44	0°  8		max. Earth dist.	16271 Jan 27 03:42	24°  ≈09'48	1.31589 AU
evening max el	16270 Mar 23 23:53	14°  803'47	27°29'54		16271 Jan 29 19:49	0°  ✕	
retrograde	16270 Apr 06 17:54	21°  836'14		evening rise	16271 Feb 01 21:19	6°  ✕29'51	
evening set	16270 Apr 13 12:01	19°  809'45		desc. node	16271 Feb 09 15:35	21°  ✕41'59	
min. Earth dist.	16270 Apr 17 07:03	15°  847'58	0.64073 AU		16271 Feb 14 09:06	0°  Υ	
asc. node	16270 Apr 19 05:13	13°  847'19		evening max el	16271 Mar 06 09:52	26°  Υ51'05	27°34'19
inferior conj	16270 Apr 19 23:23	12°  859'14	0°14'13		16271 Mar 10 01:08	0°  8	
minimum elong	16270 Apr 19 22:58	13°  800'19	0°13'37	retrograde	16271 Mar 20 09:26	4°  818'55	
transit middle	16270 Apr 19 22:58	13°  800'19	0°13'37	evening set	16271 Mar 27 04:45	2°  805'43	
transit begin	16270 Apr 19 21:20	13°  804'37			16271 Mar 29 23:27	30°  RΥ	
transit end	16270 Apr 20 00:36	12°  856'01		min. Earth dist.	16271 Mar 30 23:02	29°  Υ08'29	0.61930 AU
morning rise	16270 Apr 26 12:13	7°  839'28		inferior conj	16271 Apr 03 00:44	26°  Υ16'45	-0°59'08
direct	16270 Apr 29 01:16	7°  806'51		minimum elong	16271 Apr 03 02:47	26°  Υ11'57	0°58'33
morning max el	16270 May 05 09:43	10°  821'42	17°48'56	asc. node	16271 Apr 06 02:32	23°  Υ34'43	
	16270 May 18 21:54	0°  II		morning rise	16271 Apr 10 04:00	21°  Υ14'09	
desc. node	16270 May 21 19:55	4°  II54'59		direct	16271 Apr 12 09:27	20°  Υ51'59	
morning set	16270 May 22 07:38	5°  II44'27		morning max el	16271 Apr 19 03:07	24°  Υ15'41	17°48'02
					16271 Apr 23 19:31	0°  8	
superior conj	16270 Jun 04 12:49	27°  II36'53	-1°36'20	morning set	16271 May 04 23:02	18°  839'37	
minimum elong	16270 Jun 04 04:25	27°  II03'04	1°36'07	desc. node	16271 May 08 16:46	25°  816'15	
	16270 Jun 06 00:27	0°  ☿			16271 May 11 09:41	0°  II	
max. Earth dist.	16270 Jun 09 17:00	5°  ☿51'57	1.45231 AU				
evening rise	16270 Jun 20 04:30	22°  ☿07'54		superior conj	16271 May 16 10:07	8°  II35'26	-1°00'08
	16270 Jun 25 08:51	0°  Ω		minimum elong	16271 May 16 04:37	8°  II12'14	0°59'57
asc. node	16270 Jul 16 04:13	28°  Ω59'59		max. Earth dist.	16271 May 23 09:04	20°  II03'52	1.43852 AU
	16270 Jul 17 02:29	0°  ♍			16271 May 29 15:21	0°  ☿	
evening max el	16270 Jul 17 19:32	0°  ♍43'32	20°10'48	evening rise	16271 May 30 18:29	1°  ☿45'30	
retrograde	16270 Jul 25 13:44	5°  ♍07'42			16271 Jun 18 21:27	0°  Ω	
evening set	16270 Jul 29 13:43	3°  ♍36'02		evening max el	16271 Jun 30 17:22	14°  Ω37'52	21°20'39
	16270 Aug 02 00:16	30°  RΩ		asc. node	16271 Jul 03 01:06	16°  Ω45'24	
inferior conj	16270 Aug 03 20:15	27°  Ω33'46	3°03'17	retrograde	16271 Jul 09 12:38	19°  Ω43'56	
minimum elong	16270 Aug 03 21:11	27°  Ω30'34	3°02'45	evening set	16271 Jul 13 23:36	17°  Ω54'53	
min. Earth dist.	16270 Aug 04 17:00	26°  Ω23'04	0.68289 AU	inferior conj	16271 Jul 19 05:02	11°  Ω42'03	3°08'21
morning rise	16270 Aug 09 04:17	21°  Ω09'01		minimum elong	16271 Jul 19 05:01	11°  Ω42'06	3°07'47
direct	16270 Aug 14 17:23	18°  Ω43'55		min. Earth dist.	16271 Jul 19 12:25	11°  Ω16'20	0.68969 AU
desc. node	16270 Aug 17 18:20	19°  Ω20'37		morning rise	16271 Jul 24 10:12	5°  Ω22'37	
morning max el	16270 Aug 26 03:18	25°  Ω33'36	24°23'13	direct	16271 Jul 29 11:20	3°  Ω12'05	
	16270 Aug 30 04:37	0°  ♍		desc. node	16271 Aug 04 15:38	5°  Ω42'54	
	16270 Sep 20 15:06	0°  ♌		morning max el	16271 Aug 08 15:03	9°  Ω13'25	22°54'02
morning set	16270 Sep 30 14:52	16°  ♌29'42			16271 Aug 24 23:29	0°  ♍	
max. Earth dist.	16270 Oct 04 05:25	22°  ♌51'26	1.37904 AU	morning set	16271 Sep 11 17:05	27°  ♍16'46	
	16270 Oct 08 02:59	0°  ♍			16271 Sep 13 08:32	0°  ♌	
				max. Earth dist.	16271 Sep 16 04:47	4°  ♌47'32	1.40318 AU
superior conj	16270 Oct 11 10:32	6°  ♍17'10	-0°07'03				
minimum elong	16270 Oct 11 10:59	6°  ♍19'21	0°06'36	superior conj	16271 Sep 24 01:47	18°  ♌40'23	-0°43'06
behind sun begin	16270 Oct 11 04:43	5°  ♍49'12		minimum elong	16271 Sep 24 05:08	18°  ♌55'38	0°42'23
behind sun end	16270 Oct 11 17:15	6°  ♍49'34		asc. node	16271 Sep 29 02:08	27°  ♌58'21	
asc. node	16270 Oct 12 05:23	7°  ♍48'13			16271 Sep 30 03:53	0°  ♍	
evening rise	16270 Oct 20 00:47	23° ♍15'12		evening rise	16271 Oct 03 19:29	6° ♍56'53	
	16270 Oct 23 11:01	0° ♌			16271 Oct 17 08:44	0° ♌	
evening max el	16270 Nov 05 15:59	20° ♌34'12	19°13'00	evening max el	16271 Oct 19 18:11	2° ♌43'05	18°28'57
desc. node	16270 Nov 13 15:41	25° ♌07'06		retrograde	16271 Oct 27 14:49	6° ♌42'25	

evening set	16271 Oct 29 14:07	6°♊28'07		retrograde	16272 Oct 09 03:04	19°♍04'27	
desc. node	16271 Oct 31 12:52	5°♊47'51		evening set	16272 Oct 11 08:45	18°♍42'35	
inferior conj	16271 Nov 06 10:06	1°♊56'17	-1°53'47	desc. node	16272 Oct 17 10:08	14°♍45'53	
minimum elong	16271 Nov 06 05:37	2°♊05'03	1°51'24	inferior conj	16272 Oct 18 11:17	13°♍49'26	-0°20'00
	16271 Nov 08 21:25	30°♋♍		minimum elong	16272 Oct 18 10:36	13°♍50'57	0°19'18
min. Earth dist.	16271 Nov 09 15:07	29°♍26'23	0.57792 AU	min. Earth dist.	16272 Oct 21 16:04	10°♍55'55	0.60022 AU
morning rise	16271 Nov 13 17:41	26°♍47'00		morning rise	16272 Oct 25 09:14	8°♍07'29	
direct	16271 Nov 19 23:47	25°♍07'30		direct	16272 Oct 31 23:51	6°♍03'06	
	16271 Dec 01 06:30	0°♊		morning max el	16272 Nov 15 05:52	13°♍50'28	27°50'15
morning max el	16271 Dec 04 05:53	2°♊38'49	27°03'43		16272 Nov 28 05:19	0°♊	
	16271 Dec 23 22:01	0°♊		asc. node	16272 Dec 11 23:20	23°♊25'13	
asc. node	16271 Dec 26 02:16	3°♊57'23			16272 Dec 15 06:54	0°♊	
morning set	16272 Jan 03 09:47	20°♊39'26		morning set	16272 Dec 17 15:02	4°♊51'06	
	16272 Jan 07 16:04	0°♋		max. Earth dist.	16272 Dec 23 17:59	18°♊11'39	1.31048 AU
superior conj	16272 Jan 10 05:06	5°♋41'17	1°37'53	superior conj	16272 Dec 24 16:18	20°♊16'12	1°32'58
minimum elong	16272 Jan 10 04:45	5°♋39'23	1°38'29	minimum elong	16272 Dec 24 14:58	20°♊08'48	1°33'32
max. Earth dist.	16272 Jan 10 10:44	6°♋12'52	1.31044 AU		16272 Dec 29 00:59	0°♋	
evening rise	16272 Jan 17 01:04	20°♋43'48		evening rise	16272 Dec 31 09:00	5°♋06'12	
	16272 Jan 21 13:00	0°♋		desc. node	16273 Jan 13 09:07	0°♋08'54	
desc. node	16272 Jan 27 12:20	11°♋12'10			16273 Jan 13 06:58	0°♋	
	16272 Feb 08 18:13	0°♌		evening max el	16273 Jan 28 11:38	20°♋02'15	26°00'01
evening max el	16272 Feb 16 14:38	8°♌53'14	27°04'29	retrograde	16273 Feb 11 10:35	27°♋06'14	
retrograde	16272 Mar 01 15:44	16°♌10'38		evening set	16273 Feb 17 12:34	25°♋39'36	
evening set	16272 Mar 08 06:08	14°♌18'10		min. Earth dist.	16273 Feb 22 00:45	23°♋01'14	0.57505 AU
min. Earth dist.	16272 Mar 12 04:56	11°♌36'27	0.59667 AU	inferior conj	16273 Feb 25 00:36	20°♋54'50	-3°56'13
inferior conj	16272 Mar 15 10:22	8°♌58'48	-2°24'56	minimum elong	16273 Feb 25 09:23	20°♋39'20	3°53'11
minimum elong	16272 Mar 15 15:53	8°♌47'32	2°22'49	morning rise	16273 Mar 05 09:20	16°♋33'22	
asc. node	16272 Mar 22 23:51	4°♌19'26		direct	16273 Mar 07 08:38	16°♋20'57	
morning rise	16272 Mar 23 05:13	4°♌15'52		asc. node	16273 Mar 09 21:10	16°♋42'19	
direct	16272 Mar 25 05:21	4°♌00'28		morning max el	16273 Mar 15 23:54	20°♋35'48	18°44'17
morning max el	16272 Apr 01 17:10	7°♌44'19	18°05'52		16273 Mar 23 02:20	0°♌	
	16272 Apr 16 00:57	0°♌		morning set	16273 Apr 01 03:14	16°♌32'25	
morning set	16272 Apr 17 07:15	2°♌20'37			16273 Apr 08 02:08	0°♌	
desc. node	16272 Apr 24 13:35	15°♌44'50		superior conj	16273 Apr 09 22:23	3°♌29'09	0°12'37
superior conj	16272 Apr 27 06:27	20°♌36'03	-0°22'17	minimum elong	16273 Apr 09 23:12	3°♌33'02	0°12'08
minimum elong	16272 Apr 27 04:36	20°♌27'49	0°22'28	behind sun begin	16273 Apr 09 18:42	3°♌11'53	
	16272 May 02 16:06	0°♍		behind sun end	16273 Apr 10 03:42	3°♌54'08	
max. Earth dist.	16272 May 04 20:41	3°♍41'49	1.41958 AU	desc. node	16273 Apr 11 10:21	6°♌16'50	
evening rise	16272 May 10 00:35	12°♍09'25		max. Earth dist.	16273 Apr 17 04:32	16°♌39'32	1.39737 AU
	16272 May 21 14:22	0°♎		evening rise	16273 Apr 21 03:51	23°♌29'07	
evening max el	16272 Jun 12 10:22	28°♎32'26	22°39'16		16273 Apr 25 02:23	0°♍	
	16272 Jun 13 23:10	0°♎			16273 May 15 10:32	0°♎	
asc. node	16272 Jun 18 22:02	3°♎30'49		evening max el	16273 May 26 00:40	12°♎28'14	24°00'53
retrograde	16272 Jun 22 09:47	4°♎22'59		asc. node	16273 Jun 05 19:01	18°♎59'03	
evening set	16272 Jun 27 08:17	2°♎17'56		retrograde	16273 Jun 06 03:56	18°♎59'38	
	16272 Jun 29 13:34	30°♏♎		evening set	16273 Jun 11 14:10	16°♎41'04	
inferior conj	16272 Jul 02 15:03	25°♎56'19	3°02'40	min. Earth dist.	16273 Jun 16 05:37	11°♎16'59	0.68865 AU
minimum elong	16272 Jul 02 14:07	25°♎59'34	3°01'57	inferior conj	16273 Jun 17 00:23	10°♎13'10	2°46'36
min. Earth dist.	16272 Jul 02 09:20	26°♎16'14	0.69164 AU	minimum elong	16273 Jun 16 22:42	10°♎18'53	2°45'38
morning rise	16272 Jul 07 19:48	19°♎44'22		morning rise	16273 Jun 22 07:17	4°♎10'05	
direct	16272 Jul 12 08:49	17°♎51'48		direct	16273 Jun 26 08:25	2°♎37'09	
morning max el	16272 Jul 21 06:06	23°♎01'13	21°28'27	morning max el	16273 Jul 04 03:19	7°♎00'06	20°12'57
desc. node	16272 Jul 21 12:54	23°♎18'20		desc. node	16273 Jul 08 10:07	11°♎48'29	
	16272 Jul 27 07:57	0°♏			16273 Jul 21 11:53	0°♏	
	16272 Aug 17 06:40	0°♐		morning set	16273 Aug 01 03:38	16°♏05'46	
morning set	16272 Aug 21 19:29	7°♐03'19			16273 Aug 10 01:21	0°♐	
max. Earth dist.	16272 Aug 28 09:33	17°♐37'52	1.42560 AU	max. Earth dist.	16273 Aug 10 21:24	1°♐19'42	1.44367 AU
superior conj	16272 Sep 04 21:15	0°♑11'52	-1°19'48	superior conj	16273 Aug 16 17:34	10°♐45'09	-1°51'40
minimum elong	16272 Sep 05 03:47	0°♑40'03	1°18'59	minimum elong	16273 Aug 17 01:25	11°♐17'19	1°51'16
	16272 Sep 04 18:29	0°♑			16273 Aug 28 04:38	0°♑	
asc. node	16272 Sep 14 22:50	18°♑02'29		evening rise	16273 Aug 29 16:19	2°♑33'22	
evening rise	16272 Sep 16 02:17	20°♑06'52		asc. node	16273 Sep 01 19:32	7°♑56'57	
	16272 Sep 21 14:24	0°♒		evening max el	16273 Sep 15 18:52	28°♑47'19	18°01'57
evening max el	16272 Oct 02 04:32	15°♒30'46	18°05'46		16273 Sep 17 03:04	0°♒	



































































































































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evening set	16273 Sep 24 19:31	1°♍36'02		asc. node	16274 Aug 19 16:12	27°♍36'30	
	16273 Sep 27 10:29	30°♍			16274 Aug 21 04:32	0°♍	
inferior conj	16273 Oct 01 06:31	26°♍23'53	0°55'28	evening max el	16274 Aug 30 09:32	12°♍23'03	18°16'23
minimum elong	16273 Oct 01 08:03	26°♍19'55	0°55'10	retrograde	16274 Sep 05 18:32	15°♍46'05	
min. Earth dist.	16273 Oct 04 03:06	23°♍26'56	0.62312 AU	evening set	16274 Sep 08 16:58	14°♍58'55	
desc. node	16273 Oct 04 07:25	23°♍16'16		inferior conj	16274 Sep 14 15:42	9°♍30'34	1°51'45
morning rise	16273 Oct 07 18:06	20°♍17'56		minimum elong	16274 Sep 14 18:00	9°♍23'56	1°51'06
direct	16273 Oct 14 10:34	17°♍54'32		min. Earth dist.	16274 Sep 17 00:07	6°♍48'11	0.64441 AU
morning max el	16273 Oct 28 12:33	25°♍51'28	27°57'18	morning rise	16274 Sep 20 17:23	3°♍10'16	
	16273 Nov 01 09:03	0°♍		desc. node	16274 Sep 21 04:44	2°♍48'30	
	16273 Nov 21 18:36	0°♍		direct	16274 Sep 27 06:27	0°♍35'41	
asc. node	16273 Nov 28 20:20	13°♍12'13		morning max el	16274 Oct 10 23:04	8°♍32'38	27°28'15
morning set	16273 Dec 01 14:06	18°♍42'49			16274 Oct 27 16:24	0°♍	
	16273 Dec 06 22:01	0°♍			16274 Nov 14 02:10	0°♍	
max. Earth dist.	16273 Dec 06 21:43	29°♍58'20	1.31614 AU	morning set	16274 Nov 15 04:28	2°♍08'49	
				asc. node	16274 Nov 15 17:16	3°♍12'10	
superior conj	16273 Dec 09 01:33	4°♍42'28	1°21'56	max. Earth dist.	16274 Nov 19 18:05	11°♍25'27	1.32742 AU
minimum elong	16273 Dec 08 23:30	4°♍31'05	1°22'24				
evening rise	16273 Dec 15 19:15	19°♍33'00		superior conj	16274 Nov 23 06:51	18°♍54'49	1°04'45
	16273 Dec 20 19:17	0°♍		minimum elong	16274 Nov 23 04:28	18°♍42'03	1°05'04
desc. node	16273 Dec 31 05:57	18°♍20'32			16274 Nov 28 09:32	0°♍	
	16274 Jan 09 15:10	0°♍		evening rise	16274 Nov 30 05:59	3°♍59'45	
evening max el	16274 Jan 10 00:22	0°♍22'14	24°28'10		16274 Dec 14 03:02	0°♍	
retrograde	16274 Jan 23 16:19	7°♍10'46		desc. node	16274 Dec 18 02:51	5°♍31'06	
evening set	16274 Jan 28 20:56	6°♍11'37		evening max el	16274 Dec 22 09:48	10°♍17'44	22°44'43
min. Earth dist.	16274 Feb 03 12:11	3°♍20'11	0.55727 AU	retrograde	16275 Jan 04 09:35	16°♍43'16	
inferior conj	16274 Feb 05 17:31	1°♍58'10	-5°16'35	evening set	16275 Jan 08 08:27	16°♍09'11	
minimum elong	16274 Feb 06 02:17	1°♍44'39	5°14'23	min. Earth dist.	16275 Jan 15 18:51	12°♍44'55	0.54621 AU
	16274 Feb 09 02:03	30°♍		inferior conj	16275 Jan 16 16:11	12°♍14'44	-6°00'10
morning rise	16274 Feb 14 09:44	27°♍57'06		minimum elong	16275 Jan 16 18:29	12°♍11'28	5°59'30
direct	16274 Feb 16 16:08	27°♍43'27		morning rise	16275 Jan 25 05:43	8°♍26'07	
	16274 Feb 23 13:51	0°♍		direct	16275 Jan 28 06:08	8°♍05'12	
asc. node	16274 Feb 24 18:31	0°♍51'51		morning max el	16275 Feb 08 23:36	13°♍45'05	21°09'14
morning max el	16274 Feb 26 19:04	2°♍38'27	19°45'12	asc. node	16275 Feb 11 15:49	16°♍36'22	
	16274 Mar 15 18:35	0°♍			16275 Feb 20 15:25	0°♍	
morning set	16274 Mar 16 07:02	1°♍02'47		morning set	16275 Feb 28 15:45	15°♍43'24	
					16275 Mar 07 11:20	0°♍	
superior conj	16274 Mar 24 05:27	17°♍02'04	0°42'12				
minimum elong	16274 Mar 24 07:39	17°♍12'57	0°41'42	superior conj	16275 Mar 07 23:43	1°♍03'59	1°05'37
desc. node	16274 Mar 29 07:02	26°♍48'00		minimum elong	16275 Mar 08 02:14	1°♍17'02	1°05'18
max. Earth dist.	16274 Mar 30 10:51	28°♍57'43	1.37435 AU	max. Earth dist.	16275 Mar 12 20:02	10°♍50'58	1.35296 AU
	16274 Mar 31 00:20	0°♍		desc. node	16275 Mar 16 03:43	17°♍14'55	
evening rise	16274 Apr 03 03:21	5°♍39'14		evening rise	16275 Mar 16 20:02	18°♍31'34	
	16274 Apr 18 00:59	0°♍			16275 Mar 23 05:26	0°♍	
evening max el	16274 May 08 14:01	26°♍22'43	25°18'46		16275 Apr 12 04:48	0°♍	
	16274 May 12 16:35	0°♍		evening max el	16275 Apr 21 03:34	10°♍11'29	26°25'32
retrograde	16274 May 20 18:04	3°♍26'25		retrograde	16275 May 04 03:14	17°♍35'43	
asc. node	16274 May 23 16:04	2°♍51'23		evening set	16275 May 10 10:38	15°♍03'05	
evening set	16274 May 26 15:33	0°♍58'10		asc. node	16275 May 10 13:12	14°♍57'49	
	16274 May 27 16:39	30°♍		min. Earth dist.	16275 May 14 12:04	10°♍51'25	0.66837 AU
min. Earth dist.	16274 May 30 23:10	26°♍11'08	0.68081 AU	inferior conj	16275 May 16 09:02	8°♍34'37	1°41'21
inferior conj	16274 Jun 01 07:05	24°♍27'28	2°19'47	minimum elong	16275 May 16 06:57	8°♍40'59	1°40'03
minimum elong	16274 Jun 01 04:57	24°♍34'25	2°18'34	morning rise	16275 May 22 04:15	2°♍52'54	
morning rise	16274 Jun 06 18:45	18°♍34'28		direct	16275 May 25 07:38	1°♍57'28	
direct	16274 Jun 10 08:36	17°♍21'03		morning max el	16275 May 31 18:51	5°♍22'50	18°25'57
morning max el	16274 Jun 17 07:48	21°♍08'47	19°11'26	desc. node	16275 Jun 12 04:19	20°♍37'26	
	16274 Jun 24 14:29	0°♍			16275 Jun 18 04:26	0°♍	
desc. node	16274 Jun 25 07:15	0°♍58'22		morning set	16275 Jun 21 07:53	4°♍57'42	
greatest brilliancy	16274 Jun 30 03:14	7°♍59'02	-0.7m				
morning set	16274 Jul 11 09:19	25°♍06'33		superior conj	16275 Jul 07 01:27	29°♍37'40	-2°12'13
	16274 Jul 14 13:26	0°♍		minimum elong	16275 Jul 06 21:57	29°♍24'00	2°12'47
max. Earth dist.	16274 Jul 24 14:25	15°♍36'26	1.45553 AU		16275 Jul 07 07:11	0°♍	
				max. Earth dist.	16275 Jul 07 10:00	0°♍10'57	1.46016 AU
superior conj	16274 Jul 27 15:42	20°♍24'30	-2°11'18	evening rise	16275 Jul 22 23:01	24°♍28'20	
minimum elong	16274 Jul 27 19:55	20°♍41'05	2°11'39		16275 Jul 26 11:29	0°♍	
	16274 Aug 02 16:28	0°♍		greatest brilliancy	16275 Jul 31 22:24	8°♍30'37	-0.8m

asc. node	16275 Aug 06 12:53	16° \cap 55'26			16276 Jul 19 01:20	0° \cap	
evening max el	16275 Aug 13 21:37	26° \cap 10'38	18°48'14	asc. node	16276 Jul 23 09:39	5° \cap 46'34	
retrograde	16275 Aug 20 13:19	29° \cap 47'45		evening max el	16276 Jul 27 04:59	10° \cap 04'23	19°36'27
evening set	16275 Aug 23 21:10	28° \cap 44'12		retrograde	16276 Aug 03 11:21	14° \cap 07'50	
inferior conj	16275 Aug 29 11:07	23° \cap 01'43	2°30'48	evening set	16276 Aug 07 05:17	12° \cap 46'36	
minimum elong	16275 Aug 29 13:15	22° \cap 55'02	2°30'09	inferior conj	16276 Aug 12 13:41	6° \cap 51'24	2°55'05
min. Earth dist.	16275 Aug 31 05:50	20° \cap 47'56	0.66264 AU	minimum elong	16276 Aug 12 15:08	6° \cap 46'35	2°54'33
morning rise	16275 Sep 04 04:21	16° \cap 35'21		min. Earth dist.	16276 Aug 13 18:25	5° \cap 15'53	0.67682 AU
desc. node	16275 Sep 08 02:06	14° \cap 19'14		morning rise	16276 Aug 18 00:27	0° \cap 25'00	
direct	16275 Sep 10 10:07	13° \cap 58'12			16276 Aug 18 12:16	30° κ δ	
morning max el	16275 Sep 23 10:33	21° \cap 40'59	26°30'20	direct	16276 Aug 23 20:15	27° δ 53'26	
	16275 Sep 30 17:07	0° $\underline{\alpha}$		desc. node	16276 Aug 24 23:28	27° δ 58'32	
	16275 Oct 20 21:24	0° \cap			16276 Aug 29 20:47	0° \cap	
morning set	16275 Oct 29 06:58	15° \cap 01'25		morning max el	16276 Sep 04 21:39	5° \cap 06'11	25°12'53
max. Earth dist.	16275 Nov 02 04:36	22° \cap 32'55	1.34418 AU		16276 Sep 24 03:05	0° $\underline{\alpha}$	
asc. node	16275 Nov 02 14:05	23° \cap 19'49		morning set	16276 Oct 10 17:58	27° $\underline{\alpha}$ 12'39	
	16275 Nov 05 21:25	0° \times			16276 Oct 12 07:05	0° \cap	
				max. Earth dist.	16276 Oct 14 06:37	3° \cap 38'24	1.36552 AU
superior conj	16275 Nov 07 05:43	2° \times 46'37	0°41'23	asc. node	16276 Oct 19 10:52	13° \cap 31'30	
minimum elong	16275 Nov 07 03:42	2° \times 36'07	0°41'37				
evening rise	16275 Nov 14 15:19	18° \times 21'17		superior conj	16276 Oct 20 19:19	16° \cap 11'20	0°12'11
	16275 Nov 20 09:11	0° $\underline{\text{B}}$		minimum elong	16276 Oct 20 18:33	16° \cap 07'32	0°12'29
evening max el	16275 Dec 04 01:41	20° $\underline{\text{B}}$ 26'24	21°07'28	behind sun begin	16276 Oct 20 14:27	15° \cap 47'17	
desc. node	16275 Dec 04 23:51	21° $\underline{\text{B}}$ 19'02		behind sun end	16276 Oct 20 22:38	16° \cap 27'50	
retrograde	16275 Dec 15 19:19	26° $\underline{\text{B}}$ 14'50			16276 Oct 27 15:08	0° \times	
evening set	16275 Dec 18 13:02	25° $\underline{\text{B}}$ 57'14		evening rise	16276 Oct 28 21:10	2° \times 33'03	
inferior conj	16275 Dec 27 06:50	22° $\underline{\text{B}}$ 06'41	-5°44'52		16276 Nov 14 01:47	0° $\underline{\text{B}}$	
minimum elong	16275 Dec 27 00:03	22° $\underline{\text{B}}$ 16'18	5°43'16	evening max el	16276 Nov 15 07:09	1° $\underline{\text{B}}$ 17'42	19°48'20
min. Earth dist.	16275 Dec 28 00:13	21° $\underline{\text{B}}$ 42'04	0.54408 AU	desc. node	16276 Nov 20 20:56	5° $\underline{\text{B}}$ 20'25	
morning rise	16276 Jan 04 11:14	18° $\underline{\text{B}}$ 15'07		retrograde	16276 Nov 25 09:43	6° $\underline{\text{B}}$ 20'23	
direct	16276 Jan 08 13:36	17° $\underline{\text{B}}$ 38'50		evening set	16276 Nov 27 10:49	6° $\underline{\text{B}}$ 08'58	
morning max el	16276 Jan 21 14:18	24° $\underline{\text{B}}$ 00'01	22°52'26	inferior conj	16276 Dec 06 04:11	2° $\underline{\text{B}}$ 08'11	-4°33'30
	16276 Jan 26 22:09	0° \approx		minimum elong	16276 Dec 05 18:12	2° $\underline{\text{B}}$ 23'38	4°29'54
asc. node	16276 Jan 29 13:07	3° \approx 36'36		min. Earth dist.	16276 Dec 08 07:12	0° $\underline{\text{B}}$ 49'22	0.55139 AU
	16276 Feb 12 22:00	0° \times			16276 Dec 09 16:31	30° κ \times	
morning set	16276 Feb 13 03:04	0° \times 26'53		morning rise	16276 Dec 14 00:12	27° \times 55'12	
				direct	16276 Dec 19 03:27	26° \times 57'07	
superior conj	16276 Feb 20 01:51	15° \times 24'55	1°22'38		16276 Dec 28 04:37	0° $\underline{\text{B}}$	
minimum elong	16276 Feb 20 03:59	15° \times 36'18	1°22'39	morning max el	16277 Jan 01 22:34	3° $\underline{\text{B}}$ 50'07	24°42'27
max. Earth dist.	16276 Feb 23 12:06	22° \times 39'07	1.33499 AU	asc. node	16277 Jan 15 10:22	21° $\underline{\text{B}}$ 35'04	
	16276 Feb 27 02:47	0° Υ			16277 Jan 20 04:17	0° \approx	
evening rise	16276 Feb 28 02:19	1° Υ 56'11		morning set	16277 Jan 27 15:03	15° \approx 08'03	
desc. node	16276 Mar 02 00:23	7° Υ 32'53					
	16276 Mar 15 04:00	0° B		superior conj	16277 Feb 03 09:13	29° \approx 57'35	1°33'22
evening max el	16276 Apr 02 17:12	23° B 46'10	27°13'41	minimum elong	16277 Feb 03 10:31	0° \times 04'43	1°33'42
	16276 Apr 11 01:38	0° Π			16277 Feb 03 09:40	0° \times	
retrograde	16276 Apr 16 06:26	1° Π 18'32		max. Earth dist.	16277 Feb 05 11:56	4° \times 34'31	1.32150 AU
	16276 Apr 21 01:48	30° κ B		evening rise	16277 Feb 10 19:01	15° \times 45'04	
evening set	16276 Apr 22 21:25	28° B 48'01		desc. node	16277 Feb 16 21:04	27° \times 37'15	
asc. node	16276 Apr 26 10:25	25° B 30'06			16277 Feb 18 04:09	0° Υ	
min. Earth dist.	16276 Apr 26 18:17	25° B 08'57	0.65178 AU		16277 Mar 09 21:30	0° B	
inferior conj	16276 Apr 29 03:49	22° B 28'32	0°50'02	evening max el	16277 Mar 16 05:23	6° B 54'55	27°35'50
minimum elong	16276 Apr 29 02:31	22° B 32'11	0°49'02	retrograde	16277 Mar 30 02:18	14° B 25'34	
morning rise	16276 May 05 09:25	16° B 59'52		evening set	16277 Apr 05 21:28	12° B 04'11	
direct	16276 May 08 03:20	16° B 19'48		min. Earth dist.	16277 Apr 09 15:55	8° B 53'27	0.63185 AU
morning max el	16276 May 14 10:31	19° B 35'20	17°57'26	inferior conj	16277 Apr 12 12:31	6° B 01'51	-0°15'13
	16276 May 22 09:54	0° Π		minimum elong	16277 Apr 12 13:01	6° B 00'37	0°15'22
desc. node	16276 May 29 01:18	10° Π 37'35		transit middle	16277 Apr 12 13:01	6° B 00'37	0°15'22
morning set	16276 Jun 01 09:20	16° Π 06'13		transit begin	16277 Apr 12 12:08	6° B 02'48	
	16276 Jun 09 22:03	0° B		transit end	16277 Apr 12 13:53	5° B 58'25	
				asc. node	16277 Apr 13 07:42	5° B 14'03	
superior conj	16276 Jun 15 15:17	9° B 07'27	-1°53'41	morning rise	16277 Apr 19 07:13	0° B 48'42	
minimum elong	16276 Jun 15 06:56	8° B 34'24	1°53'43	direct	16277 Apr 21 16:52	0° B 20'53	
max. Earth dist.	16276 Jun 19 06:13	14° B 49'29	1.45724 AU	morning max el	16277 Apr 28 04:08	3° B 38'10	17°46'19
	16276 Jun 29 01:01	0° δ		morning set	16277 May 14 12:27	28° B 27'13	
evening rise	16276 Jul 01 16:45	4° δ 04'41			16277 May 15 10:00	0° Π	
greatest brilliancy	16276 Jul 15 10:54	24° δ 50'25	-0.6m	desc. node	16277 May 15 22:12	0° Π 52'31	

superior conj	16277 May 26 23:10	19° Π 28'29	-1°21'34	max. Earth dist.	16278 May 15 15:41	13° Π 18'06	1.43098 AU
minimum elong	16277 May 26 15:43	18° Π 57'53	1°21'18	evening rise	16278 May 21 22:56	23° Π 24'20	
max. Earth dist.	16277 Jun 02 00:51	29° Π 16'58	1.44718 AU		16278 May 26 04:54	0° \mathfrak{C}	
	16277 Jun 02 11:40	0° \mathfrak{C}			16278 Jun 16 05:39	0° Ω	
evening rise	16277 Jun 11 03:12	13° \mathfrak{C} 29'22		evening max el	16278 Jun 23 01:52	7° Ω 53'14	21°53'16
	16277 Jun 22 02:45	0° Ω		asc. node	16278 Jun 27 03:24	11° Ω 21'29	
asc. node	16277 Jul 10 06:29	23° Ω 59'25		retrograde	16278 Jul 02 08:44	13° Ω 18'07	
evening max el	16277 Jul 10 06:20	23° Ω 59'02	20°39'13	evening set	16278 Jul 07 00:40	11° Ω 21'45	
retrograde	16277 Jul 18 10:24	28° Ω 39'45		inferior conj	16278 Jul 12 06:23	5° Ω 04'49	3°07'12
evening set	16277 Jul 22 15:05	27° Ω 00'28		minimum elong	16278 Jul 12 05:58	5° Ω 06'17	3°06'35
inferior conj	16277 Jul 27 20:50	20° Ω 53'42	3°06'45	min. Earth dist.	16278 Jul 12 08:04	4° Ω 58'54	0.69113 AU
minimum elong	16277 Jul 27 21:22	20° Ω 51'51	3°06'14		16278 Jul 16 05:28	30° \mathfrak{R} \mathfrak{C}	
min. Earth dist.	16277 Jul 28 11:50	20° Ω 01'59	0.68639 AU	morning rise	16278 Jul 17 11:05	28° \mathfrak{C} 48'35	
morning rise	16277 Aug 02 03:23	14° Ω 31'11		direct	16278 Jul 22 07:00	26° \mathfrak{C} 45'38	
direct	16277 Aug 07 11:32	12° Ω 11'43			16278 Jul 29 06:44	0° Ω	
desc. node	16277 Aug 11 20:49	13° Ω 28'04		desc. node	16278 Jul 29 18:06	0° Ω 24'01	
morning max el	16277 Aug 18 08:39	18° Ω 41'05	23°45'24	morning max el	16278 Jul 31 21:34	2° Ω 24'29	22°16'51
	16277 Aug 27 21:43	0° \mathfrak{M}			16278 Aug 21 20:19	0° \mathfrak{M}	
	16277 Sep 17 05:21	0° \mathfrak{L}		morning set	16278 Sep 03 01:13	18° \mathfrak{M} 53'21	
morning set	16277 Sep 22 09:10	8° \mathfrak{L} 32'20		max. Earth dist.	16278 Sep 08 07:09	27° \mathfrak{M} 30'19	1.41312 AU
max. Earth dist.	16277 Sep 26 05:29	15° \mathfrak{L} 10'14	1.38942 AU		16278 Sep 09 18:43	0° \mathfrak{L}	
superior conj	16277 Oct 03 19:55	28° \mathfrak{L} 59'31	-0°21'58	superior conj	16278 Sep 16 03:14	11° \mathfrak{L} 01'28	-0°58'50
minimum elong	16277 Oct 03 21:29	29° \mathfrak{L} 06'54	0°21'25	minimum elong	16278 Sep 16 07:59	11° \mathfrak{L} 22'37	0°58'02
	16277 Oct 04 08:45	0° \mathfrak{M}		asc. node	16278 Sep 23 04:19	23° \mathfrak{L} 50'56	
asc. node	16277 Oct 06 07:37	3° \mathfrak{M} 43'00		evening rise	16278 Sep 26 11:01	29° \mathfrak{L} 57'38	
evening rise	16277 Oct 12 20:50	16° \mathfrak{M} 27'56			16278 Sep 26 11:32	0° \mathfrak{M}	
	16277 Oct 20 00:45	0° \mathfrak{J}		evening max el	16278 Oct 12 08:42	25° \mathfrak{M} 25'06	18°16'33
evening max el	16277 Oct 29 02:36	12° \mathfrak{J} 58'58	18°51'29	retrograde	16278 Oct 19 18:48	29° \mathfrak{M} 12'19	
retrograde	16277 Nov 06 16:32	17° \mathfrak{J} 18'54		evening set	16278 Oct 21 20:22	28° \mathfrak{M} 55'21	
desc. node	16277 Nov 07 18:05	17° \mathfrak{J} 15'06		desc. node	16278 Oct 25 15:18	27° \mathfrak{M} 06'15	
evening set	16277 Nov 08 14:05	17° \mathfrak{J} 06'59		inferior conj	16278 Oct 29 08:51	24° \mathfrak{M} 14'01	-1°12'05
inferior conj	16277 Nov 16 19:34	12° \mathfrak{J} 46'58	-2°53'11	minimum elong	16278 Oct 29 06:09	24° \mathfrak{M} 19'39	1°10'27
minimum elong	16277 Nov 16 12:31	12° \mathfrak{J} 59'36	2°49'52	min. Earth dist.	16278 Nov 01 14:55	21° \mathfrak{M} 31'39	0.58714 AU
min. Earth dist.	16277 Nov 19 19:04	10° \mathfrak{J} 39'36	0.56663 AU	morning rise	16278 Nov 05 12:28	18° \mathfrak{M} 49'38	
morning rise	16277 Nov 24 08:02	7° \mathfrak{J} 59'09		direct	16278 Nov 11 22:46	16° \mathfrak{M} 59'18	
direct	16277 Nov 30 06:05	6° \mathfrak{J} 35'31		morning max el	16278 Nov 26 05:42	24° \mathfrak{M} 38'22	27°28'21
morning max el	16277 Dec 14 10:05	13° \mathfrak{J} 53'42	26°20'15		16278 Dec 01 04:03	0° \mathfrak{J}	
	16277 Dec 27 03:59	0° \mathfrak{Z}		asc. node	16278 Dec 20 04:39	29° \mathfrak{J} 30'46	
asc. node	16278 Jan 02 07:33	10° \mathfrak{Z} 16'58			16278 Dec 20 10:49	0° \mathfrak{Z}	
morning set	16278 Jan 12 01:54	29° \mathfrak{Z} 42'04		morning set	16278 Dec 27 09:46	14° \mathfrak{Z} 03'38	
	16278 Jan 12 05:14	0° \approx					
superior conj	16278 Jan 18 19:38	14° \approx 35'51	1°37'59	superior conj	16279 Jan 03 07:04	29° \mathfrak{Z} 13'40	1°36'32
minimum elong	16278 Jan 18 19:54	14° \approx 37'22	1°38'31	minimum elong	16279 Jan 03 06:18	29° \mathfrak{Z} 09'20	1°37'08
max. Earth dist.	16278 Jan 19 17:25	16° \approx 37'15	1.31296 AU	max. Earth dist.	16279 Jan 03 01:05	28° \mathfrak{Z} 40'07	1.30977 AU
evening rise	16278 Jan 25 19:25	29° \approx 51'33			16279 Jan 03 15:20	0° \approx	
	16278 Jan 25 21:01	0° \mathfrak{H}		evening rise	16279 Jan 10 01:09	14° \approx 09'31	
desc. node	16278 Feb 03 17:47	17° \mathfrak{H} 22'15			16279 Jan 17 21:40	0° \mathfrak{H}	
	16278 Feb 11 06:27	0° \mathfrak{Y}		desc. node	16279 Jan 21 14:32	6° \mathfrak{H} 39'35	
evening max el	16278 Feb 26 13:35	19° \mathfrak{Y} 24'41	27°25'58		16279 Feb 07 12:55	0° \mathfrak{Y}	
retrograde	16278 Mar 12 13:49	26° \mathfrak{Y} 47'50		evening max el	16279 Feb 08 15:03	1° \mathfrak{Y} 03'52	26°40'58
evening set	16278 Mar 19 08:04	24° \mathfrak{Y} 42'41		retrograde	16279 Feb 22 15:34	8° \mathfrak{Y} 16'20	
min. Earth dist.	16278 Mar 23 03:30	21° \mathfrak{Y} 53'31	0.60972 AU	evening set	16279 Mar 01 01:52	6° \mathfrak{Y} 34'00	
inferior conj	16278 Mar 26 07:42	19° \mathfrak{Y} 05'49	-1°34'15	min. Earth dist.	16279 Mar 05 04:45	3° \mathfrak{Y} 55'46	0.58719 AU
minimum elong	16278 Mar 26 11:08	18° \mathfrak{Y} 58'13	1°33'01	inferior conj	16279 Mar 08 09:27	1° \mathfrak{Y} 29'10	-3°03'42
asc. node	16278 Mar 31 05:02	15° \mathfrak{Y} 18'57		minimum elong	16279 Mar 08 16:30	1° \mathfrak{Y} 15'37	3°01'03
morning rise	16278 Apr 02 17:33	14° \mathfrak{Y} 11'16			16279 Mar 10 09:11	30° \mathfrak{R} \mathfrak{H}	
direct	16278 Apr 04 20:33	13° \mathfrak{Y} 52'17		morning rise	16279 Mar 16 10:42	26° \mathfrak{H} 55'41	
morning max el	16278 Apr 11 20:34	17° \mathfrak{Y} 22'49	17°53'18	direct	16279 Mar 18 09:45	26° \mathfrak{H} 42'03	
	16278 Apr 20 20:48	0° \mathfrak{B}		asc. node	16279 Mar 18 02:22	26° \mathfrak{H} 42'24	
morning set	16278 Apr 27 11:44	11° \mathfrak{B} 44'22			16279 Mar 25 16:09	0° \mathfrak{Y}	
desc. node	16278 May 02 19:02	21° \mathfrak{B} 17'36		morning max el	16279 Mar 26 08:05	0° \mathfrak{Y} 37'30	18°19'39
	16278 May 07 17:56	0° \mathfrak{I}		morning set	16279 Apr 11 01:28	25° \mathfrak{Y} 39'47	
					16279 Apr 13 08:18	0° \mathfrak{B}	
				desc. node	16279 Apr 19 15:48	11° \mathfrak{B} 47'58	
superior conj	16278 May 08 06:35	0° \mathfrak{I} 54'36	-0°43'56				
minimum elong	16278 May 08 02:41	0° \mathfrak{I} 37'47	0°43'54	superior conj	16279 Apr 20 11:48	13° \mathfrak{B} 19'14	-0°06'58

minimum elong	16279 Apr 20 11:14	13°♄16'42	0°07'18	morning set	16280 Mar 25 01:09	10°♁00'28	
behind sun begin	16279 Apr 20 04:38	12°♄46'39					
behind sun end	16279 Apr 20 17:50	13°♄46'41		superior conj	16280 Apr 02 10:41	26°♁30'41	0°25'52
max. Earth dist.	16279 Apr 28 01:21	26°♄38'37	1.41033 AU	minimum elong	16280 Apr 02 12:15	26°♁38'10	0°25'21
	16279 Apr 30 01:04	0°♂			16280 Apr 04 06:40	0°♄	
evening rise	16279 May 02 13:47	4°♂11'19		desc. node	16280 Apr 05 12:31	2°♄20'01	
	16279 May 19 10:26	0°♄		max. Earth dist.	16280 Apr 09 07:29	9°♄15'59	1.38755 AU
evening max el	16279 Jun 05 17:14	21°♄47'14	23°13'57	evening rise	16280 Apr 13 01:58	15°♄53'35	
asc. node	16279 Jun 14 00:22	27°♄36'08			16280 Apr 21 15:20	0°♂	
retrograde	16279 Jun 16 04:53	27°♄56'39			16280 May 13 01:27	0°♄	
evening set	16279 Jun 21 08:21	25°♄45'19		evening max el	16280 May 18 06:52	5°♄42'25	24°34'56
min. Earth dist.	16279 Jun 26 04:59	19°♄59'34	0.69092 AU	retrograde	16280 May 29 21:31	12°♄29'22	
inferior conj	16279 Jun 26 16:19	19°♄20'23	2°57'09	asc. node	16280 May 30 21:23	12°♄25'12	
minimum elong	16279 Jun 26 15:02	19°♄24'48	2°56'19	evening set	16280 Jun 04 12:29	10°♄06'20	
morning rise	16279 Jul 01 21:39	13°♄12'00		min. Earth dist.	16280 Jun 09 00:28	4°♄57'50	0.68586 AU
direct	16279 Jul 06 05:26	11°♄27'55		inferior conj	16280 Jun 10 00:45	3°♄36'32	2°36'36
morning max el	16279 Jul 14 15:04	16°♄16'58	20°54'50	minimum elong	16280 Jun 09 22:50	3°♄42'59	2°35'31
desc. node	16279 Jul 16 15:20	18°♄24'28			16280 Jun 12 21:10	30°♁♂	
	16279 Jul 25 17:01	0°♁		morning rise	16280 Jun 15 09:20	27°♂37'21	
morning set	16279 Aug 13 18:35	28°♁17'47		direct	16280 Jun 19 05:31	26°♂12'48	
	16279 Aug 14 20:49	0°♁			16280 Jun 26 07:07	0°♄	
max. Earth dist.	16279 Aug 21 14:34	10°♁42'16	1.43386 AU	morning max el	16280 Jun 26 15:13	0°♄19'37	19°44'48
				desc. node	16280 Jul 02 12:31	7°♄12'44	
superior conj	16279 Aug 28 13:03	22°♁08'11	-1°34'20		16280 Jul 18 05:50	0°♁	
minimum elong	16279 Aug 28 20:34	22°♁39'51	1°33'36	morning set	16280 Jul 22 23:03	7°♁11'46	
	16279 Sep 02 03:45	0°♂		max. Earth dist.	16280 Aug 03 04:15	24°♁38'23	1.44950 AU
evening rise	16279 Sep 09 11:20	12°♂50'48			16280 Aug 06 13:14	0°♁	
asc. node	16279 Sep 10 01:01	13°♂51'32					
	16279 Sep 19 11:15	0°♂		superior conj	16280 Aug 07 23:19	2°♁16'34	-2°01'58
evening max el	16279 Sep 25 21:13	8°♂26'28	18°01'55	minimum elong	16280 Aug 08 06:22	2°♁44'50	2°01'53
retrograde	16279 Oct 02 13:46	11°♂53'39		evening rise	16280 Aug 21 16:29	24°♁53'36	
evening set	16279 Oct 04 22:37	11°♂27'34			16280 Aug 24 17:12	0°♂	
inferior conj	16279 Oct 11 18:14	6°♂26'18	0°14'21	asc. node	16280 Aug 26 21:41	3°♂40'02	
minimum elong	16279 Oct 11 18:41	6°♂25'12	0°14'32	evening max el	16280 Sep 08 12:07	21°♂52'17	18°06'02
transit middle	16279 Oct 11 18:41	6°♂25'12	0°14'32	retrograde	16280 Sep 14 21:05	25°♂12'45	
transit begin	16279 Oct 11 17:15	6°♂28'39		evening set	16280 Sep 17 14:27	24°♂34'01	
transit end	16279 Oct 11 20:07	6°♂21'44		inferior conj	16280 Sep 23 19:50	19°♂14'59	1°21'36
desc. node	16279 Oct 12 12:34	5°♂41'50		minimum elong	16280 Sep 23 21:50	19°♂09'33	1°21'05
min. Earth dist.	16279 Oct 14 20:21	3°♂28'35	0.60996 AU	min. Earth dist.	16280 Sep 26 11:40	16°♂22'05	0.63245 AU
morning rise	16279 Oct 18 11:45	0°♂32'42		desc. node	16280 Sep 28 09:53	14°♂28'05	
	16279 Oct 19 08:46	30°♁♂		morning rise	16280 Sep 30 03:04	13°♂02'02	
direct	16279 Oct 25 03:52	28°♂19'05		direct	16280 Oct 06 18:52	10°♂32'31	
	16279 Oct 31 07:39	0°♂		morning max el	16280 Oct 20 17:21	18°♂30'55	27°48'58
morning max el	16279 Nov 08 08:58	6°♂12'32	27°57'59		16280 Oct 30 10:30	0°♂	
	16279 Nov 26 08:07	0°♂			16280 Nov 18 05:38	0°♂	
asc. node	16279 Dec 07 01:40	19°♂07'51		asc. node	16280 Nov 22 22:36	9°♂00'49	
morning set	16279 Dec 11 12:41	28°♂08'13		morning set	16280 Nov 24 08:21	11°♂49'37	
	16279 Dec 12 09:59	0°♂		max. Earth dist.	16280 Nov 29 07:58	22°♂12'38	1.32023 AU
max. Earth dist.	16279 Dec 17 07:11	10°♂34'45	1.31215 AU				
				superior conj	16280 Dec 02 01:32	28°♂07'30	1°15'25
superior conj	16279 Dec 18 17:42	13°♂46'17	1°29'03	minimum elong	16280 Dec 01 23:17	27°♂55'09	1°15'49
minimum elong	16279 Dec 18 16:02	13°♂36'57	1°29'35		16280 Dec 02 22:06	0°♂	
evening rise	16279 Dec 25 10:18	28°♂34'43		evening rise	16280 Dec 08 20:57	13°♂02'02	
	16279 Dec 26 02:07	0°♂			16280 Dec 17 06:39	0°♂	
desc. node	16280 Jan 08 11:21	25°♂19'20		desc. node	16280 Dec 25 08:13	13°♂07'19	
	16280 Jan 11 12:59	0°♂		evening max el	16281 Jan 01 18:47	21°♂56'52	23°44'33
evening max el	16280 Jan 21 08:14	11°♂50'35	25°23'31	retrograde	16281 Jan 15 05:27	28°♂36'22	
retrograde	16280 Feb 04 05:26	18°♂49'11		evening set	16281 Jan 19 21:58	27°♂48'50	
evening set	16280 Feb 09 23:15	17°♂34'18		min. Earth dist.	16281 Jan 26 06:10	24°♂45'44	0.55163 AU
min. Earth dist.	16280 Feb 14 20:57	14°♂52'21	0.56684 AU	inferior conj	16281 Jan 27 23:02	23°♂45'33	-5°41'11
inferior conj	16280 Feb 17 14:38	13°♂03'22	-4°33'00	minimum elong	16281 Jan 28 05:52	23°♂35'28	5°39'45
minimum elong	16280 Feb 18 00:03	12°♂47'42	4°30'05	morning rise	16281 Feb 05 15:18	19°♂50'42	
morning rise	16280 Feb 26 03:41	8°♂51'05		direct	16281 Feb 08 04:05	19°♂34'45	
direct	16280 Feb 28 04:32	8°♂38'53		asc. node	16281 Feb 18 20:58	24°♂42'54	
asc. node	16280 Mar 03 23:40	9°♂51'11		morning max el	16281 Feb 18 23:35	24°♂49'12	20°18'05
morning max el	16280 Mar 08 10:29	13°♂10'11	19°07'18		16281 Feb 23 10:49	0°♂	
	16280 Mar 19 20:39	0°♁		morning set	16281 Mar 09 07:22	24°♂36'14	

	16281 Mar 11 22:17	0°♿		asc. node	16282 Feb 05 18:17	11°♿01'48	
					16282 Feb 17 04:10	0°♿	
superior conj	16281 Mar 16 22:57	10°♿17'02	0°52'54	morning set	16282 Feb 21 17:28	9°♿19'10	
minimum elong	16281 Mar 17 01:24	10°♿29'23	0°52'28				
max. Earth dist.	16281 Mar 22 14:33	21°♿21'37	1.36500 AU	superior conj	16282 Feb 28 20:54	24°♿28'02	1°13'37
desc. node	16281 Mar 23 09:13	22°♿49'59		minimum elong	16282 Feb 28 23:20	24°♿40'46	1°13'26
evening rise	16281 Mar 26 09:16	28°♿23'18			16282 Mar 03 12:52	0°♿	
	16281 Mar 27 06:40	0°♿		max. Earth dist.	16282 Mar 05 02:46	3°♿12'37	1.34486 AU
	16281 Apr 14 22:56	0°♿		evening rise	16282 Mar 09 08:08	11°♿30'26	
evening max el	16281 Apr 30 20:31	19°♿36'31	25°49'03	desc. node	16282 Mar 10 05:53	13°♿13'41	
retrograde	16281 May 13 09:35	26°♿49'52			16282 Mar 19 17:25	0°♿	
asc. node	16281 May 17 18:28	25°♿33'14			16282 Apr 10 04:56	0°♿	
evening set	16281 May 19 11:26	24°♿19'22		evening max el	16282 Apr 13 10:18	3°♿21'04	26°48'44
min. Earth dist.	16281 May 23 16:21	19°♿47'28	0.67607 AU	retrograde	16282 Apr 26 16:08	10°♿49'23	
inferior conj	16281 May 25 05:44	17°♿49'03	2°05'00	evening set	16282 May 03 03:15	8°♿16'49	
minimum elong	16281 May 25 03:33	17°♿56'01	2°03'43	asc. node	16282 May 04 15:39	6°♿56'33	
morning rise	16281 May 30 20:15	12°♿00'28		min. Earth dist.	16282 May 07 02:33	4°♿19'37	0.66183 AU
direct	16281 Jun 03 05:37	10°♿54'46		inferior conj	16282 May 09 04:59	1°♿51'36	1°21'14
morning max el	16281 Jun 09 22:37	14°♿31'17	18°50'01	minimum elong	16282 May 09 03:07	1°♿57'06	1°20'01
desc. node	16281 Jun 19 09:37	26°♿36'27			16282 May 10 19:49	30°♿	
	16281 Jun 21 16:32	0°♿		morning rise	16282 May 15 04:16	26°♿15'17	
greatest brilliancy	16281 Jun 23 13:59	2°♿51'46	-0.8m	direct	16282 May 18 03:36	25°♿26'36	
morning set	16281 Jul 02 10:00	16°♿29'12		morning max el	16282 May 24 11:57	28°♿45'55	18°11'46
	16281 Jul 11 02:46	0°♿			16282 May 25 16:42	0°♿	
max. Earth dist.	16281 Jul 16 23:01	9°♿06'15	1.45845 AU	desc. node	16282 Jun 06 06:38	16°♿25'25	
				morning set	16282 Jun 12 19:38	26°♿52'49	
superior conj	16281 Jul 18 14:32	11°♿40'42	-2°14'12		16282 Jun 14 18:22	0°♿	
minimum elong	16281 Jul 18 15:37	11°♿44'55	2°14'45				
	16281 Jul 30 04:54	0°♿		superior conj	16282 Jun 27 23:52	20°♿55'20	-2°06'31
evening rise	16281 Aug 02 21:49	5°♿55'59		minimum elong	16282 Jun 27 17:35	20°♿30'46	2°06'52
asc. node	16281 Aug 13 18:23	23°♿11'52		max. Earth dist.	16282 Jun 29 19:47	23°♿46'47	1.45988 AU
	16281 Aug 18 10:12	0°♿			16282 Jul 03 19:40	0°♿	
evening max el	16281 Aug 23 02:06	5°♿34'25	18°27'54	evening rise	16282 Jul 14 02:36	15°♿58'04	
retrograde	16281 Aug 29 12:43	9°♿01'31			16282 Jul 23 04:57	0°♿	
evening set	16281 Sep 01 15:12	8°♿07'25		greatest brilliancy	16282 Jul 25 06:31	3°♿07'47	-0.7m
inferior conj	16281 Sep 07 09:47	2°♿32'49	2°10'15	asc. node	16282 Jul 31 15:08	12°♿20'06	
minimum elong	16281 Sep 07 12:05	2°♿25'53	2°09'35	evening max el	16282 Aug 06 12:22	19°♿25'05	19°06'46
min. Earth dist.	16281 Sep 09 12:24	0°♿01'25	0.65264 AU	retrograde	16282 Aug 13 09:19	23°♿11'59	
	16281 Sep 09 12:53	30°♿		evening set	16282 Aug 16 21:24	22°♿00'52	
morning rise	16281 Sep 13 07:40	26°♿09'21		inferior conj	16282 Aug 22 08:36	16°♿12'31	2°42'44
desc. node	16281 Sep 15 07:14	24°♿46'44		minimum elong	16282 Aug 22 10:29	16°♿06'26	2°42'09
direct	16281 Sep 19 18:07	23°♿32'47		min. Earth dist.	16282 Aug 23 21:14	14°♿14'26	0.66922 AU
	16281 Oct 01 17:37	0°♿		morning rise	16282 Aug 27 22:49	9°♿45'33	
morning max el	16281 Oct 03 04:24	1°♿24'37	27°06'38	desc. node	16282 Sep 02 04:36	7°♿12'55	
	16281 Oct 24 13:32	0°♿		direct	16282 Sep 03 00:29	7°♿10'14	
morning set	16281 Nov 07 18:02	25°♿01'51		morning max el	16282 Sep 15 16:00	14°♿41'50	25°59'15
asc. node	16281 Nov 09 19:29	29°♿04'28			16282 Sep 28 05:13	0°♿	
	16281 Nov 10 06:38	0°♿			16282 Oct 17 08:34	0°♿	
max. Earth dist.	16281 Nov 12 00:21	3°♿30'43	1.33396 AU	morning set	16282 Oct 21 14:27	7°♿37'50	
				max. Earth dist.	16282 Oct 25 07:11	14°♿35'46	1.35280 AU
superior conj	16281 Nov 16 04:25	12°♿11'49	0°55'36	asc. node	16282 Oct 27 16:20	19°♿14'20	
minimum elong	16281 Nov 16 02:05	11°♿59'30	0°55'52				
evening rise	16281 Nov 23 07:20	27°♿27'12		superior conj	16282 Oct 30 23:43	25°♿52'47	0°29'41
	16281 Nov 24 12:14	0°♿		minimum elong	16282 Oct 30 22:07	25°♿44'33	0°29'55
desc. node	16281 Dec 12 05:10	29°♿45'32			16282 Nov 01 23:54	0°♿	
	16281 Dec 12 10:22	0°♿		evening rise	16282 Nov 07 15:29	11°♿45'28	
evening max el	16281 Dec 14 05:48	1°♿53'19	22°01'39		16282 Nov 17 02:25	0°♿	
retrograde	16281 Dec 26 17:55	8°♿04'13		evening max el	16282 Nov 26 02:50	12°♿17'17	20°31'10
evening set	16281 Dec 30 03:51	7°♿38'18		desc. node	16282 Nov 29 02:13	14°♿51'19	
inferior conj	16282 Jan 07 16:35	3°♿47'33	-6°01'24	retrograde	16282 Dec 07 04:24	17°♿47'21	
minimum elong	16282 Jan 07 14:47	3°♿50'04	6°00'43	evening set	16282 Dec 09 13:11	17°♿33'24	
min. Earth dist.	16282 Jan 07 11:30	3°♿54'38	0.54420 AU	inferior conj	16282 Dec 18 08:19	13°♿39'33	-5°20'11
morning rise	16282 Jan 16 02:33	0°♿00'12		minimum elong	16282 Dec 17 23:12	13°♿52'51	5°17'36
	16282 Jan 16 02:53	30°♿		min. Earth dist.	16282 Dec 19 17:02	12°♿51'53	0.54602 AU
direct	16282 Jan 19 13:52	29°♿33'35		morning rise	16282 Dec 26 08:54	9°♿41'14	
	16282 Jan 22 22:27	0°♿		direct	16282 Dec 30 22:08	8°♿56'39	
morning max el	16282 Jan 31 21:34	5°♿31'19	21°51'18	morning max el	16283 Jan 13 08:29	15°♿32'09	23°39'35

asc. node	16283 Jan 23 15:33	28°  29'04		direct	16283 Dec 11 17:02	18°  18'44	
	16283 Jan 24 14:36	0° 		morning max el	16283 Dec 25 17:18	25°  24'07	25°26'49
morning set	16283 Feb 06 05:21	24°  03'15			16283 Dec 30 00:26	0° 	
	16283 Feb 08 23:18	0° 		asc. node	16284 Jan 10 12:47	16°  47'25	
					16284 Jan 17 13:26	0° 	
superior conj	16283 Feb 13 01:37	8°  55'42	1°27'57	morning set	16284 Jan 21 17:03	8°  41'54	
minimum elong	16283 Feb 13 03:26	9°  05'32	1°28'06				
max. Earth dist.	16283 Feb 15 22:19	15°  04'09	1.32862 AU	superior conj	16284 Jan 28 10:32	23°  31'40	1°36'05
evening rise	16283 Feb 20 19:15	25°  06'48		minimum elong	16284 Jan 28 11:25	23°  36'32	1°36'30
	16283 Feb 23 07:00	0° 		max. Earth dist.	16284 Jan 30 00:38	27°  01'55	1.31715 AU
desc. node	16283 Feb 25 02:34	3°  27'02			16284 Jan 31 09:12	0° 	
	16283 Mar 13 04:42	0° 		evening rise	16284 Feb 04 15:30	9°  03'51	
evening max el	16283 Mar 26 23:22	16°  46'07	27°26'32	desc. node	16284 Feb 11 23:16	23°  23'59	
retrograde	16283 Apr 09 16:21	24°  19'05			16284 Feb 15 16:14	0° 	
evening set	16283 Apr 16 09:48	21°  51'12		evening max el	16284 Mar 08 10:00	29°  39'24	27°35'48
min. Earth dist.	16283 Apr 20 05:11	18°  25'10	0.64372 AU		16284 Mar 08 18:41	0° 	
asc. node	16283 Apr 21 12:54	17°  01'22		retrograde	16284 Mar 22 09:09	7°  08'21	
inferior conj	16283 Apr 22 19:52	15°  38'01	0°24'07	evening set	16284 Mar 29 04:31	4°  52'51	
minimum elong	16283 Apr 22 19:11	15°  39'50	0°23'24	min. Earth dist.	16284 Apr 01 22:44	1°  52'17	0.62259 AU
morning rise	16283 Apr 29 06:45	10°  15'57			16284 Apr 03 22:16	30°  R 	
direct	16283 May 01 21:00	9°  41'33		inferior conj	16284 Apr 04 23:14	29°  00'01	-0°47'08
morning max el	16283 May 08 04:54	12°  56'12	17°50'33	minimum elong	16284 Apr 05 00:50	28°  56'11	0°46'45
	16283 May 20 05:24	0° 		asc. node	16284 Apr 07 10:11	26°  45'31	
desc. node	16283 May 24 03:35	6°  11'32'40		morning rise	16284 Apr 12 00:14	23°  54'34	
morning set	16283 May 25 08:29	8°  11'33'45		direct	16284 Apr 14 06:40	23°  31'05	
	16283 Jun 07 09:07	0° 		morning max el	16284 Apr 20 22:27	26°  52'53	17°46'59
					16284 Apr 23 16:40	0° 	
superior conj	16283 Jun 07 20:10	0°  44'20	-1°41'14	morning set	16284 May 06 20:54	21°  52'04'49	
minimum elong	16283 Jun 07 11:38	0°  10'05	1°41'04	desc. node	16284 May 10 00:27	26°  52'29	
max. Earth dist.	16283 Jun 12 15:29	8°  22'11	1.45380 AU		16284 May 11 19:28	0° 	
evening rise	16283 Jun 23 15:07	25°  23'49					
	16283 Jun 26 15:37	0° 		superior conj	16284 May 18 13:57	11°  33'14	-1°05'51
greatest brilliancy	16283 Jul 08 10:25	17°  03'24'44	-0.6m	minimum elong	16284 May 18 07:53	11°  07'52	1°05'39
	16283 Jul 17 16:38	0° 		max. Earth dist.	16284 May 25 08:07	22°  38'13	1.44094 AU
asc. node	16283 Jul 18 11:57	0°  56'23			16284 May 29 23:22	0° 	
evening max el	16283 Jul 20 17:08	3°  19'07	20°01'28	evening rise	16284 Jun 02 03:40	4°  57'02	
retrograde	16283 Jul 28 08:08	7°  17'37'46			16284 Jun 19 00:24	0° 	
evening set	16283 Aug 01 06:30	6°  17'08'52		evening max el	16284 Jul 02 15:52	17°  13'54	21°09'38
inferior conj	16283 Aug 06 13:25	0°  17'08'24	3°01'27	asc. node	16284 Jul 04 08:48	18°  04'49'45	
minimum elong	16283 Aug 06 14:30	0°  17'04'45	3°00'57	retrograde	16284 Jul 11 07:06	22°  13'13	
	16283 Aug 06 15:54	30°  R 		evening set	16284 Jul 15 16:24	20°  12'6'44	
min. Earth dist.	16283 Aug 07 12:15	28°  15'01'03	0.68146 AU	inferior conj	16284 Jul 20 21:51	14°  15'30	3°08'15
morning rise	16283 Aug 11 22:05	23°  15'42'59		minimum elong	16284 Jul 20 21:59	14°  15'03	3°07'43
direct	16283 Aug 17 12:55	21°  16'01		min. Earth dist.	16284 Jul 21 07:13	13°  15'42'53	0.68899 AU
desc. node	16283 Aug 20 01:58	21°  16'41'44		morning rise	16284 Jul 26 03:17	7°  15'55'11	
morning max el	16283 Aug 29 03:05	28°  12'21	24°36'15	direct	16284 Jul 31 06:17	5°  15'42'06	
	16283 Aug 30 20:08	0° 		desc. node	16284 Aug 05 23:17	7°  15'51'07	
	16283 Sep 21 21:53	0° 		morning max el	16284 Aug 10 14:30	11°  15'50'56	23°07'16
morning set	16283 Oct 03 17:32	19°  15'28'30			16284 Aug 25 02:58	0° 	
max. Earth dist.	16283 Oct 07 06:57	25°  15'48'18	1.37547 AU	morning set	16284 Sep 13 23:13	0°  15'24'29	
	16283 Oct 09 13:52	0° 			16284 Sep 13 17:18	0° 	
				max. Earth dist.	16284 Sep 18 05:54	7°  15'37'26	1.39966 AU
superior conj	16283 Oct 14 08:15	9°  15'02'45	-0°01'50				
minimum elong	16283 Oct 14 08:20	9°  15'03'13	0°01'26	superior conj	16284 Sep 26 02:05	21°  15'33'10	-0°37'28
behind sun begin	16283 Oct 14 01:39	8°  15'30'50		minimum elong	16284 Sep 26 04:56	21°  15'46'17	0°36'48
behind sun end	16283 Oct 14 15:01	9°  15'35'41		asc. node	16284 Sep 30 09:50	29°  15'37'15	
asc. node	16283 Oct 14 13:06	9°  15'26'23			16284 Sep 30 14:39	0° 	
evening rise	16283 Oct 22 19:04	25°  15'50'48		evening rise	16284 Oct 05 15:10	9°  15'36'26	
	16283 Oct 24 21:07	0° 			16284 Oct 17 03:55	0° 	
evening max el	16283 Nov 08 14:27	23°  15'29'42	19°21'25	evening max el	16284 Oct 21 15:04	5°  15'32'06	18°34'04
desc. node	16283 Nov 15 23:20	28°  15'00'21		retrograde	16284 Oct 29 15:46	9°  15'36'10	
retrograde	16283 Nov 18 00:56	28°  15'13'35		evening set	16284 Oct 31 14:30	9°  15'22'36	
evening set	16283 Nov 19 22:58	28°  15'02'43		desc. node	16284 Nov 01 20:31	9°  15'00'21	
inferior conj	16283 Nov 28 12:23	23°  15'54'40	-3°52'38	inferior conj	16284 Nov 08 13:02	4°  15'53'52	-2°09'10
minimum elong	16283 Nov 28 03:10	24°  15'09'47	3°48'51	minimum elong	16284 Nov 08 07:52	5°  15'03'44	2°06'30
min. Earth dist.	16283 Dec 01 02:01	22°  15'13'44	0.55694 AU	min. Earth dist.	16284 Nov 11 17:05	2°  15'29'19	0.57492 AU
morning rise	16283 Dec 06 05:09	19°  15'27'25		morning rise	16284 Nov 15 21:56	29°  15'50'12	

	16284 Nov 15 14:19	30° \mathbb{M}		morning rise	16285 Oct 28 10:41	11° \mathbb{M} 02'58	
direct	16284 Nov 22 02:17	28° \mathbb{M} 14'40		direct	16285 Nov 04 00:22	9° \mathbb{M} 02'11	
	16284 Nov 28 17:21	0° \mathbb{A}		morning max el	16285 Nov 18 06:42	16° \mathbb{M} 47'16	27°45'50
morning max el	16284 Dec 06 07:49	5° \mathbb{A} 42'31	26°53'30		16285 Nov 29 05:02	0° \mathbb{A}	
	16284 Dec 24 04:41	0° \mathbb{B}		asc. node	16285 Dec 14 06:59	25° \mathbb{A} 08'47	
asc. node	16284 Dec 27 09:56	5° \mathbb{B} 44'08			16285 Dec 16 18:20	0° \mathbb{B}	
morning set	16285 Jan 05 02:48	23° \mathbb{B} 10'46		morning set	16285 Dec 20 08:47	7° \mathbb{B} 25'28	
	16285 Jan 08 05:45	0° \approx		max. Earth dist.	16285 Dec 26 14:53	21° \mathbb{B} 05'37	1.31013 AU
superior conj	16285 Jan 11 21:35	8° \approx 10'16	1°38'06	superior conj	16285 Dec 27 08:53	22° \mathbb{B} 46'21	1°34'05
minimum elong	16285 Jan 11 21:25	8° \approx 09'16	1°38'41	minimum elong	16285 Dec 27 07:42	22° \mathbb{B} 39'43	1°34'41
max. Earth dist.	16285 Jan 12 07:18	9° \approx 04'38	1.31094 AU		16285 Dec 30 14:28	0° \approx	
evening rise	16285 Jan 18 18:24	23° \approx 15'48		evening rise	16286 Jan 03 01:50	7° \approx 37'35	
	16285 Jan 22 00:18	0° \mathbb{H}			16286 Jan 14 12:19	0° \mathbb{H}	
desc. node	16285 Jan 28 19:59	12° \mathbb{H} 58'06		desc. node	16286 Jan 15 16:46	2° \mathbb{H} 01'04	
	16285 Feb 08 14:39	0° \mathbb{Y}		evening max el	16286 Jan 31 14:02	23° \mathbb{H} 06'16	26°11'36
evening max el	16285 Feb 18 15:46	11° \mathbb{Y} 48'56	27°11'12		16286 Feb 12 06:52	0° \mathbb{Y}	
retrograde	16285 Mar 04 16:46	19° \mathbb{Y} 07'44		retrograde	16286 Feb 14 13:21	0° \mathbb{Y} 12'20	
evening set	16285 Mar 11 08:20	17° \mathbb{Y} 11'58			16286 Feb 16 19:35	30° \mathbb{R} \mathbb{H}	
min. Earth dist.	16285 Mar 15 06:06	14° \mathbb{Y} 28'36	0.60000 AU	evening set	16286 Feb 20 17:51	28° \mathbb{H} 41'32	
inferior conj	16285 Mar 18 11:25	11° \mathbb{Y} 47'55	-2°11'21	min. Earth dist.	16286 Feb 25 03:12	26° \mathbb{H} 03'46	0.57809 AU
minimum elong	16285 Mar 18 16:22	11° \mathbb{Y} 37'35	2°09'29	inferior conj	16286 Feb 28 04:44	23° \mathbb{H} 51'42	-3°42'36
asc. node	16285 Mar 25 07:30	7° \mathbb{Y} 17'47		minimum elong	16286 Feb 28 13:09	23° \mathbb{H} 36'33	3°39'37
morning rise	16285 Mar 26 03:56	7° \mathbb{Y} 01'47		morning rise	16286 Mar 08 11:41	19° \mathbb{H} 27'10	
direct	16285 Mar 28 04:43	6° \mathbb{Y} 45'34		direct	16286 Mar 10 10:46	19° \mathbb{H} 14'32	
morning max el	16285 Apr 04 13:11	10° \mathbb{Y} 25'41	18°02'00	asc. node	16286 Mar 12 04:49	19° \mathbb{H} 25'03	
	16285 Apr 17 10:29	0° \mathbb{B}		morning max el	16286 Mar 18 21:16	23° \mathbb{H} 23'54	18°37'14
morning set	16285 Apr 20 02:58	4° \mathbb{B} 56'13			16286 Mar 24 04:13	0° \mathbb{Y}	
desc. node	16285 Apr 26 21:14	17° \mathbb{B} 20'15		morning set	16286 Apr 03 21:28	19° \mathbb{Y} 04'36	
					16286 Apr 09 13:28	0° \mathbb{B}	
superior conj	16285 Apr 30 06:59	23° \mathbb{B} 25'03	-0°27'54	superior conj	16286 Apr 12 20:18	6° \mathbb{B} 11'38	0°07'37
minimum elong	16285 Apr 30 04:37	23° \mathbb{B} 14'38	0°28'02	minimum elong	16286 Apr 12 20:48	6° \mathbb{B} 13'59	0°07'11
	16285 May 04 01:53	0° \mathbb{I}		behind sun begin	16286 Apr 12 14:30	5° \mathbb{B} 44'36	
max. Earth dist.	16285 May 07 20:39	6° \mathbb{I} 22'54	1.42263 AU	behind sun end	16286 Apr 13 03:06	6° \mathbb{B} 43'17	
evening rise	16285 May 13 06:51	15° \mathbb{I} 13'08		desc. node	16286 Apr 13 17:59	7° \mathbb{B} 52'10	
	16285 May 22 20:23	0° \mathbb{E}		max. Earth dist.	16286 Apr 20 05:07	19° \mathbb{B} 27'42	1.40077 AU
	16285 Jun 14 06:44	0° \mathbb{O}		evening rise	16286 Apr 24 06:56	26° \mathbb{B} 24'48	
evening max el	16285 Jun 15 09:29	1° \mathbb{O} 08'36	22°27'14		16286 Apr 26 10:55	0° \mathbb{I}	
asc. node	16285 Jun 21 05:43	5° \mathbb{O} 45'33			16286 May 16 11:31	0° \mathbb{E}	
retrograde	16285 Jun 25 04:30	6° \mathbb{O} 52'20		evening max el	16286 May 28 23:58	15° \mathbb{E} 04'08	23°48'43
evening set	16285 Jun 30 01:20	4° \mathbb{O} 49'26		asc. node	16286 Jun 08 02:42	21° \mathbb{E} 26'53	
	16285 Jul 04 05:32	30° \mathbb{R} \mathbb{E}		retrograde	16286 Jun 08 23:11	21° \mathbb{E} 30'00	
inferior conj	16285 Jul 05 07:46	28° \mathbb{E} 29'05	3°04'13	evening set	16286 Jun 14 07:43	19° \mathbb{E} 13'04	
minimum elong	16285 Jul 05 06:58	28° \mathbb{E} 31'53	3°03'31	min. Earth dist.	16286 Jun 19 00:25	13° \mathbb{E} 43'29	0.68943 AU
min. Earth dist.	16285 Jul 05 03:58	28° \mathbb{E} 42'19	0.69167 AU	inferior conj	16286 Jun 19 17:18	12° \mathbb{E} 45'49	2°49'45
morning rise	16285 Jul 10 12:26	22° \mathbb{E} 16'02		minimum elong	16286 Jun 19 15:42	12° \mathbb{E} 51'15	2°48'48
direct	16285 Jul 15 03:15	20° \mathbb{E} 20'41		morning rise	16286 Jun 24 23:43	6° \mathbb{E} 41'27	
desc. node	16285 Jul 23 20:32	25° \mathbb{E} 16'52		direct	16286 Jun 29 02:33	5° \mathbb{E} 05'39	
morning max el	16285 Jul 24 04:50	25° \mathbb{E} 37'22	21°40'44	morning max el	16286 Jul 07 01:04	9° \mathbb{E} 34'56	20°23'22
	16285 Jul 28 04:02	0° \mathbb{O}		desc. node	16286 Jul 10 17:44	13° \mathbb{E} 39'50	
	16285 Aug 18 13:30	0° \mathbb{P}			16286 Jul 22 16:52	0° \mathbb{O}	
morning set	16285 Aug 25 05:01	10° \mathbb{P} 19'36		morning set	16286 Aug 04 15:05	19° \mathbb{O} 26'35	
max. Earth dist.	16285 Aug 31 09:54	20° \mathbb{P} 20'32	1.42251 AU	max. Earth dist.	16286 Aug 11 09:29	0° \mathbb{P}	
	16285 Sep 06 03:56	0° \mathbb{U}			16286 Aug 13 20:44	3° \mathbb{P} 55'30	1.44135 AU
superior conj	16285 Sep 08 00:41	3° \mathbb{U} 12'50	-1°14'24	superior conj	16286 Aug 20 00:27	13° \mathbb{P} 54'27	-1°47'27
minimum elong	16285 Sep 08 06:48	3° \mathbb{U} 39'22	1°13'33	minimum elong	16286 Aug 20 08:22	14° \mathbb{P} 27'06	1°46'57
asc. node	16285 Sep 17 06:31	19° \mathbb{U} 42'38			16286 Aug 29 13:29	0° \mathbb{U}	
evening rise	16285 Sep 18 23:58	22° \mathbb{U} 51'54		evening rise	16286 Sep 01 16:48	5° \mathbb{U} 25'39	
	16285 Sep 22 22:10	0° \mathbb{M}		asc. node	16286 Sep 04 03:11	9° \mathbb{U} 38'52	
evening max el	16285 Oct 05 00:26	18° \mathbb{M} 14'36	18°07'56		16286 Sep 17 05:45	0° \mathbb{M}	
retrograde	16285 Oct 12 01:34	21° \mathbb{M} 51'23		evening max el	16286 Sep 18 14:20	1° \mathbb{M} 27'10	18°01'21
evening set	16285 Oct 14 06:10	21° \mathbb{M} 30'51		retrograde	16286 Sep 25 02:30	4° \mathbb{M} 50'04	
desc. node	16285 Oct 19 17:46	18° \mathbb{M} 10'30		evening set	16286 Sep 27 14:52	4° \mathbb{M} 18'57	
inferior conj	16285 Oct 21 11:13	16° \mathbb{M} 40'35	-0°33'07		16286 Oct 03 07:58	30° \mathbb{R} \mathbb{U}	
minimum elong	16285 Oct 21 10:04	16° \mathbb{M} 43'08	0°32'12	inferior conj	16286 Oct 04 04:00	29° \mathbb{U} 09'27	0°45'19
min. Earth dist.	16285 Oct 24 16:34	13° \mathbb{M} 49'26	0.59682 AU				

minimum elong	16286 Oct 04 05:18	29° Ω 06'09	0°45'06	inferior conj	16287 Sep 17 11:21	12° Ω 12'12	1°44'22
desc. node	16286 Oct 06 15:03	26° Ω 38'58		minimum elong	16287 Sep 17 13:36	12° Ω 05'47	1°43'44
min. Earth dist.	16286 Oct 07 02:07	26° Ω 11'43	0.61973 AU	min. Earth dist.	16287 Sep 19 21:47	9° Ω 26'29	0.64137 AU
morning rise	16286 Oct 10 17:05	23° Ω 06'18		morning rise	16287 Sep 23 14:25	5° Ω 53'26	
direct	16286 Oct 17 09:34	20° Ω 45'15		desc. node	16287 Sep 23 12:22	5° Ω 57'29	
morning max el	16286 Oct 31 12:40	28° Ω 41'44	27°58'43	direct	16287 Sep 30 04:20	3° Ω 19'48	
	16286 Nov 01 19:22	0° \mathbb{M}		morning max el	16287 Oct 13 22:44	11° Ω 17'52	27°34'37
	16286 Nov 23 02:19	0° \mathcal{A}			16287 Oct 28 19:23	0° \mathbb{M}	
asc. node	16286 Dec 01 03:57	14° \mathcal{A} 53'25			16287 Nov 15 13:04	0° \mathcal{A}	
morning set	16286 Dec 04 08:55	21° \mathcal{A} 20'51		morning set	16287 Nov 18 00:47	4° \mathcal{A} 51'28	
	16286 Dec 08 11:11	0° \mathcal{B}		asc. node	16287 Nov 18 00:53	4° \mathcal{A} 51'58	
max. Earth dist.	16286 Dec 09 19:22	2° \mathcal{B} 54'56	1.31491 AU	max. Earth dist.	16287 Nov 22 16:56	14° \mathcal{A} 24'57	1.32535 AU
superior conj	16286 Dec 11 18:33	7° \mathcal{B} 14'28	1°24'00	superior conj	16287 Nov 26 00:36	21° \mathcal{A} 29'40	1°07'47
minimum elong	16286 Dec 11 16:35	7° \mathcal{B} 03'33	1°24'30	minimum elong	16287 Nov 25 22:14	21° \mathcal{A} 16'55	1°08'06
evening rise	16286 Dec 18 11:50	22° \mathcal{B} 04'09			16287 Nov 29 22:25	0° \mathcal{B}	
	16286 Dec 22 05:58	0° \approx		evening rise	16287 Dec 02 22:38	6° \mathcal{B} 31'26	
desc. node	16287 Jan 02 13:37	20° \approx 20'54			16287 Dec 15 03:48	0° \approx	
	16287 Jan 09 18:50	0° \mathcal{H}		desc. node	16287 Dec 20 10:33	7° \approx 42'19	
evening max el	16287 Jan 13 03:44	3° \mathcal{H} 32'30	24°43'02	evening max el	16287 Dec 25 13:09	13° \approx 29'51	23°00'10
retrograde	16287 Jan 26 21:19	10° \mathcal{H} 24'05		retrograde	16288 Jan 07 16:19	19° \approx 59'33	
evening set	16287 Feb 01 05:39	9° \mathcal{H} 20'47		evening set	16288 Jan 11 19:47	19° \approx 22'16	
min. Earth dist.	16287 Feb 06 15:44	6° \mathcal{H} 32'27	0.55954 AU	min. Earth dist.	16288 Jan 18 23:05	16° \approx 04'02	0.54733 AU
inferior conj	16287 Feb 09 00:47	5° \mathcal{H} 03'05	-5°06'10	inferior conj	16288 Jan 20 01:44	15° \approx 25'59	-5°57'02
minimum elong	16287 Feb 09 09:57	4° \mathcal{H} 48'43	5°03'42	minimum elong	16288 Jan 20 05:23	15° \approx 20'45	5°56'14
morning rise	16287 Feb 17 16:33	0° \mathcal{H} 59'25		morning rise	16288 Jan 28 16:15	11° \approx 36'04	
direct	16287 Feb 19 21:05	0° \mathcal{H} 46'22		direct	16288 Jan 31 13:15	11° \approx 16'44	
asc. node	16287 Feb 27 02:09	3° \mathcal{H} 19'06		morning max el	16288 Feb 12 01:18	16° \approx 50'18	20°55'16
morning max el	16287 Mar 01 18:28	5° \mathcal{H} 34'56	19°34'39	asc. node	16288 Feb 13 23:27	18° \approx 50'26	
	16287 Mar 17 05:40	0° \mathcal{Y}			16288 Feb 21 20:57	0° \mathcal{H}	
morning set	16287 Mar 19 00:17	3° \mathcal{Y} 32'46		morning set	16288 Mar 02 08:26	18° \mathcal{H} 12'19	
					16288 Mar 08 00:02	0° \mathcal{Y}	
superior conj	16287 Mar 27 01:23	19° \mathcal{Y} 39'33	0°38'05	superior conj	16288 Mar 09 18:13	3° \mathcal{Y} 37'45	1°02'28
minimum elong	16287 Mar 27 03:28	19° \mathcal{Y} 49'41	0°37'34	minimum elong	16288 Mar 09 20:45	3° \mathcal{Y} 50'44	1°02'06
desc. node	16287 Mar 31 14:41	28° \mathcal{Y} 23'48		max. Earth dist.	16288 Mar 14 19:29	13° \mathcal{Y} 45'10	1.35600 AU
	16287 Apr 01 11:18	0° \mathcal{B}		desc. node	16288 Mar 17 11:23	18° \mathcal{Y} 51'43	
max. Earth dist.	16287 Apr 02 11:09	1° \mathcal{B} 50'08	1.37773 AU	evening rise	16288 Mar 18 17:58	21° \mathcal{Y} 14'51	
evening rise	16287 Apr 06 03:36	8° \mathcal{B} 28'01			16288 Mar 23 14:39	0° \mathcal{B}	
	16287 Apr 19 06:44	0° \mathbb{I}		evening max el	16288 Apr 12 03:39	0° \mathbb{I}	
evening max el	16287 May 11 13:16	28° \mathbb{I} 58'39	25°07'39		16288 Apr 23 02:52	12° \mathbb{I} 49'04	26°16'38
	16287 May 12 14:47	0° \mathcal{E}		retrograde	16288 May 06 00:06	20° \mathbb{I} 11'03	
retrograde	16287 May 23 14:03	5° \mathcal{E} 58'39		asc. node	16288 May 11 20:55	17° \mathbb{I} 57'07	
asc. node	16287 May 25 23:46	5° \mathcal{E} 34'40		evening set	16288 May 12 06:03	17° \mathbb{I} 38'50	
evening set	16287 May 29 09:53	3° \mathcal{E} 31'31		min. Earth dist.	16288 May 16 08:20	13° \mathbb{I} 21'55	0.67048 AU
	16287 Jun 01 17:05	30° $\mathcal{R}\mathbb{I}$		inferior conj	16288 May 18 03:20	11° \mathbb{I} 09'36	1°47'58
min. Earth dist.	16287 Jun 02 18:33	28° \mathbb{I} 38'59	0.68227 AU	minimum elong	16288 May 18 01:12	11° \mathbb{I} 16'12	1°46'41
inferior conj	16287 Jun 04 00:30	27° \mathbb{I} 00'49	2°24'36	morning rise	16288 May 23 21:15	5° \mathbb{I} 25'59	
minimum elong	16287 Jun 03 22:25	27° \mathbb{I} 07'41	2°23'25	direct	16288 May 27 02:07	4° \mathbb{I} 27'58	
morning rise	16287 Jun 09 11:18	21° \mathbb{I} 06'12		morning max el	16288 Jun 02 14:38	7° \mathbb{I} 55'59	18°31'38
direct	16287 Jun 13 02:43	19° \mathbb{I} 50'01		desc. node	16288 Jun 13 11:56	22° \mathbb{I} 19'43	
morning max el	16287 Jun 20 04:28	23° \mathbb{I} 42'24	19°19'35		16288 Jun 18 11:11	0° \mathcal{E}	
	16287 Jun 25 14:00	0° \mathcal{E}		morning set	16288 Jun 23 14:59	8° \mathcal{E} 05'28	
desc. node	16287 Jun 27 14:52	2° \mathcal{E} 44'27			16288 Jul 07 15:05	0° \mathcal{Q}	
greatest brilliancy	16287 Jul 02 21:11	10° \mathcal{E} 17'45	-0.7m	superior conj	16288 Jul 09 12:15	2° \mathcal{Q} 56'02	-2°13'25
morning set	16287 Jul 14 19:50	28° \mathcal{E} 24'09		minimum elong	16288 Jul 09 09:54	2° \mathcal{Q} 46'53	2°13'59
	16287 Jul 15 20:45	0° \mathcal{Q}		max. Earth dist.	16288 Jul 09 08:09	2° \mathcal{Q} 40'00	1.45993 AU
max. Earth dist.	16287 Jul 27 12:48	18° \mathcal{Q} 07'01	1.45418 AU	evening rise	16288 Jul 25 06:52	27° \mathcal{Q} 39'29	
superior conj	16287 Jul 31 01:34	23° \mathcal{Q} 41'03	-2°09'26		16288 Jul 26 18:27	0° \mathcal{M}	
minimum elong	16287 Jul 31 06:41	24° \mathcal{Q} 01'21	2°09'41	greatest brilliancy	16288 Aug 02 09:36	10° \mathcal{M} 26'06	-0.8m
	16287 Aug 04 00:43	0° \mathcal{M}		asc. node	16288 Aug 07 20:38	18° \mathcal{M} 44'21	
evening rise	16287 Aug 14 12:21	17° \mathcal{M} 04'21		evening max el	16288 Aug 15 17:53	28° \mathcal{M} 47'45	18°42'28
asc. node	16287 Aug 21 23:54	29° \mathcal{M} 21'26			16288 Aug 17 01:30	0° \mathcal{Q}	
	16287 Aug 22 09:28	0° \mathcal{Q}		retrograde	16288 Aug 22 08:00	2° \mathcal{Q} 21'47	
evening max el	16287 Sep 02 05:10	15° \mathcal{Q} 00'55	18°13'09	evening set	16288 Aug 25 14:26	1° \mathcal{Q} 20'46	
retrograde	16287 Sep 08 13:56	18° \mathcal{Q} 22'58			16288 Aug 27 08:32	30° $\mathcal{R}\mathcal{M}$	
evening set	16287 Sep 11 11:00	17° \mathcal{Q} 38'09					

inferior conj	16288 Aug 31 05:30	25° \mathbb{M} 40'24	2°25'49	evening set	16289 Aug 09 22:10	15° \mathbb{M} 21'15	
minimum elong	16288 Aug 31 07:41	25° \mathbb{M} 33'35	2°25'11	inferior conj	16289 Aug 15 07:12	9° \mathbb{M} 27'50	2°52'11
min. Earth dist.	16288 Sep 02 02:18	23° \mathbb{M} 21'38	0.66017 AU	minimum elong	16289 Aug 15 08:46	9° \mathbb{M} 22'38	2°51'39
morning rise	16288 Sep 05 23:52	19° \mathbb{M} 14'37		min. Earth dist.	16289 Aug 16 13:58	7° \mathbb{M} 46'20	0.67502 AU
desc. node	16288 Sep 09 09:44	17° \mathbb{M} 09'11		morning rise	16289 Aug 20 18:49	3° \mathbb{M} 01'14	
direct	16288 Sep 12 07:01	16° \mathbb{M} 37'15		direct	16289 Aug 26 16:12	0° \mathbb{M} 28'31	
morning max el	16288 Sep 25 10:09	24° \mathbb{M} 22'52	26°40'26	desc. node	16289 Aug 27 07:04	0° \mathbb{M} 30'02	
	16288 Sep 30 11:59	0° \mathbb{L}		morning max el	16289 Sep 07 21:21	7° \mathbb{M} 46'17	25°25'15
	16288 Oct 21 05:17	0° \mathbb{M}			16289 Sep 25 07:21	0° \mathbb{L}	
morning set	16288 Oct 31 05:17	17° \mathbb{M} 49'38		morning set	16289 Oct 13 18:49	0° \mathbb{M} 07'23	
asc. node	16288 Nov 03 21:44	24° \mathbb{M} 58'56			16289 Oct 13 17:11	0° \mathbb{M}	
max. Earth dist.	16288 Nov 04 04:55	25° \mathbb{M} 34'36	1.34137 AU	max. Earth dist.	16289 Oct 17 08:03	6° \mathbb{M} 39'09	1.36216 AU
	16288 Nov 06 09:36	0° \mathbb{L}		asc. node	16289 Oct 21 18:34	15° \mathbb{M} 10'24	
superior conj	16288 Nov 09 00:38	5° \mathbb{L} 25'13	0°45'22	superior conj	16289 Oct 23 15:49	18° \mathbb{M} 54'25	0°16'59
minimum elong	16288 Nov 08 22:30	5° \mathbb{L} 14'06	0°45'34	minimum elong	16289 Oct 23 14:47	18° \mathbb{M} 49'18	0°17'15
evening rise	16288 Nov 16 08:18	20° \mathbb{L} 54'13			16289 Oct 29 02:49	0° \mathbb{L}	
	16288 Nov 20 18:30	0° \mathbb{L}		evening rise	16289 Oct 31 14:50	5° \mathbb{L} 07'51	
evening max el	16288 Dec 06 03:34	23° \mathbb{L} 34'36	21°21'00		16289 Nov 14 14:16	0° \mathbb{L}	
desc. node	16288 Dec 06 07:34	23° \mathbb{L} 44'23		evening max el	16289 Nov 18 06:45	4° \mathbb{L} 18'11	19°58'41
retrograde	16288 Dec 18 02:17	29° \mathbb{L} 28'58		desc. node	16289 Nov 23 04:37	8° \mathbb{L} 03'15	
evening set	16288 Dec 20 23:54	29° \mathbb{L} 09'35		retrograde	16289 Nov 28 15:11	9° \mathbb{L} 27'52	
inferior conj	16288 Dec 29 16:41	25° \mathbb{L} 19'36	-5°51'08	evening set	16289 Nov 30 17:52	9° \mathbb{L} 15'59	
minimum elong	16288 Dec 29 11:02	25° \mathbb{L} 27'32	5°49'52	inferior conj	16289 Dec 09 12:05	5° \mathbb{L} 17'14	-4°46'54
min. Earth dist.	16288 Dec 30 04:24	25° \mathbb{L} 03'07	0.54382 AU	minimum elong	16289 Dec 09 02:05	5° \mathbb{L} 32'25	4°43'30
morning rise	16289 Jan 06 22:31	21° \mathbb{L} 29'42		min. Earth dist.	16289 Dec 11 10:45	4° \mathbb{L} 06'25	0.54974 AU
direct	16289 Jan 10 21:04	20° \mathbb{L} 56'04		morning rise	16289 Dec 17 09:14	1° \mathbb{L} 08'43	
morning max el	16289 Jan 23 17:40	27° \mathbb{L} 11'33	22°36'13	direct	16289 Dec 22 09:06	0° \mathbb{L} 14'16	
	16289 Jan 26 10:10	0° \mathbb{L}		morning max el	16290 Jan 05 02:12	7° \mathbb{L} 02'42	24°26'29
asc. node	16289 Jan 30 20:44	5° \mathbb{L} 40'25		asc. node	16290 Jan 17 17:58	23° \mathbb{L} 31'01	
	16289 Feb 13 10:07	0° \mathbb{L}			16290 Jan 21 12:07	0° \mathbb{L}	
morning set	16289 Feb 14 19:32	2° \mathbb{L} 56'06		morning set	16290 Jan 30 07:32	17° \mathbb{L} 38'13	
					16290 Feb 04 23:08	0° \mathbb{L}	
superior conj	16289 Feb 21 19:22	17° \mathbb{L} 56'33	1°20'28	superior conj	16290 Feb 06 02:06	2° \mathbb{L} 28'02	1°32'09
minimum elong	16289 Feb 21 21:36	18° \mathbb{L} 08'23	1°20'24	minimum elong	16290 Feb 06 03:33	2° \mathbb{L} 35'57	1°32'25
max. Earth dist.	16289 Feb 25 10:35	25° \mathbb{L} 34'11	1.33742 AU	max. Earth dist.	16290 Feb 08 09:26	7° \mathbb{L} 28'58	1.32317 AU
	16289 Feb 27 14:47	0° \mathbb{Y}		evening rise	16290 Feb 13 13:48	18° \mathbb{L} 21'25	
evening rise	16289 Mar 01 22:28	4° \mathbb{Y} 35'36		desc. node	16290 Feb 19 04:47	29° \mathbb{L} 18'47	
desc. node	16289 Mar 04 08:06	9° \mathbb{Y} 11'44			16290 Feb 19 13:40	0° \mathbb{Y}	
	16289 Mar 16 09:17	0° \mathbb{L}			16290 Mar 10 16:09	0° \mathbb{L}	
evening max el	16289 Apr 05 16:42	26° \mathbb{L} 27'28	27°08'03	evening max el	16290 Mar 19 05:12	9° \mathbb{L} 41'05	27°34'28
	16289 Apr 09 18:12	0° \mathbb{L}		retrograde	16290 Apr 02 01:09	17° \mathbb{L} 12'21	
retrograde	16289 Apr 19 04:11	3° \mathbb{L} 58'56		evening set	16290 Apr 08 20:05	14° \mathbb{L} 49'04	
evening set	16289 Apr 25 18:15	1° \mathbb{L} 27'47		min. Earth dist.	16290 Apr 12 14:40	11° \mathbb{L} 34'39	0.63501 AU
	16289 Apr 27 11:01	30° \mathbb{L} 8		inferior conj	16290 Apr 15 09:51	8° \mathbb{L} 43'45	-0°04'22
asc. node	16289 Apr 28 18:07	28° \mathbb{L} 42'15		minimum elong	16290 Apr 15 10:00	8° \mathbb{L} 43'23	0°04'41
min. Earth dist.	16289 Apr 29 15:45	27° \mathbb{L} 44'04	0.65450 AU	transit middle	16290 Apr 15 10:00	8° \mathbb{L} 43'23	0°04'41
inferior conj	16289 May 01 23:26	25° \mathbb{L} 06'36	0°58'43	transit begin	16290 Apr 15 06:58	8° \mathbb{L} 51'07	
minimum elong	16289 May 01 21:57	25° \mathbb{L} 10'49	0°57'39	transit end	16290 Apr 15 13:01	8° \mathbb{L} 35'39	
morning rise	16289 May 08 03:17	19° \mathbb{L} 35'46		asc. node	16290 Apr 15 15:23	8° \mathbb{L} 29'38	
direct	16289 May 10 22:36	18° \mathbb{L} 53'32		morning rise	16290 Apr 22 02:26	3° \mathbb{L} 28'13	
morning max el	16289 May 17 05:48	22° \mathbb{L} 09'38	18°00'35	direct	16290 Apr 24 13:18	2° \mathbb{L} 58'45	
	16289 May 23 12:26	0° \mathbb{L}		morning max el	16290 Apr 30 23:19	6° \mathbb{L} 14'51	17°46'51
desc. node	16289 May 31 08:55	12° \mathbb{L} 17'25			16290 May 16 18:37	0° \mathbb{L}	
morning set	16289 Jun 04 12:23	19° \mathbb{L} 02'54		morning set	16290 May 17 11:58	1° \mathbb{L} 14'12	
	16289 Jun 11 06:20	0° \mathbb{L}		desc. node	16290 May 18 05:49	2° \mathbb{L} 30'34	
superior conj	16289 Jun 19 00:26	12° \mathbb{L} 20'54	-1°57'34	superior conj	16290 May 30 05:04	22° \mathbb{L} 33'08	-1°26'58
minimum elong	16289 Jun 18 16:25	11° \mathbb{L} 49'19	1°57'40	minimum elong	16290 May 29 21:13	22° \mathbb{L} 01'07	1°26'43
max. Earth dist.	16289 Jun 22 04:44	17° \mathbb{L} 20'24	1.45817 AU		16290 Jun 03 19:57	0° \mathbb{L}	
	16289 Jun 30 08:21	0° \mathbb{L}		max. Earth dist.	16290 Jun 04 23:54	1° \mathbb{L} 51'11	1.44912 AU
evening rise	16289 Jul 05 03:07	7° \mathbb{L} 21'51		evening rise	16290 Jun 14 13:33	16° \mathbb{L} 45'31	
greatest brilliancy	16289 Jul 18 06:34	27° \mathbb{L} 17'05	-0.7m		16290 Jun 23 08:05	0° \mathbb{L}	
	16289 Jul 20 03:14	0° \mathbb{L}		asc. node	16290 Jul 12 14:16	26° \mathbb{L} 00'02	
asc. node	16289 Jul 25 17:26	7° \mathbb{L} 40'37		evening max el	16290 Jul 13 04:20	26° \mathbb{L} 35'47	20°28'59
evening max el	16289 Jul 30 02:07	12° \mathbb{L} 41'18	19°28'16		16290 Jul 17 09:28	0° \mathbb{L}	
retrograde	16289 Aug 06 05:44	16° \mathbb{L} 39'55					

retrograde	16290 Jul 21 04:47	1° \mathbb{M} 10'30		asc. node	16291 Jun 29 11:08	13° Ω 30'26	
	16290 Jul 24 17:29	30° $\mathbb{R}\Omega$		retrograde	16291 Jul 05 03:21	15° Ω 47'55	
evening set	16290 Jul 25 07:50	29° Ω 33'47		evening set	16291 Jul 09 17:32	13° Ω 54'02	
inferior conj	16290 Jul 30 13:48	23° Ω 28'33	3°05'41	inferior conj	16291 Jul 14 23:05	7° Ω 38'26	3°07'50
minimum elong	16290 Jul 30 14:29	23° Ω 26'12	3°05'11	minimum elong	16291 Jul 14 22:49	7° Ω 39'23	3°07'14
min. Earth dist.	16290 Jul 31 06:47	22° Ω 30'11	0.68529 AU	min. Earth dist.	16291 Jul 15 02:45	7° Ω 25'38	0.69073 AU
morning rise	16290 Aug 04 20:50	17° Ω 05'13		morning rise	16291 Jul 20 03:54	1° Ω 21'00	
direct	16290 Aug 10 06:43	14° Ω 43'47			16291 Jul 22 02:43	30° $\mathbb{R}\mathfrak{S}$	
desc. node	16290 Aug 14 04:23	15° Ω 44'17		direct	16291 Jul 25 01:36	29° \mathfrak{S} 15'25	
morning max el	16290 Aug 21 08:22	21° Ω 20'19	23°58'41		16291 Jul 28 05:53	0° Ω	
	16290 Aug 28 20:24	0° \mathbb{M}		desc. node	16291 Aug 01 01:40	2° Ω 28'19	
	16290 Sep 18 12:55	0° \mathfrak{L}		morning max el	16291 Aug 03 20:50	5° Ω 02'18	22°29'44
morning set	16290 Sep 25 13:15	11° \mathfrak{L} 35'34			16291 Aug 23 01:29	0° \mathbb{M}	
max. Earth dist.	16290 Sep 29 07:07	18° \mathfrak{L} 06'00	1.38578 AU	morning set	16291 Sep 06 08:50	22° \mathbb{M} 05'33	
	16290 Oct 05 19:35	0° \mathbb{M}			16291 Sep 11 03:44	0° \mathfrak{L}	
				max. Earth dist.	16291 Sep 11 07:50	0° \mathfrak{L} 17'13	1.40967 AU
superior conj	16290 Oct 06 18:36	1° \mathbb{M} 48'43	-0°16'33	superior conj	16291 Sep 19 04:44	13° \mathfrak{L} 57'59	-0°53'14
minimum elong	16290 Oct 06 19:45	1° \mathbb{M} 54'10	0°16'02	minimum elong	16291 Sep 19 09:00	14° \mathfrak{L} 17'04	0°52'26
behind sun begin	16290 Oct 06 18:54	1° \mathbb{M} 50'08		asc. node	16291 Sep 25 12:04	25° \mathfrak{L} 31'10	
behind sun end	16290 Oct 06 20:36	1° \mathbb{M} 58'12			16291 Sep 27 21:25	0° \mathbb{M}	
asc. node	16290 Oct 08 15:21	5° \mathbb{M} 22'28		evening rise	16291 Sep 29 07:27	2° \mathbb{M} 40'00	
evening rise	16290 Oct 15 15:38	19° \mathbb{M} 06'04		evening max el	16291 Oct 15 05:03	28° \mathbb{M} 12'29	18°20'28
	16290 Oct 21 07:41	0° \mathfrak{J}			16291 Oct 17 06:14	0° \mathfrak{J}	
evening max el	16290 Nov 01 00:15	15° \mathfrak{J} 52'19	18°58'31	retrograde	16291 Oct 22 18:40	2° \mathfrak{J} 03'44	
retrograde	16290 Nov 09 19:19	20° \mathfrak{J} 18'22		evening set	16291 Oct 24 19:20	1° \mathfrak{J} 47'49	
desc. node	16290 Nov 10 01:44	20° \mathfrak{J} 18'08		desc. node	16291 Oct 27 22:55	0° \mathfrak{J} 26'12	
evening set	16290 Nov 11 16:41	20° \mathfrak{J} 06'53			16291 Oct 28 15:54	30° $\mathbb{R}\mathbb{M}$	
inferior conj	16290 Nov 20 00:25	15° \mathfrak{J} 50'00	-3°09'00	inferior conj	16291 Nov 01 10:27	27° \mathbb{M} 09'51	-1°26'40
minimum elong	16290 Nov 19 16:43	16° \mathfrak{J} 03'28	3°05'29	minimum elong	16291 Nov 01 07:08	27° \mathbb{M} 16'37	1°24'47
min. Earth dist.	16290 Nov 22 21:46	13° \mathfrak{J} 49'08	0.56390 AU	min. Earth dist.	16291 Nov 04 16:23	24° \mathbb{M} 31'25	0.58384 AU
morning rise	16290 Nov 27 14:00	11° \mathfrak{J} 07'35		morning rise	16291 Nov 08 15:27	21° \mathbb{M} 50'34	
direct	16290 Dec 03 09:31	9° \mathfrak{J} 47'58		direct	16291 Nov 15 00:25	20° \mathbb{M} 03'54	
morning max el	16290 Dec 17 12:55	17° \mathfrak{J} 03'01	26°07'18	morning max el	16291 Nov 29 07:14	27° \mathbb{M} 40'36	27°20'32
	16290 Dec 28 03:52	0° \mathfrak{Z}			16291 Dec 01 13:35	0° \mathfrak{J}	
asc. node	16291 Jan 04 15:09	12° \mathfrak{Z} 07'23			16291 Dec 21 19:48	0° \mathfrak{Z}	
	16291 Jan 13 17:38	0° \approx		asc. node	16291 Dec 22 12:15	1° \mathfrak{Z} 16'55	
morning set	16291 Jan 14 18:40	2° \approx 14'00		morning set	16291 Dec 30 03:04	16° \mathfrak{Z} 37'33	
					16292 Jan 05 04:57	0° \approx	
superior conj	16291 Jan 21 12:11	17° \approx 06'12	1°37'40	superior conj	16292 Jan 05 23:35	1° \approx 44'23	1°37'08
minimum elong	16291 Jan 21 12:38	17° \approx 08'37	1°38'11	minimum elong	16292 Jan 05 22:57	1° \approx 40'54	1°37'45
max. Earth dist.	16291 Jan 22 14:14	19° \approx 31'02	1.31386 AU	max. Earth dist.	16292 Jan 05 21:40	1° \approx 33'40	1.30988 AU
	16291 Jan 27 09:35	0° \mathfrak{H}		evening rise	16292 Jan 12 18:14	16° \approx 42'14	
evening rise	16291 Jan 28 13:11	2° \mathfrak{H} 25'51			16292 Jan 19 06:57	0° \mathfrak{H}	
desc. node	16291 Feb 06 01:30	19° \mathfrak{H} 07'21		desc. node	16292 Jan 23 22:14	8° \mathfrak{H} 29'16	
	16291 Feb 12 10:12	0° \mathbb{Y}			16292 Feb 07 19:16	0° \mathbb{Y}	
evening max el	16291 Mar 01 14:02	22° \mathbb{Y} 17'05	27°29'36	evening max el	16292 Feb 11 16:35	4° \mathbb{Y} 03'54	26°49'53
retrograde	16291 Mar 15 14:02	29° \mathbb{Y} 42'00		retrograde	16292 Feb 25 17:27	11° \mathbb{Y} 18'23	
evening set	16291 Mar 22 08:50	27° \mathbb{Y} 33'49		evening set	16292 Mar 03 05:19	9° \mathbb{Y} 32'24	
min. Earth dist.	16291 Mar 26 03:43	24° \mathbb{Y} 42'07	0.61311 AU	min. Earth dist.	16292 Mar 07 06:34	6° \mathbb{Y} 53'10	0.59045 AU
inferior conj	16291 Mar 29 07:13	21° \mathbb{Y} 52'33	-1°21'24	inferior conj	16292 Mar 10 11:44	4° \mathbb{Y} 22'18	-2°49'48
minimum elong	16291 Mar 29 10:08	21° \mathbb{Y} 45'58	1°20'25	minimum elong	16292 Mar 10 18:15	4° \mathbb{Y} 09'30	2°47'20
asc. node	16291 Apr 02 12:38	18° \mathbb{Y} 26'46			16292 Mar 17 14:24	30° $\mathbb{R}\mathfrak{H}$	
morning rise	16291 Apr 05 14:46	16° \mathbb{Y} 55'13		morning rise	16292 Mar 18 10:49	29° \mathfrak{H} 45'33	
direct	16291 Apr 07 18:35	16° \mathbb{Y} 35'11		asc. node	16292 Mar 19 09:55	29° \mathfrak{H} 35'09	
morning max el	16291 Apr 14 16:09	20° \mathbb{Y} 02'59	17°51'04	direct	16292 Mar 20 10:06	29° \mathfrak{H} 31'25	
	16291 Apr 22 02:06	0° \mathfrak{B}			16292 Mar 23 03:49	0° \mathbb{Y}	
morning set	16291 Apr 30 08:34	14° \mathfrak{B} 23'51		morning max el	16292 Mar 28 04:37	3° \mathbb{Y} 22'37	18°14'26
desc. node	16291 May 05 02:41	22° \mathfrak{B} 54'24		morning set	16292 Apr 12 20:27	28° \mathbb{Y} 14'21	
	16291 May 09 03:38	0° \mathbb{I}			16292 Apr 13 18:52	0° \mathfrak{B}	
superior conj	16291 May 11 08:58	3° \mathbb{I} 49'38	-0°49'44	desc. node	16292 Apr 20 23:28	13° \mathfrak{B} 24'10	
minimum elong	16291 May 11 04:29	3° \mathbb{I} 30'31	0°49'38	superior conj	16292 Apr 22 11:08	16° \mathfrak{B} 06'05	-0°12'23
max. Earth dist.	16291 May 18 15:10	15° \mathbb{I} 56'12	1.43373 AU	minimum elong	16292 Apr 22 10:09	16° \mathfrak{B} 01'35	0°12'39
evening rise	16291 May 25 06:58	26° \mathbb{I} 33'30		behind sun begin	16292 Apr 22 05:32	15° \mathfrak{B} 40'47	
	16291 May 27 12:07	0° \mathfrak{S}		behind sun end	16292 Apr 22 14:45	16° \mathfrak{B} 22'22	
	16291 Jun 17 04:36	0° Ω					
evening max el	16291 Jun 26 00:33	10° Ω 29'33	21°41'40				

max. Earth dist.	16292 Apr 30 01:18	29°♄22'12	1.41360 AU	minimum elong	16293 Apr 05 08:59	29°♄17'21	0°20'44
	16292 Apr 30 10:16	0°♄			16293 Apr 05 17:57	0°♄	
evening rise	16292 May 04 18:41	7°♄12'19		desc. node	16293 Apr 07 20:12	3°♄56'04	
	16292 May 19 14:47	0°♄		max. Earth dist.	16293 Apr 12 07:56	12°♄06'19	1.39097 AU
evening max el	16292 Jun 07 16:25	24°♄23'48	23°01'47	evening rise	16293 Apr 16 03:47	18°♄46'43	
asc. node	16292 Jun 15 08:02	29°♄56'33			16293 Apr 22 22:47	0°♄	
	16292 Jun 15 11:55	0°♄			16293 May 13 21:18	0°♄	
retrograde	16292 Jun 17 23:52	0°♄26'52		evening max el	16293 May 21 06:17	8°♄19'22	24°23'10
	16292 Jun 20 08:23	30°♄		retrograde	16293 Jun 01 17:03	15°♄00'58	
evening set	16292 Jun 23 01:35	28°♄17'42		asc. node	16293 Jun 02 05:03	14°♄59'55	
inferior conj	16292 Jun 28 09:05	21°♄53'51	2°59'23	evening set	16293 Jun 07 06:22	12°♄39'29	
minimum elong	16292 Jun 28 07:55	21°♄57'53	2°58'35	min. Earth dist.	16293 Jun 11 19:32	7°♄25'32	0.68694 AU
min. Earth dist.	16292 Jun 27 23:44	22°♄26'17	0.69126 AU	inferior conj	16293 Jun 12 17:53	6°♄10'18	2°40'27
morning rise	16292 Jul 03 14:10	15°♄44'07		minimum elong	16293 Jun 12 16:02	6°♄16'32	2°39'24
direct	16292 Jul 07 23:45	13°♄57'02		morning rise	16293 Jun 18 01:48	0°♄09'42	
morning max el	16292 Jul 16 13:24	18°♄53'11	21°06'22		16293 Jun 18 07:08	30°♄	
desc. node	16292 Jul 17 22:55	20°♄20'17		direct	16293 Jun 21 23:45	28°♄42'10	
	16292 Jul 25 18:20	0°♄			16293 Jun 25 22:53	0°♄	
	16292 Aug 15 04:13	0°♄		morning max el	16293 Jun 29 12:29	2°♄54'20	19°54'20
morning set	16292 Aug 16 05:13	1°♄37'21		desc. node	16293 Jul 04 20:07	9°♄02'12	
max. Earth dist.	16292 Aug 23 14:08	13°♄21'09	1.43107 AU		16293 Jul 19 11:58	0°♄	
				morning set	16293 Jul 26 10:34	10°♄33'06	
superior conj	16292 Aug 30 17:58	25°♄13'28	-1°29'17	max. Earth dist.	16293 Aug 06 03:17	27°♄12'45	1.44763 AU
minimum elong	16292 Aug 31 01:12	25°♄44'08	1°28'31		16293 Aug 07 21:23	0°♄	
	16292 Sep 02 13:01	0°♄					
evening rise	16292 Sep 11 10:06	15°♄39'12		superior conj	16293 Aug 11 07:43	5°♄30'18	-1°58'35
asc. node	16292 Sep 11 08:45	15°♄33'06		minimum elong	16293 Aug 11 15:10	6°♄00'25	1°58'24
	16292 Sep 19 14:54	0°♄		evening rise	16293 Aug 24 18:28	27°♄50'19	
evening max el	16292 Sep 27 16:54	11°♄09'17	18°02'54		16293 Aug 26 01:01	0°♄	
retrograde	16292 Oct 04 11:20	14°♄38'26		asc. node	16293 Aug 29 05:26	5°♄23'41	
evening set	16292 Oct 06 19:03	14°♄13'54		evening max el	16293 Sep 11 07:41	24°♄31'50	18°04'15
inferior conj	16292 Oct 13 17:03	9°♄15'29	0°02'28	retrograde	16293 Sep 17 17:07	27°♄52'23	
minimum elong	16292 Oct 13 17:08	9°♄15'16	0°02'49	evening set	16293 Sep 20 09:13	27°♄15'39	
transit middle	16292 Oct 13 17:08	9°♄15'16	0°02'49	inferior conj	16293 Sep 26 16:29	21°♄58'58	1°12'37
transit begin	16292 Oct 13 13:54	9°♄22'55		minimum elong	16293 Sep 26 18:21	21°♄54'00	1°12'10
transit end	16292 Oct 13 20:22	9°♄07'36		min. Earth dist.	16293 Sep 29 10:02	19°♄04'22	0.62926 AU
desc. node	16292 Oct 13 20:11	9°♄08'03		desc. node	16293 Sep 30 17:31	17°♄46'28	
min. Earth dist.	16292 Oct 16 20:16	6°♄18'49	0.60656 AU	morning rise	16293 Oct 03 01:14	15°♄48'21	
morning rise	16292 Oct 20 12:07	3°♄25'50		direct	16293 Oct 09 17:25	13°♄20'50	
direct	16292 Oct 27 03:53	1°♄15'12		morning max el	16293 Oct 23 17:09	21°♄18'44	27°52'35
morning max el	16292 Nov 10 09:20	9°♄06'42	27°56'03		16293 Oct 31 07:06	0°♄	
	16292 Nov 26 12:07	0°♄			16293 Nov 19 15:01	0°♄	
asc. node	16292 Dec 08 09:18	20°♄50'49		asc. node	16293 Nov 25 06:17	10°♄41'34	
	16292 Dec 12 22:18	0°♄		morning set	16293 Nov 27 03:44	14°♄29'23	
morning set	16292 Dec 13 06:49	0°♄44'31		max. Earth dist.	16293 Dec 02 06:05	25°♄10'30	1.31866 AU
max. Earth dist.	16292 Dec 19 04:12	13°♄29'35	1.31145 AU		16293 Dec 04 11:23	0°♄	
superior conj	16292 Dec 20 10:26	16°♄17'47	1°30'34	superior conj	16293 Dec 04 18:50	0°♄40'46	1°17'54
minimum elong	16292 Dec 20 08:53	16°♄09'07	1°31'08	minimum elong	16293 Dec 04 16:38	0°♄28'42	1°18'19
	16292 Dec 26 14:44	0°♄		evening rise	16293 Dec 11 13:32	15°♄33'35	
evening rise	16292 Dec 27 02:58	1°♄06'25			16293 Dec 18 14:42	0°♄	
desc. node	16293 Jan 09 19:02	27°♄15'11		desc. node	16293 Dec 27 15:56	15°♄12'02	
	16293 Jan 11 12:45	0°♄		evening max el	16294 Jan 04 22:27	25°♄09'15	24°00'03
evening max el	16293 Jan 23 11:09	14°♄58'18	25°36'48		16294 Jan 11 10:13	0°♄	
retrograde	16293 Feb 06 09:09	21°♄58'47		retrograde	16294 Jan 18 11:07	1°♄51'57	
evening set	16293 Feb 12 05:56	20°♄39'51		evening set	16294 Jan 23 08:04	1°♄00'26	
min. Earth dist.	16293 Feb 17 00:03	17°♄59'25	0.56961 AU		16294 Jan 25 18:51	30°♄	
inferior conj	16293 Feb 19 20:08	16°♄04'08	-4°20'18	min. Earth dist.	16294 Jan 29 10:01	28°♄01'54	0.55344 AU
minimum elong	16293 Feb 20 05:25	15°♄48'22	4°17'17	inferior conj	16294 Jan 31 07:30	26°♄53'59	-5°33'23
morning rise	16293 Feb 28 07:49	11°♄48'35		minimum elong	16294 Jan 31 15:11	26°♄42'31	5°31'39
direct	16293 Mar 02 07:54	11°♄36'25		morning rise	16294 Feb 08 23:59	22°♄57'07	
asc. node	16293 Mar 06 07:15	12°♄27'12		direct	16294 Feb 11 10:19	22°♄42'06	
morning max el	16293 Mar 11 08:36	16°♄01'56	18°58'46	asc. node	16294 Feb 21 04:35	27°♄04'25	
	16293 Mar 21 04:18	0°♄		morning max el	16294 Feb 21 23:56	27°♄49'39	20°06'04
morning set	16293 Mar 27 18:54	12°♄31'56			16294 Feb 24 01:03	0°♄	
				morning set	16294 Mar 12 00:23	27°♄06'23	
superior conj	16293 Apr 05 07:39	29°♄11'03	0°21'14		16294 Mar 13 10:20	0°♄	

superior conj	16294 Mar 19 18:14	12° Υ 53'14	0°49'12	superior conj	16295 Mar 03 14:59	27° X 01'09	1°10'52
minimum elong	16294 Mar 19 20:37	13° Υ 05'08	0°48'43	minimum elong	16295 Mar 03 17:27	27° X 14'04	1°10'38
max. Earth dist.	16294 Mar 25 14:51	24° Υ 16'56	1.36826 AU		16295 Mar 05 01:27	0° Υ	
desc. node	16294 Mar 25 16:55	24° Υ 26'40		max. Earth dist.	16295 Mar 08 01:59	6° Υ 08'20	1.34761 AU
	16294 Mar 28 17:00	0° B		evening rise	16295 Mar 12 05:17	14° Υ 12'06	
evening rise	16294 Mar 29 08:30	1° B 10'09		desc. node	16295 Mar 12 13:36	14° Υ 51'27	
	16294 Apr 16 02:31	0° Π			16295 Mar 21 01:19	0° B	
evening max el	16294 May 03 19:54	22° Π 13'54	25°38'40		16295 Apr 10 20:37	0° Π	
retrograde	16294 May 16 05:50	29° Π 23'54		evening max el	16295 Apr 16 09:35	5° Π 59'50	26°40'59
asc. node	16294 May 20 02:09	28° Π 23'59		retrograde	16295 Apr 29 13:20	13° Π 26'58	
evening set	16294 May 22 06:13	26° Π 54'03		evening set	16295 May 05 23:14	10° Π 54'09	
min. Earth dist.	16294 May 26 12:04	22° Π 16'56	0.67786 AU	asc. node	16295 May 06 23:19	10° Π 02'10	
inferior conj	16294 May 27 23:31	20° Π 23'36	2°10'33	min. Earth dist.	16295 May 09 23:13	6° Π 52'02	0.66424 AU
minimum elong	16294 May 27 21:21	20° Π 30'35	2°09'18	inferior conj	16295 May 11 23:47	4° Π 27'38	1°28'42
morning rise	16294 Jun 02 12:59	14° Π 33'26		minimum elong	16295 May 11 21:49	4° Π 33'29	1°27'28
direct	16294 Jun 05 23:56	13° Π 25'01			16295 May 16 05:06	30° R B	
morning max el	16294 Jun 12 18:54	17° Π 05'05	18°57'10	morning rise	16295 May 17 21:36	28° B 49'29	
desc. node	16294 Jun 21 17:13	28° Π 21'00		direct	16295 May 20 22:20	27° B 58'30	
	16294 Jun 22 20:28	0° B			16295 May 25 19:19	0° Π	
greatest brilliancy	16294 Jun 26 01:04	4° B 45'09	-0.7m	morning max el	16295 May 27 07:31	1° Π 19'35	18°16'21
morning set	16294 Jul 05 19:20	19° B 43'46		desc. node	16295 Jun 08 14:15	18° Π 06'16	
	16294 Jul 12 10:26	0° Ω		morning set	16295 Jun 16 00:57	29° Π 55'28	
max. Earth dist.	16294 Jul 19 21:40	11° Ω 37'33	1.45763 AU		16295 Jun 16 02:05	0° B	
superior conj	16294 Jul 22 01:08	14° Ω 59'02	-2°13'35	superior conj	16295 Jul 01 10:14	24° B 12'04	-2°08'57
minimum elong	16294 Jul 22 03:24	15° Ω 07'53	2°14'05	minimum elong	16295 Jul 01 04:50	23° B 51'00	2°09'23
	16294 Jul 31 12:47	0° B		max. Earth dist.	16295 Jul 02 18:03	26° B 16'06	1.46013 AU
evening rise	16294 Aug 06 03:37	9° B 02'16			16295 Jul 05 03:33	0° Ω	
asc. node	16294 Aug 16 02:09	24° B 58'20		evening rise	16295 Jul 17 11:46	19° Ω 12'13	
	16294 Aug 19 09:58	0° B			16295 Jul 24 10:37	0° B	
evening max el	16294 Aug 25 21:58	8° B 11'40	18°23'28	greatest brilliancy	16295 Jul 27 22:05	5° B 19'51	-0.8m
retrograde	16294 Sep 01 07:50	11° B 37'04		asc. node	16295 Aug 02 22:55	14° B 10'44	
evening set	16294 Sep 04 08:53	10° B 45'25		evening max el	16295 Aug 09 08:56	22° B 01'28	18°59'56
inferior conj	16294 Sep 10 04:51	5° B 12'50	2°03'56	retrograde	16295 Aug 16 03:54	25° B 44'48	
minimum elong	16294 Sep 10 07:10	5° B 05'58	2°03'17	evening set	16295 Aug 19 14:29	24° B 36'23	
min. Earth dist.	16294 Sep 12 09:28	2° B 37'26	0.64987 AU	inferior conj	16295 Aug 25 02:34	18° B 50'01	2°38'42
	16294 Sep 14 20:35	30° R B		minimum elong	16295 Aug 25 04:33	18° B 43'41	2°38'06
morning rise	16294 Sep 16 04:02	28° B 50'20		min. Earth dist.	16295 Aug 26 17:19	16° B 46'14	0.66699 AU
desc. node	16294 Sep 17 14:51	27° B 47'30		morning rise	16295 Aug 30 17:48	12° B 23'03	
direct	16294 Sep 22 15:27	26° B 14'21		desc. node	16295 Sep 04 12:11	9° B 54'13	
	16294 Oct 01 12:44	0° B		direct	16295 Sep 05 20:54	9° B 46'58	
morning max el	16294 Oct 06 04:05	4° B 08'06	27°14'44	morning max el	16295 Sep 18 15:45	17° B 22'58	26°10'29
	16294 Oct 25 19:10	0° B			16295 Sep 29 05:39	0° B	
morning set	16294 Nov 10 15:08	27° B 46'13			16295 Oct 18 17:37	0° B	
	16294 Nov 11 18:23	0° B		morning set	16295 Oct 24 13:48	10° B 28'31	
asc. node	16294 Nov 12 03:12	0° B 43'45		max. Earth dist.	16295 Oct 28 08:08	17° B 37'28	1.34970 AU
max. Earth dist.	16294 Nov 14 23:57	6° B 31'26	1.33155 AU	asc. node	16295 Oct 30 00:04	20° B 53'07	
superior conj	16294 Nov 18 22:37	14° B 47'37	0°59'02	superior conj	16295 Nov 02 19:16	28° B 32'42	0°34'01
minimum elong	16294 Nov 18 20:15	14° B 35'04	0°59'17	minimum elong	16295 Nov 02 17:29	28° B 23'34	0°34'14
evening rise	16294 Nov 26 00:06	29° B 59'06			16295 Nov 03 12:15	0° B	
	16294 Nov 26 00:16	0° B		evening rise	16295 Nov 10 08:45	14° B 18'46	
	16294 Dec 12 21:15	0° \approx			16295 Nov 18 07:46	0° B	
desc. node	16294 Dec 14 12:53	2° \approx 01'51		evening max el	16295 Nov 29 03:42	15° B 21'42	20°43'23
evening max el	16294 Dec 17 08:37	5° \approx 03'51	22°16'31	desc. node	16295 Dec 01 09:54	17° B 23'01	
retrograde	16294 Dec 30 01:05	11° \approx 20'18		retrograde	16295 Dec 10 11:05	20° B 58'24	
evening set	16295 Jan 02 15:31	10° \approx 51'40		evening set	16295 Dec 12 22:38	20° B 43'24	
min. Earth dist.	16295 Jan 10 15:40	7° \approx 15'12	0.54467 AU	inferior conj	16295 Dec 21 17:33	16° B 50'57	-5°30'03
inferior conj	16295 Jan 11 02:32	6° \approx 59'59	-6°02'17	minimum elong	16295 Dec 21 09:05	17° B 03'07	5°27'48
minimum elong	16295 Jan 11 02:12	7° \approx 00'26	6°01'42	min. Earth dist.	16295 Dec 22 21:05	16° B 11'16	0.54513 AU
morning rise	16295 Jan 19 13:52	3° \approx 12'39		morning rise	16295 Dec 29 19:25	12° B 55'20	
direct	16295 Jan 22 21:13	2° \approx 48'14		direct	16296 Jan 03 04:52	12° B 13'47	
morning max el	16295 Feb 04 00:10	8° \approx 39'48	21°36'16	morning max el	16296 Jan 16 12:14	18° B 44'40	23°23'06
asc. node	16295 Feb 08 01:55	13° \approx 11'04		asc. node	16296 Jan 25 23:11	0° \approx 28'38	
	16295 Feb 18 13:36	0° X			16296 Jan 25 15:36	0° \approx	
morning set	16295 Feb 24 10:04	11° X 48'35		morning set	16296 Feb 08 21:46	26° \approx 32'08	
					16296 Feb 10 12:25	0° X	

superior conj	16296 Feb 15 18:50	11° H 26'15	1°26'10	asc. node	16297 Jan 11 20:23	18° Z 39'54	
minimum elong	16296 Feb 15 20:46	11° H 36'41	1°26'16		16297 Jan 18 00:03	0° Z	
max. Earth dist.	16296 Feb 18 20:12	17° H 57'42	1.33072 AU	morning set	16297 Jan 23 09:34	11° Z 11'24	
evening rise	16296 Feb 23 14:44	27° H 44'03					
	16296 Feb 24 18:20	0° Y		superior conj	16297 Jan 30 03:13	26° Z 00'53	1°35'14
desc. node	16296 Feb 27 10:18	5° Y 06'20		minimum elong	16297 Jan 30 04:15	26° Z 06'35	1°35'37
	16296 Mar 13 07:08	0° Z			16297 Jan 31 22:42	0° H	
evening max el	16296 Mar 28 22:49	19° Z 28'07	27°22'38	max. Earth dist.	16297 Jan 31 21:36	29° Z 53'59	1.31854 AU
retrograde	16296 Apr 11 14:40	27° Z 01'19		evening rise	16297 Feb 06 09:46	11° H 38'09	
evening set	16296 Apr 18 07:19	24° Z 32'17		desc. node	16297 Feb 13 07:01	25° H 06'00	
min. Earth dist.	16296 Apr 22 03:08	21° Z 01'50	0.64660 AU		16297 Feb 16 00:12	0° Y	
asc. node	16296 Apr 22 20:32	20° Z 15'28			16297 Mar 08 23:57	0° Z	
inferior conj	16296 Apr 24 16:06	18° Z 16'39	0°33'42	evening max el	16297 Mar 11 10:03	2° Z 27'07	27°36'37
minimum elong	16296 Apr 24 15:10	18° Z 19'10	0°32'53	retrograde	16297 Mar 25 08:37	9° Z 56'57	
morning rise	16296 May 01 01:05	12° Z 52'15		evening set	16297 Apr 01 03:58	7° Z 39'20	
direct	16296 May 03 16:33	12° Z 15'59		min. Earth dist.	16297 Apr 04 22:11	4° Z 35'19	0.62582 AU
morning max el	16296 May 10 00:04	15° Z 30'45	17°52'34	inferior conj	16297 Apr 07 21:24	1° Z 42'55	-0°35'23
	16296 May 20 11:56	0° II		minimum elong	16297 Apr 07 22:35	1° Z 40'03	0°35'13
desc. node	16296 May 25 11:12	8° II 10'54		asc. node	16297 Apr 09 17:47	29° Y 58'07	
morning set	16296 May 27 09:51	11° II 24'58			16297 Apr 09 16:57	30° R Y	
	16296 Jun 07 17:40	0° Z		morning rise	16297 Apr 14 20:08	26° Y 34'42	
				direct	16297 Apr 17 03:39	26° Y 09'47	
superior conj	16296 Jun 10 03:59	3° Z 53'31	-1°45'54	morning max el	16297 Apr 23 17:42	29° Y 29'51	17°46'23
minimum elong	16296 Jun 09 19:24	3° Z 19'15	1°45'48		16297 Apr 24 05:43	0° Z	
max. Earth dist.	16296 Jun 14 13:50	10° Z 52'18	1.45514 AU	morning set	16297 May 09 19:11	24° Z 03'41	
evening rise	16296 Jun 26 01:42	28° Z 40'19		desc. node	16297 May 12 08:06	28° Z 29'18	
	16296 Jun 26 22:33	0° Z			16297 May 13 04:59	0° II	
greatest brilliancy	16296 Jul 10 17:13	20° Z 38'05	-0.6m				
	16296 Jul 17 11:58	0° H		superior conj	16297 May 21 18:18	14° II 32'56	-1°11'33
asc. node	16296 Jul 19 19:41	2° H 52'22		minimum elong	16297 May 21 11:43	14° II 05'33	1°11'18
evening max el	16296 Jul 22 14:35	5° H 55'12	19°52'27	max. Earth dist.	16297 May 28 07:12	25° II 12'50	1.44325 AU
retrograde	16296 Jul 30 02:29	10° H 08'24			16297 May 31 07:27	0° Z	
evening set	16296 Aug 02 23:15	8° H 42'14		evening rise	16297 Jun 05 13:15	8° Z 10'13	
inferior conj	16296 Aug 08 06:38	2° H 43'36	2°59'24		16297 Jun 20 04:12	0° Z	
minimum elong	16296 Aug 08 07:51	2° H 39'31	2°58'53	evening max el	16297 Jul 05 14:15	19° Z 50'14	20°58'44
min. Earth dist.	16296 Aug 09 07:32	1° H 19'44	0.67992 AU	asc. node	16297 Jul 06 16:31	20° Z 53'06	
	16296 Aug 10 07:47	30° R Z		retrograde	16297 Jul 14 01:27	24° Z 42'46	
morning rise	16296 Aug 13 15:59	26° Z 17'43		evening set	16297 Jul 18 09:08	22° Z 58'48	
direct	16296 Aug 19 08:35	23° Z 48'57		inferior conj	16297 Jul 23 14:39	16° Z 49'11	3°07'55
desc. node	16296 Aug 21 09:31	24° Z 05'29		minimum elong	16297 Jul 23 14:55	16° Z 48'13	3°07'23
	16296 Aug 30 06:01	0° H		min. Earth dist.	16297 Jul 24 02:01	16° Z 09'46	0.68823 AU
morning max el	16296 Aug 31 02:48	0° H 51'30	24°49'12	morning rise	16297 Jul 28 20:26	10° Z 28'02	
	16296 Sep 22 04:01	0° Z		direct	16297 Aug 03 01:16	8° Z 12'36	
morning set	16296 Oct 05 19:42	22° Z 26'23		desc. node	16297 Aug 08 06:48	10° Z 01'05	
max. Earth dist.	16296 Oct 09 08:24	28° Z 46'16	1.37195 AU	morning max el	16297 Aug 13 13:57	14° Z 28'34	23°20'30
	16296 Oct 10 00:29	0° H			16297 Aug 26 05:28	0° H	
asc. node	16296 Oct 15 20:50	11° H 05'03			16297 Sep 15 01:49	0° Z	
				morning set	16297 Sep 17 04:42	3° Z 30'27	
superior conj	16296 Oct 16 05:36	11° H 47'50	0°03'18	max. Earth dist.	16297 Sep 21 07:06	10° Z 28'29	1.39613 AU
minimum elong	16296 Oct 16 05:21	11° H 46'40	0°03'40				
behind sun begin	16296 Oct 15 22:54	11° H 15'10		superior conj	16297 Sep 29 01:50	24° Z 24'28	-0°31'55
behind sun end	16296 Oct 16 11:49	12° H 18'15		minimum elong	16297 Sep 29 04:13	24° Z 35'30	0°31'15
evening rise	16296 Oct 24 13:08	28° H 26'14			16297 Oct 02 01:30	0° H	
	16296 Oct 25 07:47	0° Z		asc. node	16297 Oct 02 17:34	1° H 16'14	
evening max el	16296 Nov 10 13:12	26° Z 26'41	19°30'21	evening rise	16297 Oct 08 10:31	12° H 15'00	
	16296 Nov 15 05:07	0° Z			16297 Oct 18 04:25	0° Z	
desc. node	16296 Nov 17 06:59	0° Z 50'56		evening max el	16297 Oct 24 12:05	8° Z 21'45	18°39'43
retrograde	16296 Nov 20 05:11	1° Z 16'53		retrograde	16297 Nov 01 17:08	12° Z 31'02	
evening set	16296 Nov 22 04:02	1° Z 05'56		evening set	16297 Nov 03 15:23	12° Z 18'05	
	16296 Nov 25 13:33	30° R Z		desc. node	16297 Nov 04 04:07	12° Z 10'09	
inferior conj	16296 Nov 30 19:03	27° Z 00'39	-4°07'33	inferior conj	16297 Nov 11 16:24	7° Z 52'23	-2°24'40
minimum elong	16296 Nov 30 09:27	27° Z 16'04	4°03'47	minimum elong	16297 Nov 11 10:34	8° Z 03'17	2°21'46
min. Earth dist.	16296 Dec 03 05:20	25° Z 27'13	0.55487 AU	min. Earth dist.	16297 Nov 14 19:09	5° Z 33'32	0.57196 AU
morning rise	16296 Dec 08 12:55	22° Z 38'34		morning rise	16297 Nov 19 02:34	2° Z 54'19	
direct	16296 Dec 13 22:00	21° Z 33'33		direct	16297 Nov 25 04:57	1° Z 22'53	
morning max el	16296 Dec 27 20:36	28° Z 34'51	25°11'40	morning max el	16297 Dec 09 09:55	8° Z 47'13	26°42'34
	16296 Dec 29 06:54	0° Z			16297 Dec 25 09:56	0° Z	

asc. node	16297 Dec 29 17:32	7° ♁ 31'30			16298 Dec 18 05:14	0° ♁	
morning set	16298 Jan 07 19:43	25° ♁ 41'56		morning set	16298 Dec 23 02:26	9° ♁ 59'31	
	16298 Jan 09 19:11	0° ♁		max. Earth dist.	16298 Dec 29 11:44	23° ♁ 59'31	1.30990 AU
superior conj	16298 Jan 14 14:03	10° ♁ 39'16	1°38'11	superior conj	16298 Dec 30 01:28	25° ♁ 16'20	1°35'06
minimum elong	16298 Jan 14 14:02	10° ♁ 39'11	1°38'45	minimum elong	16298 Dec 30 00:25	25° ♁ 10'30	1°35'42
max. Earth dist.	16298 Jan 15 03:56	11° ♁ 56'54	1.31154 AU		16299 Jan 01 04:07	0° ♁	
evening rise	16298 Jan 21 11:50	25° ♁ 48'11		evening rise	16299 Jan 05 18:44	10° ♁ 09'03	
	16298 Jan 23 12:03	0° ♁			16299 Jan 15 19:05	0° ♁	
desc. node	16298 Jan 31 03:44	14° ♁ 44'04		desc. node	16299 Jan 18 00:30	3° ♁ 52'31	
	16298 Feb 09 13:49	0° ♁		evening max el	16299 Feb 03 16:11	26° ♁ 08'53	26°22'29
evening max el	16298 Feb 21 16:46	14° ♁ 43'52	27°17'10		16299 Feb 08 09:16	0° ♁	
retrograde	16298 Mar 07 17:33	22° ♁ 04'05		retrograde	16299 Feb 17 15:52	3° ♁ 17'08	
evening set	16298 Mar 14 10:10	20° ♁ 04'59		evening set	16299 Feb 23 22:38	1° ♁ 42'10	
min. Earth dist.	16298 Mar 18 07:00	17° ♁ 19'49	0.60336 AU		16299 Feb 26 21:07	30° ♁	
inferior conj	16298 Mar 21 12:04	14° ♁ 36'24	-1°57'55	min. Earth dist.	16299 Feb 28 05:29	29° ♁ 04'36	0.58123 AU
minimum elong	16298 Mar 21 16:29	14° ♁ 27'01	1°56'16	inferior conj	16299 Mar 03 08:24	26° ♁ 47'07	-3°28'50
asc. node	16298 Mar 27 15:04	10° ♁ 18'59		minimum elong	16299 Mar 03 16:22	26° ♁ 32'27	3°25'55
morning rise	16298 Mar 29 02:15	9° ♁ 47'11		morning rise	16299 Mar 11 13:28	22° ♁ 19'30	
direct	16298 Mar 31 03:46	9° ♁ 30'03		direct	16299 Mar 13 12:26	22° ♁ 06'35	
morning max el	16298 Apr 07 09:03	13° ♁ 06'37	17°58'36	asc. node	16299 Mar 14 12:23	22° ♁ 10'04	
	16298 Apr 18 19:14	0° ♁		morning max el	16299 Mar 21 18:26	26° ♁ 10'43	18°30'40
morning set	16298 Apr 22 22:59	7° ♁ 32'55			16299 Mar 25 01:48	0° ♁	
desc. node	16298 Apr 29 04:56	18° ♁ 56'08		morning set	16299 Apr 06 15:53	21° ♁ 36'47	
					16299 Apr 11 00:48	0° ♁	
superior conj	16298 May 03 08:01	26° ♁ 15'45	-0°33'37	superior conj	16299 Apr 15 18:36	8° ♁ 54'42	0°02'31
minimum elong	16298 May 03 05:08	26° ♁ 03'05	0°33'40	minimum elong	16299 Apr 15 18:45	8° ♁ 55'24	0°02'06
	16298 May 05 11:43	0° ♁			16299 Apr 15 11:40	8° ♁ 22'40	
max. Earth dist.	16298 May 10 20:42	9° ♁ 03'54	1.42564 AU	behind sun begin	16299 Apr 16 01:49	9° ♁ 28'02	
evening rise	16298 May 16 13:40	18° ♁ 18'32		behind sun end	16299 Apr 16 01:43	9° ♁ 27'35	
	16298 May 24 02:50	0° ♁		desc. node	16299 Apr 16 01:43	9° ♁ 27'35	
	16298 Jun 14 21:26	0° ♁		max. Earth dist.	16299 Apr 23 05:32	22° ♁ 14'00	1.40415 AU
evening max el	16298 Jun 18 08:31	3° ♁ 44'50	22°15'11	evening rise	16299 Apr 27 10:30	29° ♁ 21'13	
asc. node	16298 Jun 23 13:24	7° ♁ 58'39			16299 Apr 27 19:51	0° ♁	
retrograde	16298 Jun 27 23:11	9° ♁ 21'48			16299 May 17 13:51	0° ♁	
evening set	16298 Jul 02 18:20	7° ♁ 21'05		evening max el	16299 May 31 23:13	17° ♁ 39'27	23°36'33
inferior conj	16298 Jul 08 00:28	1° ♁ 01'56	3°05'29	asc. node	16299 Jun 10 10:21	23° ♁ 52'08	
minimum elong	16298 Jul 07 23:48	1° ♁ 04'15	3°04'49	retrograde	16299 Jun 11 18:25	23° ♁ 59'46	
min. Earth dist.	16298 Jul 07 22:35	1° ♁ 08'30	0.69163 AU	evening set	16299 Jun 17 01:13	21° ♁ 44'39	
	16298 Jul 08 18:16	30° ♁		inferior conj	16299 Jun 22 10:11	15° ♁ 18'08	2°52'37
morning rise	16298 Jul 13 05:06	24° ♁ 47'47		minimum elong	16299 Jun 22 08:42	15° ♁ 23'13	2°51'44
direct	16298 Jul 17 21:43	22° ♁ 49'44		min. Earth dist.	16299 Jun 21 19:14	16° ♁ 09'27	0.69006 AU
desc. node	16298 Jul 26 04:05	27° ♁ 16'34		morning rise	16299 Jun 27 16:11	9° ♁ 12'22	
morning max el	16298 Jul 27 03:45	28° ♁ 13'57	21°53'10	direct	16299 Jul 01 20:43	7° ♁ 33'44	
	16298 Jul 28 20:14	0° ♁		morning max el	16299 Jul 09 23:02	12° ♁ 09'44	20°34'08
	16298 Aug 19 20:01	0° ♁		desc. node	16299 Jul 13 01:20	15° ♁ 31'44	
morning set	16298 Aug 28 14:04	13° ♁ 34'33			16299 Jul 23 21:17	0° ♁	
max. Earth dist.	16298 Sep 03 10:24	23° ♁ 04'09	1.41933 AU	morning set	16299 Aug 08 02:30	22° ♁ 47'07	
	16298 Sep 07 13:25	0° ♁			16299 Aug 12 17:34	0° ♁	
				max. Earth dist.	16299 Aug 16 20:08	6° ♁ 31'29	1.43886 AU
superior conj	16298 Sep 11 03:36	6° ♁ 12'09	-1°08'54	superior conj	16299 Aug 23 06:55	17° ♁ 02'31	-1°42'59
minimum elong	16298 Sep 11 09:15	6° ♁ 36'53	1°08'04	minimum elong	16299 Aug 23 14:47	17° ♁ 35'10	1°42'24
asc. node	16298 Sep 19 14:16	21° ♁ 22'44			16299 Aug 30 22:39	0° ♁	
evening rise	16298 Sep 21 21:18	25° ♁ 35'45		evening rise	16299 Sep 04 16:54	8° ♁ 16'42	
	16298 Sep 24 06:50	0° ♁		asc. node	16299 Sep 06 10:57	11° ♁ 20'35	
evening max el	16298 Oct 07 20:23	20° ♁ 58'45	18°10'32		16299 Sep 17 22:14	0° ♁	
retrograde	16298 Oct 15 00:26	24° ♁ 38'59		evening max el	16299 Sep 21 09:52	4° ♁ 07'25	18°01'09
evening set	16298 Oct 17 03:56	24° ♁ 19'46		retrograde	16299 Sep 27 23:26	7° ♁ 31'38	
desc. node	16298 Oct 22 01:19	21° ♁ 34'05		evening set	16299 Sep 30 10:30	7° ♁ 02'24	
inferior conj	16298 Oct 24 11:33	19° ♁ 32'30	-0°46'40	inferior conj	16299 Oct 07 01:51	1° ♁ 55'43	0°34'37
minimum elong	16298 Oct 24 09:53	19° ♁ 36'08	0°45'30	minimum elong	16299 Oct 07 02:53	1° ♁ 53'08	0°34'33
min. Earth dist.	16298 Oct 27 17:18	16° ♁ 44'05	0.59338 AU	desc. node	16299 Oct 08 22:37	0° ♁ 03'11	
morning rise	16298 Oct 31 12:28	13° ♁ 59'22			16299 Oct 08 23:54	30° ♁	
direct	16298 Nov 07 01:05	12° ♁ 02'14		min. Earth dist.	16299 Oct 10 01:28	28° ♁ 57'33	0.61632 AU
morning max el	16298 Nov 21 07:45	19° ♁ 45'14	27°40'36	morning rise	16299 Oct 13 16:28	25° ♁ 55'37	
	16298 Nov 30 02:20	0° ♁		direct	16299 Oct 20 08:55	23° ♁ 37'01	
asc. node	16298 Dec 16 14:38	26° ♁ 52'51					

	16299 Nov 01 21:52	0°♍		direct	16300 Oct 03 02:30	6°♌04'44	
morning max el	16299 Nov 03 12:54	1°♍32'48	27°59'16	morning max el	16300 Oct 16 22:28	14°♌03'17	27°40'12
	16299 Nov 24 09:20	0°♌			16300 Oct 29 21:13	0°♍	
asc. node	16299 Dec 03 11:40	16°♌34'57			16300 Nov 16 23:48	0°♌	
morning set	16299 Dec 07 03:36	23°♌58'08		asc. node	16300 Nov 20 08:38	6°♌31'46	
	16299 Dec 10 00:16	0°♌		morning set	16300 Nov 20 20:51	7°♌32'38	
max. Earth dist.	16299 Dec 12 16:52	5°♌50'38	1.31380 AU	max. Earth dist.	16300 Nov 25 15:34	17°♌23'01	1.32345 AU
superior conj	16299 Dec 14 11:30	9°♌45'57	1°25'58	superior conj	16300 Nov 28 18:15	24°♌03'23	1°10'40
minimum elong	16299 Dec 14 09:38	9°♌35'34	1°26'27	minimum elong	16300 Nov 28 15:54	23°♌50'42	1°11'00
evening rise	16299 Dec 21 04:27	24°♌34'59			16300 Dec 01 11:38	0°♌	
	16299 Dec 23 17:28	0°♌		evening rise	16300 Dec 05 15:15	9°♌02'14	
desc. node	16300 Jan 04 21:20	22°♌19'37			16300 Dec 16 07:33	0°♌	
	16300 Jan 10 07:22	0°♌		desc. node	16300 Dec 22 18:13	9°♌50'38	
evening max el	16300 Jan 16 06:59	6°♌41'37	24°57'34	evening max el	16300 Dec 28 16:39	16°♌41'18	23°15'41
retrograde	16300 Jan 30 02:03	13°♌35'59		retrograde	16301 Jan 10 22:49	23°♌14'40	
evening set	16300 Feb 04 13:53	12°♌28'38		evening set	16301 Jan 15 06:51	22°♌34'00	
min. Earth dist.	16300 Feb 09 19:15	9°♌42'52	0.56197 AU	min. Earth dist.	16301 Jan 22 03:15	19°♌21'24	0.54865 AU
inferior conj	16300 Feb 12 07:39	8°♌06'22	-4°54'57	inferior conj	16301 Jan 23 11:02	18°♌35'36	-5°52'33
minimum elong	16300 Feb 12 17:01	7°♌51'22	4°52'18	minimum elong	16301 Jan 23 15:57	18°♌28'31	5°51'35
morning rise	16300 Feb 20 22:42	3°♌59'52		morning rise	16301 Feb 01 02:22	14°♌44'07	
direct	16300 Feb 23 01:41	3°♌47'15		direct	16301 Feb 03 20:13	14°♌26'08	
asc. node	16300 Mar 01 09:45	5°♌47'57		morning max el	16301 Feb 15 02:38	19°♌53'14	20°41'48
morning max el	16300 Mar 04 17:35	8°♌29'38	19°24'36	asc. node	16301 Feb 16 07:05	21°♌05'25	
	16300 Mar 18 16:17	0°♌			16301 Feb 23 00:15	0°♌	
morning set	16300 Mar 21 17:40	6°♌02'20		morning set	16301 Mar 06 01:11	20°♌40'33	
					16301 Mar 10 12:49	0°♌	
superior conj	16300 Mar 29 21:36	22°♌16'59	0°33'50	superior conj	16301 Mar 13 12:53	6°♌11'06	0°59'10
minimum elong	16300 Mar 29 23:31	22°♌26'16	0°33'18	minimum elong	16301 Mar 13 15:24	6°♌23'57	0°58'46
desc. node	16300 Apr 02 22:27	29°♌59'23		max. Earth dist.	16301 Mar 18 19:09	16°♌38'52	1.35908 AU
	16300 Apr 02 22:35	0°♌		desc. node	16301 Mar 20 19:08	20°♌28'01	
max. Earth dist.	16300 Apr 05 11:24	4°♌40'42	1.38112 AU	evening rise	16301 Mar 22 16:12	23°♌58'07	
evening rise	16300 Apr 09 04:14	11°♌17'04			16301 Mar 26 00:25	0°♌	
	16300 Apr 20 13:17	0°♌			16301 Apr 14 04:25	0°♌	
	16300 May 12 23:41	0°♌		evening max el	16301 Apr 27 02:14	15°♌26'04	26°07'24
evening max el	16300 May 14 12:36	1°♌34'14	24°56'26	retrograde	16301 May 09 20:50	22°♌45'21	
retrograde	16300 May 26 10:01	8°♌30'09		asc. node	16301 May 15 04:33	20°♌53'49	
asc. node	16300 May 28 07:25	8°♌15'14		evening set	16301 May 16 01:20	20°♌13'40	
evening set	16300 Jun 01 04:09	6°♌04'19		min. Earth dist.	16301 May 20 04:32	15°♌51'29	0.67249 AU
min. Earth dist.	16300 Jun 05 13:55	1°♌06'14	0.68358 AU	inferior conj	16301 May 21 21:33	13°♌43'54	1°54'21
	16300 Jun 06 09:59	30°♌11		minimum elong	16301 May 21 19:22	13°♌50'40	1°53'04
inferior conj	16300 Jun 06 17:54	29°♌33'47	2°29'10	morning rise	16301 May 27 14:11	7°♌58'27	
minimum elong	16300 Jun 06 15:52	29°♌40'32	2°28'01	direct	16301 May 30 20:37	6°♌57'46	
morning rise	16300 Jun 12 03:51	23°♌37'32		morning max el	16301 Jun 06 10:32	10°♌28'34	18°37'43
direct	16300 Jun 15 20:54	22°♌18'29		desc. node	16301 Jun 16 19:36	24°♌02'07	
morning max el	16300 Jun 23 01:21	26°♌15'49	19°28'07		16301 Jun 20 17:31	0°♌	
	16300 Jun 26 10:29	0°♌		morning set	16301 Jun 27 22:44	11°♌14'33	
desc. node	16300 Jun 29 22:31	4°♌30'56			16301 Jul 09 23:08	0°♌	
greatest brilliancy	16300 Jul 05 17:37	12°♌45'01	-0.7m	superior conj	16301 Jul 13 23:08	6°♌14'06	-2°14'07
	16300 Jul 17 04:00	0°♌		minimum elong	16301 Jul 13 22:00	6°♌09'41	2°14'43
morning set	16300 Jul 18 06:48	1°♌42'46		max. Earth dist.	16301 Jul 13 06:29	5°♌09'13	1.45956 AU
max. Earth dist.	16300 Jul 30 11:23	20°♌38'05	1.45267 AU		16301 Jul 29 01:55	0°♌	
superior conj	16300 Aug 03 11:12	26°♌56'56	-2°07'08	evening rise	16301 Jul 29 14:15	0°♌48'58	
minimum elong	16300 Aug 03 17:08	27°♌20'32	2°07'16	greatest brilliancy	16301 Aug 05 17:01	12°♌05'52	-0.9m
	16300 Aug 05 09:05	0°♌		asc. node	16301 Aug 11 04:23	20°♌31'51	
evening rise	16300 Aug 17 16:00	20°♌04'36			16301 Aug 18 06:01	0°♌	
	16300 Aug 23 15:38	0°♌		evening max el	16301 Aug 19 14:06	1°♌24'27	18°37'00
asc. node	16300 Aug 24 07:40	1°♌05'39		retrograde	16301 Aug 26 02:47	4°♌55'40	
evening max el	16300 Sep 05 00:52	17°♌39'00	18°10'16	evening set	16301 Aug 29 07:50	3°♌57'07	
retrograde	16300 Sep 11 09:32	21°♌00'15			16301 Sep 02 14:25	30°♌11	
evening set	16300 Sep 14 05:16	20°♌17'38		inferior conj	16301 Sep 04 00:03	28°♌18'47	2°20'31
inferior conj	16300 Sep 20 07:20	14°♌54'08	1°36'31	minimum elong	16301 Sep 04 02:18	28°♌11'52	2°19'52
minimum elong	16300 Sep 20 09:31	14°♌48'01	1°35'56	min. Earth dist.	16301 Sep 05 22:55	25°♌55'23	0.65765 AU
min. Earth dist.	16300 Sep 22 19:44	12°♌05'31	0.63834 AU	morning rise	16301 Sep 09 19:38	21°♌53'44	
desc. node	16300 Sep 25 19:57	9°♌09'18		desc. node	16301 Sep 12 17:18	20°♌01'37	
morning rise	16300 Sep 26 11:50	8°♌37'12					

direct	16301 Sep 16 04:03	19° $\overline{\text{M}}$ 16'27		min. Earth dist.	16302 Aug 20 09:34	10° $\overline{\text{M}}$ 15'55	0.67309 AU
morning max el	16301 Sep 29 09:43	27° $\overline{\text{M}}$ 04'24	26°50'00	morning rise	16302 Aug 24 13:15	5° $\overline{\text{M}}$ 36'31	
	16301 Oct 02 03:46	0° $\underline{\text{L}}$		direct	16302 Aug 30 12:10	3° $\overline{\text{M}}$ 02'49	
	16301 Oct 23 12:48	0° $\overline{\text{M}}$		desc. node	16302 Aug 30 14:38	3° $\overline{\text{M}}$ 02'52	
morning set	16301 Nov 04 03:15	20° $\overline{\text{M}}$ 35'53		morning max el	16302 Sep 11 21:01	10° $\overline{\text{M}}$ 25'31	25°37'26
asc. node	16301 Nov 07 05:30	26° $\overline{\text{M}}$ 37'42			16302 Sep 27 11:01	0° $\underline{\text{L}}$	
max. Earth dist.	16301 Nov 08 05:02	28° $\overline{\text{M}}$ 35'08	1.33870 AU		16302 Oct 16 03:12	0° $\overline{\text{M}}$	
	16301 Nov 08 21:52	0° $\overline{\text{X}}$		morning set	16302 Oct 17 19:15	3° $\overline{\text{M}}$ 00'12	
				max. Earth dist.	16302 Oct 21 09:28	9° $\overline{\text{M}}$ 39'54	1.35883 AU
superior conj	16301 Nov 12 19:21	8° $\overline{\text{X}}$ 02'17	0°49'10	asc. node	16302 Oct 25 02:19	16° $\overline{\text{M}}$ 48'39	
minimum elong	16301 Nov 12 17:08	7° $\overline{\text{X}}$ 50'39	0°49'23				
evening rise	16301 Nov 20 01:14	23° $\overline{\text{X}}$ 26'03		superior conj	16302 Oct 27 12:02	21° $\overline{\text{M}}$ 35'51	0°21'38
	16301 Nov 23 04:59	0° $\overline{\text{Z}}$		minimum elong	16302 Oct 27 10:46	21° $\overline{\text{M}}$ 29'31	0°21'54
desc. node	16301 Dec 09 15:11	26° $\overline{\text{Z}}$ 06'03			16302 Oct 31 14:53	0° $\overline{\text{X}}$	
evening max el	16301 Dec 10 05:42	26° $\overline{\text{Z}}$ 42'35	21°34'52	evening rise	16302 Nov 04 08:22	7° $\overline{\text{X}}$ 41'34	
	16301 Dec 14 05:20	0° \approx			16302 Nov 16 10:32	0° $\overline{\text{Z}}$	
retrograde	16301 Dec 22 09:17	2° \approx 42'48		evening max el	16302 Nov 22 06:39	7° $\overline{\text{Z}}$ 18'57	20°09'32
evening set	16301 Dec 25 11:03	2° \approx 21'21		desc. node	16302 Nov 26 12:13	10° $\overline{\text{Z}}$ 42'17	
	16301 Dec 31 09:53	30° $\overline{\text{R}}$ $\overline{\text{Z}}$		retrograde	16302 Dec 02 21:02	12° $\overline{\text{Z}}$ 35'49	
inferior conj	16302 Jan 03 02:34	28° $\overline{\text{Z}}$ 31'33	-5°56'07	evening set	16302 Dec 05 01:36	12° $\overline{\text{Z}}$ 23'20	
minimum elong	16302 Jan 02 22:12	28° $\overline{\text{Z}}$ 37'40	5°55'06	inferior conj	16302 Dec 13 20:23	8° $\overline{\text{Z}}$ 26'28	-4°59'32
min. Earth dist.	16302 Jan 03 08:31	28° $\overline{\text{Z}}$ 23'14	0.54374 AU	minimum elong	16302 Dec 13 10:32	8° $\overline{\text{Z}}$ 41'12	4°56'23
morning rise	16302 Jan 11 09:52	24° $\overline{\text{Z}}$ 42'58		min. Earth dist.	16302 Dec 15 14:23	7° $\overline{\text{Z}}$ 23'43	0.54826 AU
direct	16302 Jan 15 04:31	24° $\overline{\text{Z}}$ 11'54		morning rise	16302 Dec 21 18:42	4° $\overline{\text{Z}}$ 21'57	
	16302 Jan 27 11:44	0° \approx		direct	16302 Dec 26 14:58	3° $\overline{\text{Z}}$ 31'06	
morning max el	16302 Jan 27 20:48	0° \approx 21'23	22°20'16	morning max el	16303 Jan 09 05:56	10° $\overline{\text{Z}}$ 15'03	24°10'15
asc. node	16302 Feb 03 04:23	7° \approx 44'53		asc. node	16303 Jan 21 01:38	25° $\overline{\text{Z}}$ 27'31	
	16302 Feb 15 21:47	0° $\overline{\text{X}}$			16303 Jan 23 18:42	0° \approx	
morning set	16302 Feb 18 11:59	5° $\overline{\text{X}}$ 24'32		morning set	16303 Feb 02 23:58	20° \approx 07'28	
					16303 Feb 07 12:40	0° $\overline{\text{X}}$	
superior conj	16302 Feb 25 12:59	20° $\overline{\text{X}}$ 27'40	1°18'07				
minimum elong	16302 Feb 25 15:18	20° $\overline{\text{X}}$ 39'53	1°18'02	superior conj	16303 Feb 09 19:02	4° $\overline{\text{X}}$ 57'51	1°30'45
max. Earth dist.	16302 Mar 01 09:17	28° $\overline{\text{X}}$ 28'58	1.33994 AU	minimum elong	16303 Feb 09 20:37	5° $\overline{\text{X}}$ 06'29	1°31'00
	16302 Mar 02 03:09	0° $\overline{\text{Y}}$		max. Earth dist.	16303 Feb 12 07:02	10° $\overline{\text{X}}$ 22'43	1.32496 AU
evening rise	16302 Mar 05 18:50	7° $\overline{\text{Y}}$ 14'44		evening rise	16303 Feb 17 08:43	20° $\overline{\text{X}}$ 57'16	
desc. node	16302 Mar 07 15:48	10° $\overline{\text{Y}}$ 49'37			16303 Feb 21 23:54	0° $\overline{\text{Y}}$	
	16302 Mar 18 15:36	0° $\overline{\text{Z}}$		desc. node	16303 Feb 22 12:28	0° $\overline{\text{Y}}$ 58'55	
evening max el	16302 Apr 09 16:07	29° $\overline{\text{Z}}$ 07'14	27°01'47		16303 Mar 12 13:51	0° $\overline{\text{Z}}$	
	16302 Apr 10 14:20	0° $\overline{\text{II}}$		evening max el	16303 Mar 23 04:50	12° $\overline{\text{Z}}$ 25'02	27°32'18
retrograde	16302 Apr 23 01:42	6° $\overline{\text{II}}$ 37'36		retrograde	16303 Apr 05 23:45	19° $\overline{\text{Z}}$ 56'57	
evening set	16302 Apr 29 14:49	4° $\overline{\text{II}}$ 05'53		evening set	16303 Apr 12 18:18	17° $\overline{\text{Z}}$ 31'51	
asc. node	16302 May 02 01:44	1° $\overline{\text{II}}$ 52'01		min. Earth dist.	16303 Apr 16 13:05	14° $\overline{\text{Z}}$ 13'35	0.63814 AU
min. Earth dist.	16302 May 03 12:55	0° $\overline{\text{II}}$ 17'30	0.65717 AU	asc. node	16303 Apr 18 22:58	11° $\overline{\text{Z}}$ 44'05	
	16302 May 03 19:09	30° $\overline{\text{R}}$ $\overline{\text{Z}}$		inferior conj	16303 Apr 19 06:47	11° $\overline{\text{Z}}$ 23'41	0°06'09
inferior conj	16302 May 05 18:47	27° $\overline{\text{Z}}$ 43'09	1°07'06	minimum elong	16303 Apr 19 06:37	11° $\overline{\text{Z}}$ 24'08	0°05'41
minimum elong	16302 May 05 17:08	27° $\overline{\text{Z}}$ 47'53	1°05'58	transit middle	16303 Apr 19 06:37	11° $\overline{\text{Z}}$ 24'08	0°05'41
morning rise	16302 May 11 20:58	22° $\overline{\text{Z}}$ 10'18		transit begin	16303 Apr 19 03:41	11° $\overline{\text{Z}}$ 31'46	
direct	16302 May 14 17:42	21° $\overline{\text{Z}}$ 25'49		transit end	16303 Apr 19 09:33	11° $\overline{\text{Z}}$ 16'31	
morning max el	16302 May 21 01:04	24° $\overline{\text{Z}}$ 42'42	18°04'07	morning rise	16303 Apr 25 21:20	6° $\overline{\text{Z}}$ 05'51	
	16302 May 25 12:34	0° $\overline{\text{II}}$		direct	16303 Apr 28 09:23	5° $\overline{\text{Z}}$ 34'42	
desc. node	16302 Jun 03 16:35	13° $\overline{\text{II}}$ 56'52		morning max el	16303 May 04 18:27	8° $\overline{\text{Z}}$ 49'57	17°47'47
morning set	16302 Jun 08 15:57	22° $\overline{\text{II}}$ 00'01			16303 May 19 03:03	0° $\overline{\text{II}}$	
	16302 Jun 13 14:45	0° $\overline{\text{Z}}$		morning set	16303 May 21 11:51	4° $\overline{\text{II}}$ 01'04	
				desc. node	16303 May 21 13:30	4° $\overline{\text{II}}$ 08'03	
superior conj	16302 Jun 23 09:53	15° $\overline{\text{Z}}$ 34'08	-2°01'05				
minimum elong	16302 Jun 23 02:21	15° $\overline{\text{Z}}$ 04'32	2°01'17	superior conj	16303 Jun 03 11:25	25° $\overline{\text{II}}$ 37'51	-1°32'14
max. Earth dist.	16302 Jun 26 03:12	19° $\overline{\text{Z}}$ 49'56	1.45895 AU	minimum elong	16303 Jun 03 03:15	25° $\overline{\text{II}}$ 04'43	1°31'58
	16302 Jul 02 16:08	0° $\overline{\Omega}$			16303 Jun 06 04:33	0° $\overline{\text{Z}}$	
evening rise	16302 Jul 09 13:12	10° $\overline{\Omega}$ 37'16		max. Earth dist.	16303 Jun 08 22:41	4° $\overline{\text{Z}}$ 23'03	1.45091 AU
greatest brilliancy	16302 Jul 22 00:49	29° $\overline{\Omega}$ 37'44	-0.7m	evening rise	16303 Jun 18 23:56	20° $\overline{\text{Z}}$ 00'38	
	16302 Jul 22 06:49	0° $\overline{\text{M}}$			16303 Jun 25 14:11	0° $\overline{\Omega}$	
asc. node	16302 Jul 29 01:08	9° $\overline{\text{M}}$ 32'22		asc. node	16303 Jul 15 21:55	27° $\overline{\Omega}$ 58'04	
evening max el	16302 Aug 02 23:03	15° $\overline{\text{M}}$ 16'50	19°20'26	evening max el	16303 Jul 17 02:07	29° $\overline{\Omega}$ 11'10	20°19'08
retrograde	16302 Aug 10 00:06	19° $\overline{\text{M}}$ 11'03			16303 Jul 17 22:25	0° $\overline{\text{M}}$	
evening set	16302 Aug 13 15:03	17° $\overline{\text{M}}$ 54'58		retrograde	16303 Jul 24 23:08	3° $\overline{\text{M}}$ 40'08	
inferior conj	16302 Aug 19 00:46	12° $\overline{\text{M}}$ 03'18	2°49'04	evening set	16303 Jul 29 00:33	2° $\overline{\text{M}}$ 06'07	
minimum elong	16302 Aug 19 02:27	11° $\overline{\text{M}}$ 57'45	2°48'30		16303 Jul 31 04:50	30° $\overline{\text{R}}$ $\overline{\Omega}$	

inferior conj	16303 Aug 03 06:47	26°02'26	3°04'25	retrograde	16304 Jul 07 21:52	18°01'58	
minimum elong	16303 Aug 03 07:36	25°05'37	3°03'54	evening set	16304 Jul 12 10:20	16°02'53	
min. Earth dist.	16303 Aug 04 01:47	24°05'26	0.68401 AU	inferior conj	16304 Jul 17 15:48	10°01'30	3°08'11
morning rise	16303 Aug 08 14:20	19°03'19		minimum elong	16304 Jul 17 15:40	10°01'57	3°07'37
direct	16303 Aug 14 01:56	17°01'45		min. Earth dist.	16304 Jul 17 21:28	9°05'44	0.69020 AU
desc. node	16303 Aug 17 11:58	18°01'23		morning rise	16304 Jul 22 20:47	3°05'56	
morning max el	16303 Aug 25 08:06	23°05'44	24°11'58	direct	16304 Jul 27 20:18	1°04'41	
	16303 Aug 30 17:13	0°00		desc. node	16304 Aug 03 09:17	4°03'32	
	16303 Sep 20 20:18	0°00		morning max el	16304 Aug 06 20:08	7°03'28	22°42'45
morning set	16303 Sep 29 16:48	14°03'46			16304 Aug 24 06:13	0°00	
max. Earth dist.	16303 Oct 03 08:45	21°01'57	1.38213 AU	morning set	16304 Sep 09 15:54	25°00'15	
	16303 Oct 08 06:31	0°00			16304 Sep 12 12:45	0°00	
				max. Earth dist.	16304 Sep 14 08:32	3°04'11	1.40618 AU
superior conj	16303 Oct 10 16:54	4°03'05	-0°11'12				
minimum elong	16303 Oct 10 17:39	4°03'40	0°10'44	superior conj	16304 Sep 22 05:46	16°05'32	-0°47'36
behind sun begin	16303 Oct 10 12:26	4°03'45		minimum elong	16304 Sep 22 09:31	17°09'31	0°46'51
behind sun end	16303 Oct 10 22:52	5°04'37		asc. node	16304 Sep 27 19:45	27°01'21	
asc. node	16303 Oct 11 23:03	7°00'58			16304 Sep 29 07:48	0°00	
evening rise	16303 Oct 19 10:12	21°04'29		evening rise	16304 Oct 02 03:33	5°02'43	
	16303 Oct 23 16:08	0°00			16304 Oct 17 02:51	0°00	
evening max el	16303 Nov 04 22:10	18°04'01	19°06'05	evening max el	16304 Oct 18 01:35	1°00'01	18°24'52
desc. node	16303 Nov 13 09:20	23°01'17		retrograde	16304 Oct 25 18:54	4°05'53	
retrograde	16303 Nov 13 22:33	23°01'18		evening set	16304 Oct 27 18:47	4°04'03	
evening set	16303 Nov 15 19:54	23°07'07		desc. node	16304 Oct 30 06:32	3°04'13	
inferior conj	16303 Nov 24 05:47	18°05'31	-3°24'41	inferior conj	16304 Nov 04 12:32	0°05'53	-1°41'35
minimum elong	16303 Nov 23 21:29	19°07'32	3°21'03	minimum elong	16304 Nov 04 08:35	0°01'47	1°39'25
min. Earth dist.	16303 Nov 27 00:41	16°05'17	0.56134 AU		16304 Nov 04 15:28	30°00	
morning rise	16303 Dec 01 20:28	14°01'16		min. Earth dist.	16304 Nov 07 18:05	27°03'53	0.58064 AU
direct	16303 Dec 07 13:24	13°00'34		morning rise	16304 Nov 11 18:54	24°05'57	
morning max el	16303 Dec 21 15:56	20°01'26	25°53'36	direct	16304 Nov 18 02:25	23°09'03	
	16303 Dec 30 01:01	0°00			16304 Dec 01 14:49	0°00	
asc. node	16304 Jan 07 22:48	13°05'53		morning max el	16304 Dec 02 08:53	0°04'25	27°11'49
	16304 Jan 16 05:47	0°00			16304 Dec 23 04:06	0°00	
morning set	16304 Jan 18 11:20	4°04'29		asc. node	16304 Dec 24 19:56	3°03'03	
				morning set	16305 Jan 01 20:15	19°01'08	
superior conj	16304 Jan 25 04:45	19°03'58	1°37'13		16305 Jan 06 18:41	0°00	
minimum elong	16304 Jan 25 05:21	19°03'47	1°37'42				
max. Earth dist.	16304 Jan 26 11:00	22°03'19	1.31492 AU	superior conj	16305 Jan 08 16:05	4°04'09	1°37'38
	16304 Jan 29 22:36	0°00		minimum elong	16305 Jan 08 15:37	4°01'34	1°38'13
evening rise	16304 Feb 01 07:03	4°05'14		max. Earth dist.	16305 Jan 08 18:13	4°02'03	1.31014 AU
desc. node	16304 Feb 09 09:11	20°05'03		evening rise	16305 Jan 15 11:25	19°04'22	
	16304 Feb 14 15:33	0°00			16305 Jan 20 17:10	0°00	
evening max el	16304 Mar 04 14:15	25°06'58	27°32'26	desc. node	16305 Jan 26 05:57	10°01'16	
	16304 Mar 10 17:45	0°00			16305 Feb 08 08:42	0°00	
retrograde	16304 Mar 18 14:03	2°03'36		evening max el	16305 Feb 14 18:02	7°02'14	26°58'04
evening set	16304 Mar 25 09:11	0°02'39		retrograde	16305 Feb 28 19:08	14°01'27	
	16304 Mar 25 22:57	30°00		evening set	16305 Mar 07 08:22	12°02'01	
min. Earth dist.	16304 Mar 29 03:42	27°02'05	0.61645 AU	min. Earth dist.	16305 Mar 11 08:13	9°04'32	0.59374 AU
inferior conj	16304 Apr 01 06:18	24°03'08	-1°08'56	inferior conj	16305 Mar 14 13:38	7°01'50	-2°36'01
minimum elong	16304 Apr 01 08:44	24°03'33	1°08'10	minimum elong	16305 Mar 14 19:36	7°01'52	2°33'44
asc. node	16304 Apr 04 20:14	21°03'48		morning rise	16305 Mar 22 10:27	2°03'34	
morning rise	16304 Apr 08 11:33	19°03'00		asc. node	16305 Mar 22 17:33	2°02'45	
direct	16304 Apr 10 16:12	19°01'52		direct	16305 Mar 24 10:08	2°01'01	
morning max el	16304 Apr 17 11:36	22°04'18	17°49'15	morning max el	16305 Apr 01 00:59	6°06'14	18°09'40
	16304 Apr 23 05:25	0°00			16305 Apr 16 05:12	0°00	
morning set	16304 May 03 05:42	17°03'05		morning set	16305 Apr 16 15:43	0°04'08	
desc. node	16304 May 07 10:21	24°03'33		desc. node	16305 Apr 24 07:11	15°00'04	
	16304 May 10 13:30	0°00					
superior conj	16304 May 14 11:47	6°04'45	-0°55'30	superior conj	16305 Apr 26 10:55	18°05'32	-0°17'52
minimum elong	16304 May 14 06:45	6°02'31	0°55'21	minimum elong	16305 Apr 26 09:28	18°04'00	0°18'06
max. Earth dist.	16304 May 21 14:21	18°03'54	1.43635 AU		16305 May 02 19:45	0°00	
evening rise	16304 May 28 15:22	29°04'29		max. Earth dist.	16305 May 04 01:18	2°04'50	1.41682 AU
	16304 May 28 19:47	0°00		evening rise	16305 May 09 00:08	10°01'19	
	16304 Jun 18 05:29	0°00			16305 May 21 19:55	0°00	
evening max el	16304 Jun 28 23:08	13°05'09	21°30'19	evening max el	16305 Jun 11 15:39	27°00'16	22°49'36
asc. node	16304 Jul 01 18:46	15°03'01			16305 Jun 15 00:02	0°00	
				asc. node	16305 Jun 18 15:42	2°01'41	

retrograde	16305 Jun 21 18:47	2°Ω56'36		evening max el	16306 May 25 05:46	10°Ω56'07	24°11'11
evening set	16305 Jun 26 18:45	0°Ω49'39		retrograde	16306 Jun 05 12:30	17°Ω32'13	
	16305 Jun 27 16:00	30°κΩ		asc. node	16306 Jun 05 12:43	17°Ω32'13	
inferior conj	16305 Jul 02 01:50	24°Ω26'59	3°01'18	evening set	16306 Jun 11 00:10	15°Ω12'16	
minimum elong	16305 Jul 02 00:48	24°Ω30'35	3°00'34	min. Earth dist.	16306 Jun 15 14:33	9°Ω52'53	0.68794 AU
min. Earth dist.	16305 Jul 01 18:27	24°Ω52'38	0.69153 AU	inferior conj	16306 Jun 16 10:58	8°Ω43'48	2°44'00
morning rise	16305 Jul 07 06:43	18°Ω15'59		minimum elong	16306 Jun 16 09:12	8°Ω49'45	2°43'00
direct	16305 Jul 11 18:09	16°Ω25'55		morning rise	16306 Jun 21 18:18	2°Ω41'50	
morning max el	16305 Jul 20 11:53	21°Ω29'10	21°18'08	direct	16306 Jun 25 17:58	1°Ω11'22	
desc. node	16305 Jul 21 06:33	22°Ω16'50		morning max el	16306 Jul 03 09:57	5°Ω29'12	20°04'12
	16305 Jul 27 18:11	0°Ω		desc. node	16306 Jul 08 03:45	10°Ω52'22	
	16305 Aug 17 11:31	0°κ			16306 Jul 21 17:43	0°Ω	
morning set	16305 Aug 20 15:28	4°κ55'27		morning set	16306 Jul 30 22:11	13°Ω54'35	
max. Earth dist.	16305 Aug 27 13:59	16°κ01'00	1.42821 AU	max. Earth dist.	16306 Aug 10 02:31	29°Ω47'50	1.44562 AU
					16306 Aug 10 05:35	0°κ	
superior conj	16305 Sep 03 22:23	28°κ16'52	-1°24'05	superior conj	16306 Aug 15 15:40	8°κ42'41	-1°54'54
minimum elong	16305 Sep 04 05:16	28°κ46'16	1°23'17	minimum elong	16306 Aug 15 23:24	9°κ14'08	1°54'35
	16305 Sep 04 22:27	0°Ω			16306 Aug 28 09:19	0°Ω	
asc. node	16305 Sep 14 16:28	17°Ω13'42		evening rise	16306 Aug 28 19:58	0°Ω45'35	
evening rise	16305 Sep 15 08:30	18°Ω25'54		asc. node	16306 Sep 01 13:10	7°Ω06'40	
	16305 Sep 21 20:40	0°κ		evening max el	16306 Sep 15 03:13	27°Ω11'28	18°02'49
evening max el	16305 Oct 01 12:39	13°κ51'59	18°04'17		16306 Sep 19 00:50	0°κ	
retrograde	16305 Oct 08 09:11	17°κ23'25		retrograde	16306 Sep 21 13:23	0°κ32'31	
evening set	16305 Oct 10 15:48	17°κ00'21		evening set	16306 Sep 24 04:10	29°Ω57'47	
desc. node	16305 Oct 17 03:48	12°κ33'23			16306 Sep 24 02:07	30°κΩ	
inferior conj	16305 Oct 17 16:13	12°κ04'45	-0°09'51	inferior conj	16306 Sep 30 13:26	24°Ω43'29	1°03'14
minimum elong	16305 Oct 17 15:54	12°κ05'29	0°09'18	minimum elong	16306 Sep 30 15:07	24°Ω39'03	1°02'51
transit middle	16305 Oct 17 15:54	12°κ05'29	0°09'18	min. Earth dist.	16306 Oct 03 08:37	21°Ω47'30	0.62597 AU
transit begin	16305 Oct 17 13:11	12°κ11'46		desc. node	16306 Oct 04 01:05	21°Ω06'42	
transit end	16305 Oct 17 18:37	11°κ59'11		morning rise	16306 Oct 06 23:41	18°Ω35'20	
min. Earth dist.	16305 Oct 20 20:23	9°κ09'35	0.60315 AU	direct	16306 Oct 13 16:05	16°Ω09'59	
morning rise	16305 Oct 24 12:50	6°κ19'12		morning max el	16306 Oct 27 17:04	24°Ω07'24	27°55'33
direct	16305 Oct 31 04:05	4°κ11'49			16306 Nov 02 00:48	0°κ	
morning max el	16305 Nov 14 09:50	12°κ01'08	27°53'20		16306 Nov 21 23:49	0°κ	
	16305 Nov 28 14:50	0°κ		asc. node	16306 Nov 28 14:01	12°κ22'47	
asc. node	16305 Dec 11 17:01	22°κ33'49		morning set	16306 Nov 30 22:59	17°κ08'45	
	16305 Dec 15 10:24	0°Ω		max. Earth dist.	16306 Dec 06 04:08	28°κ08'17	1.31720 AU
morning set	16305 Dec 17 00:52	3°Ω19'55			16306 Dec 07 00:41	0°Ω	
max. Earth dist.	16305 Dec 23 01:12	16°Ω23'57	1.31084 AU				
superior conj	16305 Dec 24 03:09	18°Ω48'41	1°31'59	superior conj	16306 Dec 08 12:04	3°Ω13'47	1°20'14
minimum elong	16305 Dec 24 01:44	18°Ω40'43	1°32'32	minimum elong	16306 Dec 08 09:56	3°Ω02'04	1°20'40
	16305 Dec 29 03:46	0°Ω		evening rise	16306 Dec 15 06:10	18°Ω05'15	
evening rise	16305 Dec 30 19:45	3°Ω37'57			16306 Dec 20 23:55	0°Ω	
desc. node	16306 Jan 13 02:44	29°Ω09'35		desc. node	16306 Dec 30 23:35	17°Ω15'01	
	16306 Jan 13 15:07	0°κ		evening max el	16307 Jan 09 02:03	28°Ω21'07	24°15'23
evening max el	16306 Jan 27 14:00	18°κ05'06	25°49'36		16307 Jan 10 22:00	0°κ	
retrograde	16306 Feb 10 12:34	25°κ07'27		retrograde	16307 Jan 22 16:32	5°κ07'02	
evening set	16306 Feb 16 12:12	23°κ44'24		evening set	16307 Jan 27 17:45	4°κ11'25	
min. Earth dist.	16306 Feb 21 03:01	21°κ05'14	0.57248 AU	min. Earth dist.	16307 Feb 02 13:46	1°κ16'58	0.55542 AU
inferior conj	16306 Feb 24 01:14	19°κ03'52	-4°07'07	inferior conj	16307 Feb 04 15:37	0°κ01'23	-5°24'30
minimum elong	16306 Feb 24 10:17	18°κ48'11	4°04'04	minimum elong	16307 Feb 04 23:58	29°Ω48'43	5°22'31
morning rise	16306 Mar 04 11:24	14°κ45'06			16307 Feb 04 16:32	30°κΩ	
direct	16306 Mar 06 10:57	14°κ32'51		morning rise	16307 Feb 13 08:06	26°Ω02'21	
asc. node	16306 Mar 09 14:55	15°κ05'50		direct	16307 Feb 15 16:10	25°Ω48'10	
morning max el	16306 Mar 15 06:31	18°κ52'35	18°50'45	asc. node	16307 Feb 24 12:15	29°Ω28'07	
	16306 Mar 23 10:17	0°κ			16307 Feb 25 03:02	0°κ	
morning set	16306 Mar 31 12:53	15°κ03'54		morning max el	16307 Feb 25 23:59	0°κ48'52	19°54'33
	16306 Apr 08 05:20	0°κ		morning set	16307 Mar 15 17:30	29°κ36'37	
superior conj	16306 Apr 09 05:01	1°κ52'23	0°16'28		16307 Mar 15 22:06	0°κ	
minimum elong	16306 Apr 09 06:04	1°κ57'22	0°15'58	superior conj	16307 Mar 23 13:45	15°κ29'56	0°45'19
desc. node	16306 Apr 11 03:56	5°κ32'05		minimum elong	16307 Mar 23 16:02	15°κ41'18	0°44'50
max. Earth dist.	16306 Apr 16 08:36	14°κ56'30	1.39443 AU	desc. node	16307 Mar 29 00:38	26°κ03'14	
evening rise	16306 Apr 20 06:07	21°κ41'02		max. Earth dist.	16307 Mar 29 15:12	27°κ11'25	1.37157 AU
	16306 Apr 25 06:43	0°κ			16307 Mar 31 03:37	0°κ	
	16306 May 15 19:34	0°Ω		evening rise	16307 Apr 02 08:05	3°κ57'37	

	16307 Apr 18 07:00	0°♂		desc. node	16308 Mar 14 21:19	16°♂29'06	
evening max el	16307 May 07 19:13	24°♂50'37	25°28'01	evening rise	16308 Mar 15 02:39	16°♂54'17	
	16307 May 14 03:18	0°♂			16308 Mar 22 09:45	0°♂	
retrograde	16307 May 20 02:00	1°♂57'16			16308 Apr 11 15:36	0°♂	
asc. node	16307 May 23 09:49	1°♂12'04		evening max el	16308 Apr 19 08:49	8°♂38'16	26°32'51
	16307 May 25 09:01	30°♂♂		retrograde	16308 May 02 10:26	16°♂04'02	
evening set	16307 May 26 00:51	29°♂28'11		evening set	16308 May 08 19:02	13°♂31'12	
min. Earth dist.	16307 May 30 07:39	24°♂45'47	0.67954 AU	asc. node	16308 May 09 06:57	13°♂06'04	
inferior conj	16307 May 31 17:12	22°♂57'33	2°15'51	min. Earth dist.	16308 May 12 19:44	9°♂24'02	0.66652 AU
minimum elong	16307 May 31 15:02	23°♂04'33	2°14'37	inferior conj	16308 May 14 18:24	7°♂03'33	1°35'56
morning rise	16307 Jun 06 05:40	17°♂05'54		minimum elong	16308 May 14 16:22	7°♂09'43	1°34'39
direct	16307 Jun 09 18:11	15°♂54'48		morning rise	16308 May 20 14:47	1°♂23'31	
morning max el	16307 Jun 16 15:19	19°♂38'47	19°04'38	direct	16308 May 23 16:56	0°♂30'10	
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desc. node	16307 Jun 25 00:53	0°♂06'11		desc. node	16308 Jun 10 21:55	19°♂48'15	
greatest brilliancy	16307 Jun 29 14:45	6°♂48'14	-0.7m		16308 Jun 17 09:25	0°♂	
morning set	16307 Jul 10 05:05	22°♂59'23		morning set	16308 Jun 19 06:52	3°♂00'13	
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				minimum elong	16308 Jul 04 16:24	27°♂12'43	2°11'27
superior conj	16307 Jul 26 11:29	18°♂16'48	-2°12'31	max. Earth dist.	16308 Jul 05 16:14	28°♂45'36	1.46021 AU
minimum elong	16307 Jul 26 14:51	18°♂30'03	2°12'56		16308 Jul 06 11:20	0°♂	
	16307 Aug 02 20:47	0°♂		evening rise	16308 Jul 20 20:30	22°♂25'45	
evening rise	16307 Aug 10 08:48	12°♂07'05			16308 Jul 25 16:45	0°♂	
asc. node	16307 Aug 19 09:52	26°♂44'19		greatest brilliancy	16308 Jul 30 12:31	7°♂28'12	-0.8m
	16307 Aug 21 12:13	0°♂		asc. node	16308 Aug 05 06:35	16°♂00'49	
evening max el	16307 Aug 29 17:44	10°♂49'19	18°19'28	evening max el	16308 Aug 12 05:21	24°♂38'23	18°53'28
retrograde	16307 Sep 05 03:04	14°♂13'23		retrograde	16308 Aug 18 22:30	28°♂18'16	
evening set	16307 Sep 08 02:41	13°♂24'11		evening set	16308 Aug 22 07:35	27°♂12'32	
inferior conj	16307 Sep 14 00:07	7°♂53'48	1°57'15	inferior conj	16308 Aug 27 20:39	21°♂28'15	2°34'21
minimum elong	16307 Sep 14 02:25	7°♂47'02	1°56'36	minimum elong	16308 Aug 27 22:42	21°♂21'43	2°33'44
min. Earth dist.	16307 Sep 16 06:46	5°♂14'32	0.64696 AU	min. Earth dist.	16308 Aug 29 13:32	19°♂19'00	0.66469 AU
morning rise	16307 Sep 20 00:37	1°♂32'23		morning rise	16308 Sep 02 12:56	15°♂01'30	
desc. node	16307 Sep 20 22:25	0°♂51'38		desc. node	16308 Sep 06 19:45	12°♂38'53	
	16307 Sep 22 08:40	30°♂♂		direct	16308 Sep 08 17:28	12°♂24'48	
direct	16307 Sep 26 12:56	28°♂57'06		morning max el	16308 Sep 21 15:26	20°♂04'41	26°21'18
	16307 Oct 01 00:57	0°♂			16308 Sep 30 04:11	0°♂	
morning max el	16307 Oct 10 03:47	6°♂52'40	27°22'16		16308 Oct 20 02:09	0°♂	
	16307 Oct 27 23:49	0°♂		morning set	16308 Oct 27 12:42	13°♂18'28	
morning set	16307 Nov 14 11:58	0°♂30'24		max. Earth dist.	16308 Oct 31 08:45	20°♂39'11	1.34672 AU
	16307 Nov 14 05:45	0°♂		asc. node	16308 Nov 01 07:45	22°♂32'24	
asc. node	16307 Nov 15 10:55	2°♂23'44			16308 Nov 05 00:27	0°♂	
max. Earth dist.	16307 Nov 18 23:21	9°♂32'26	1.32926 AU				
				superior conj	16308 Nov 05 14:30	1°♂12'17	0°38'11
superior conj	16307 Nov 22 16:38	17°♂23'24	1°02'17	minimum elong	16308 Nov 05 12:34	1°♂02'21	0°38'25
minimum elong	16307 Nov 22 14:16	17°♂10'41	1°02'35	evening rise	16308 Nov 13 01:51	16°♂52'02	
	16307 Nov 28 12:39	0°♂			16308 Nov 19 14:54	0°♂	
evening rise	16307 Nov 29 16:49	2°♂31'16		evening max el	16308 Dec 02 04:53	18°♂27'41	20°56'06
	16307 Dec 14 15:10	0°♂		desc. node	16308 Dec 03 17:29	19°♂52'24	
desc. node	16307 Dec 17 20:31	4°♂16'18		retrograde	16308 Dec 13 17:52	24°♂10'41	
evening max el	16307 Dec 21 11:38	8°♂15'12	22°31'37	evening set	16308 Dec 16 08:35	23°♂54'24	
retrograde	16308 Jan 03 08:10	14°♂36'45		inferior conj	16308 Dec 25 02:58	20°♂03'05	-5°38'41
evening set	16308 Jan 07 03:09	14°♂05'16		minimum elong	16308 Dec 24 19:21	20°♂13'57	5°36'49
min. Earth dist.	16308 Jan 14 19:50	10°♂35'33	0.54538 AU	min. Earth dist.	16308 Dec 26 01:10	19°♂31'25	0.54448 AU
inferior conj	16308 Jan 15 12:22	10°♂12'15	-6°01'46	morning rise	16309 Jan 02 06:10	16°♂09'46	
minimum elong	16308 Jan 15 13:31	10°♂10'39	6°01'10	direct	16309 Jan 06 11:51	15°♂31'05	
morning rise	16308 Jan 24 00:59	6°♂24'27		morning max el	16309 Jan 19 15:49	21°♂56'59	23°06'39
direct	16308 Jan 27 04:30	6°♂02'01			16309 Jan 26 12:56	0°♂	
morning max el	16308 Feb 08 02:28	11°♂47'25	21°21'34	asc. node	16309 Jan 28 06:50	2°♂30'05	
asc. node	16308 Feb 11 09:34	15°♂22'15		morning set	16309 Feb 11 14:09	29°♂01'12	
	16308 Feb 20 21:48	0°♂			16309 Feb 12 01:09	0°♂	
morning set	16308 Feb 28 02:40	14°♂17'50					
				superior conj	16309 Feb 18 12:06	13°♂57'19	1°24'15
superior conj	16308 Mar 06 09:10	29°♂34'34	1°07'58	minimum elong	16309 Feb 18 14:08	14°♂08'18	1°24'17
minimum elong	16308 Mar 06 11:41	29°♂47'35	1°07'42	max. Earth dist.	16309 Feb 21 18:11	20°♂51'40	1.33293 AU
	16308 Mar 06 14:05	0°♂		evening rise	16309 Feb 26 10:24	0°♂22'14	
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































































































































desc. node	16309 Mar 01 17:59	6° Υ 45'37		minimum elong	16310 Feb 02 21:09	28° \approx 37'43	1°34'36
	16309 Mar 15 10:45	0° B			16310 Feb 03 12:06	0° H	
evening max el	16309 Apr 01 22:14	22° B 10'09	27°18'09	max. Earth dist.	16310 Feb 04 18:46	2° H 47'43	1.32003 AU
retrograde	16309 Apr 15 12:47	29° B 43'11		evening rise	16310 Feb 10 04:13	14° H 13'54	
evening set	16309 Apr 22 04:34	27° B 13'16		desc. node	16310 Feb 16 14:40	26° H 48'09	
min. Earth dist.	16309 Apr 26 00:55	23° B 38'15	0.64939 AU		16310 Feb 18 08:41	0° Υ	
asc. node	16309 Apr 26 04:10	23° B 29'31			16310 Mar 10 11:48	0° B	
inferior conj	16309 Apr 28 12:04	20° B 55'27	0°42'59	evening max el	16310 Mar 15 10:03	5° B 14'59	27°36'35
minimum elong	16309 Apr 28 10:55	20° B 58'37	0°42'04	retrograde	16310 Mar 29 07:50	12° B 45'21	
morning rise	16309 May 04 19:11	15° B 28'44		evening set	16310 Apr 05 03:05	10° B 25'43	
direct	16309 May 07 11:58	14° B 50'28		min. Earth dist.	16310 Apr 08 21:23	7° B 18'09	0.62906 AU
morning max el	16309 May 13 19:14	18° B 05'33	17°55'01	inferior conj	16310 Apr 11 19:15	4° B 25'59	-0°24'00
	16309 May 22 17:09	0° II		minimum elong	16310 Apr 11 20:02	4° B 24'02	0°24'00
desc. node	16309 May 28 18:54	9° II 50'33		asc. node	16310 Apr 13 01:25	3° B 12'30	
morning set	16309 May 31 11:48	14° II 18'40			16310 Apr 17 02:14	30° R Υ	
	16309 Jun 10 02:02	0° E		morning rise	16310 Apr 18 15:46	29° Υ 15'03	
				direct	16310 Apr 21 00:26	28° Υ 48'35	
superior conj	16309 Jun 14 12:20	7° E 04'55	-1°50'20		16310 Apr 24 21:01	0° B	
minimum elong	16309 Jun 14 03:49	6° E 31'07	1°50'17	morning max el	16310 Apr 27 12:53	2° B 07'04	17°46'12
max. Earth dist.	16309 Jun 18 12:11	13° E 22'59	1.45635 AU	morning set	16310 May 13 17:53	26° B 48'29	
	16309 Jun 29 05:32	0° Ω		desc. node	16310 May 15 15:48	0° II 07'15	
evening rise	16309 Jun 30 12:17	1° Ω 57'51			16310 May 15 14:07	0° II	
greatest brilliancy	16309 Jul 14 17:30	23° Ω 21'04	-0.6m				
	16309 Jul 19 10:25	0° P		superior conj	16310 May 25 23:13	17° II 34'48	-1°17'09
asc. node	16309 Jul 23 03:21	4° P 47'52		minimum elong	16310 May 25 16:08	17° II 05'34	1°16'54
evening max el	16309 Jul 26 11:55	8° P 32'02	19°43'41	max. Earth dist.	16310 Jun 01 06:19	27° II 47'49	1.44546 AU
retrograde	16309 Aug 02 20:47	12° P 39'54			16310 Jun 02 15:33	0° E	
evening set	16309 Aug 06 16:01	11° P 16'24		evening rise	16310 Jun 09 23:09	11° E 24'58	
inferior conj	16309 Aug 11 23:55	5° P 19'38	2°57'02		16310 Jun 22 08:36	0° Ω	
minimum elong	16309 Aug 12 01:16	5° P 15'07	2°56'31	evening max el	16310 Jul 09 12:31	22° Ω 27'07	20°48'04
min. Earth dist.	16309 Aug 13 02:53	3° P 49'24	0.67833 AU	asc. node	16310 Jul 10 00:10	22° Ω 55'39	
	16309 Aug 16 06:30	30° R Ω		retrograde	16310 Jul 17 19:47	27° Ω 13'04	
morning rise	16309 Aug 17 10:01	28° Ω 53'25		evening set	16310 Jul 22 01:52	25° Ω 31'37	
direct	16309 Aug 23 04:21	26° Ω 23'04		inferior conj	16310 Jul 27 07:30	19° Ω 23'33	3°07'19
desc. node	16309 Aug 24 17:07	26° Ω 32'24		minimum elong	16310 Jul 27 07:55	19° Ω 22'05	3°06'48
	16309 Aug 31 05:48	0° P		min. Earth dist.	16310 Jul 27 20:49	18° Ω 37'28	0.68735 AU
morning max el	16309 Sep 04 02:27	3° P 31'13	25°01'56	morning rise	16310 Aug 01 13:41	13° Ω 01'37	
	16309 Sep 24 09:24	0° E		direct	16310 Aug 06 20:19	10° Ω 44'00	
morning set	16309 Oct 09 21:20	25° E 23'24		desc. node	16310 Aug 11 14:28	12° Ω 13'47	
	16309 Oct 12 10:48	0° M		morning max el	16310 Aug 17 13:30	17° Ω 07'05	23°33'48
max. Earth dist.	16309 Oct 13 09:46	1° M 45'17	1.36850 AU		16310 Aug 28 06:40	0° P	
asc. node	16309 Oct 19 04:31	12° M 44'10			16310 Sep 17 09:56	0° E	
				morning set	16310 Sep 21 09:41	6° E 35'46	
superior conj	16309 Oct 20 02:36	14° M 32'30	0°08'17	max. Earth dist.	16310 Sep 25 08:33	13° E 21'51	1.39255 AU
minimum elong	16309 Oct 20 02:03	14° M 29'50	0°08'37				
behind sun begin	16309 Oct 19 20:31	14° M 02'36		superior conj	16310 Oct 03 01:13	27° E 15'24	-0°26'22
behind sun end	16309 Oct 20 07:35	14° M .57'07		minimum elong	16310 Oct 03 03:09	27° E 24'24	0°25'47
	16309 Oct 27 18:50	0° A			16310 Oct 04 12:17	0° M	
evening rise	16309 Oct 28 07:00	1° A 01'42		asc. node	16310 Oct 06 01:14	2° M .55'32	
evening max el	16309 Nov 14 12:12	29° A 25'17	19°39'47	evening rise	16310 Oct 12 05:39	14° M .53'47	
	16309 Nov 15 02:30	0° B			16310 Oct 20 08:04	0° A	
desc. node	16309 Nov 20 14:34	3° B 39'08		evening max el	16310 Oct 28 09:18	11° A 13'05	18°45'50
retrograde	16309 Nov 24 09:49	4° B 22'05		retrograde	16310 Nov 05 19:00	15° A 28'00	
evening set	16309 Nov 26 09:46	4° B 10'56		desc. node	16310 Nov 07 11:44	15° A 18'12	
inferior conj	16309 Dec 05 02:09	0° B 08'11	-4°22'02	evening set	16310 Nov 07 16:51	15° A 15'38	
minimum elong	16309 Dec 04 16:16	0° B 23'42	4°18'21	inferior conj	16310 Nov 15 20:18	10° A 52'59	-2°40'23
	16309 Dec 05 07:20	30° R A		minimum elong	16310 Nov 15 13:47	11° A 04'52	2°37'14
min. Earth dist.	16309 Dec 07 08:44	28° A 42'27	0.55292 AU	min. Earth dist.	16310 Nov 18 21:26	8° A 40'12	0.56904 AU
morning rise	16309 Dec 12 21:07	25° A 51'08		morning rise	16310 Nov 23 07:41	6° A 00'29	
direct	16309 Dec 18 03:11	24° A 49'48		direct	16310 Nov 29 07:50	4° A 33'15	
	16309 Dec 30 00:16	0° B		morning max el	16310 Dec 13 12:19	11° A 54'15	26°30'55
morning max el	16309 Dec 31 24:00	1° B 46'45	24°56'12		16310 Dec 27 13:20	0° B	
asc. node	16310 Jan 15 04:02	20° B 34'30		asc. node	16311 Jan 02 01:12	9° B 20'53	
	16310 Jan 20 09:36	0° \approx		morning set	16311 Jan 11 12:36	28° B 14'05	
morning set	16310 Jan 27 02:04	13° \approx 41'44			16311 Jan 12 08:11	0° \approx	
superior conj	16310 Feb 02 19:58	28° \approx 31'12	1°34'15	superior conj	16311 Jan 18 06:34	13° \approx 09'24	1°38'08

minimum elong	16311 Jan 18 06:42	13° \approx 10'12	1°38'40	max. Earth dist.	16312 Jan 02 08:30	26° \approx 53'34	1.30978 AU
max. Earth dist.	16311 Jan 19 00:43	14° \approx 50'43	1.31224 AU		16312 Jan 03 17:46	0° \approx	
evening rise	16311 Jan 25 05:23	28° \approx 21'56		evening rise	16312 Jan 09 11:42	12° \approx 41'15	
	16311 Jan 26 00:04	0° \approx			16312 Jan 18 02:53	0° \approx	
desc. node	16311 Feb 03 11:23	16° \approx 30'00		desc. node	16312 Jan 21 08:10	5° \approx 43'26	
	16311 Feb 11 14:54	0° \approx		evening max el	16312 Feb 07 18:05	29° \approx 10'47	26°32'42
evening max el	16311 Feb 25 17:36	17° \approx 38'32	27°22'16		16312 Feb 08 15:20	0° \approx	
retrograde	16311 Mar 11 18:04	25° \approx 00'17		retrograde	16312 Feb 21 18:12	6° \approx 21'21	
evening set	16311 Mar 18 11:38	22° \approx 57'55		evening set	16312 Feb 28 02:58	4° \approx 42'24	
min. Earth dist.	16311 Mar 22 07:41	20° \approx 10'42	0.60677 AU	min. Earth dist.	16312 Mar 03 07:36	2° \approx 04'35	0.58441 AU
inferior conj	16311 Mar 25 12:21	17° \approx 24'50	-1°44'42	inferior conj	16312 Mar 06 11:35	29° \approx 42'02	-3°14'57
minimum elong	16311 Mar 25 16:12	17° \approx 16'26	1°43'16	minimum elong	16312 Mar 06 19:04	29° \approx 27'57	3°12'11
asc. node	16311 Mar 30 22:45	13° \approx 23'16			16312 Mar 06 02:06	30° \approx 8'11	
morning rise	16311 Apr 02 00:11	12° \approx 32'42		morning rise	16312 Mar 14 14:39	25° \approx 11'18	
direct	16311 Apr 04 02:29	12° \approx 14'35		direct	16312 Mar 16 13:37	24° \approx 58'02	
morning max el	16311 Apr 11 04:50	15° \approx 47'46	17°55'35	asc. node	16312 Mar 16 20:05	24° \approx 58'18	
	16311 Apr 21 02:53	0° \approx		morning max el	16312 Mar 24 15:23	28° \approx 57'20	18°24'34
morning set	16311 Apr 26 19:17	10° \approx 10'59			16312 Mar 25 15:35	0° \approx	
desc. node	16311 May 02 12:37	20° \approx 32'50		morning set	16312 Apr 09 10:29	24° \approx 10'01	
					16312 Apr 12 11:50	0° \approx	
superior conj	16311 May 07 09:32	29° \approx 08'21	-0°39'21	desc. node	16312 Apr 18 09:23	11° \approx 03'24	
minimum elong	16311 May 07 06:05	28° \approx 53'24	0°39'21				
	16311 May 07 21:27	0° \approx		superior conj	16312 Apr 18 17:14	11° \approx 39'23	-0°02'45
max. Earth dist.	16311 May 14 20:35	11° \approx 44'21	1.42856 AU	minimum elong	16312 Apr 18 17:00	11° \approx 38'18	0°03'07
evening rise	16311 May 20 20:56	21° \approx 25'36		behind sun begin	16312 Apr 18 09:52	11° \approx 05'34	
	16311 May 26 09:31	0° \approx		behind sun end	16312 Apr 19 00:08	12° \approx 10'58	
	16311 Jun 16 16:13	0° \approx		max. Earth dist.	16312 Apr 26 05:45	24° \approx 59'29	1.40747 AU
evening max el	16311 Jun 22 07:27	6° \approx 21'29	22°03'19		16312 Apr 29 04:51	0° \approx	
asc. node	16311 Jun 26 21:06	10° \approx 10'38		evening rise	16312 Apr 30 14:29	2° \approx 19'27	
retrograde	16311 Jul 01 17:53	11° \approx 51'53			16312 May 18 16:58	0° \approx	
evening set	16311 Jul 06 11:19	9° \approx 53'26		evening max el	16312 Jun 03 22:28	20° \approx 15'38	23°24'25
inferior conj	16311 Jul 11 17:11	3° \approx 35'28	3°06'32	asc. node	16312 Jun 12 18:05	26° \approx 16'10	
minimum elong	16311 Jul 11 16:40	3° \approx 37'18	3°05'54	retrograde	16312 Jun 14 13:38	26° \approx 30'15	
min. Earth dist.	16311 Jul 11 17:13	3° \approx 35'21	0.69142 AU	evening set	16312 Jun 19 18:40	24° \approx 17'05	
	16311 Jul 14 09:26	30° \approx 8'26		min. Earth dist.	16312 Jun 24 14:03	18° \approx 36'13	0.69055 AU
morning rise	16311 Jul 16 21:51	27° \approx 20'12		inferior conj	16312 Jun 25 03:03	17° \approx 51'23	2°55'16
direct	16311 Jul 21 16:15	25° \approx 19'32		minimum elong	16312 Jun 25 01:41	17° \approx 56'06	2°54'25
desc. node	16311 Jul 29 11:45	29° \approx 18'38		morning rise	16312 Jun 30 08:41	11° \approx 44'11	
	16311 Jul 30 05:42	0° \approx		direct	16312 Jul 04 14:56	10° \approx 02'40	
morning max el	16311 Jul 31 02:51	0° \approx 51'34	22°05'50	morning max el	16312 Jul 12 21:10	14° \approx 45'38	20°45'10
	16311 Aug 22 01:55	0° \approx		desc. node	16312 Jul 15 08:59	17° \approx 25'42	
morning set	16311 Sep 01 22:42	16° \approx 49'20			16312 Jul 25 00:34	0° \approx	
max. Earth dist.	16311 Sep 07 11:05	25° \approx 49'51	1.41603 AU	morning set	16312 Aug 11 13:44	26° \approx 08'11	
	16311 Sep 09 22:37	0° \approx			16312 Aug 14 01:15	0° \approx	
				max. Earth dist.	16312 Aug 19 19:35	9° \approx 09'03	1.43624 AU
superior conj	16311 Sep 15 06:04	9° \approx 11'11	-1°03'21				
minimum elong	16311 Sep 15 11:14	9° \approx 33'58	1°02'31	superior conj	16312 Aug 26 12:55	20° \approx 10'22	-1°38'17
asc. node	16311 Sep 22 21:58	23° \approx 03'06		minimum elong	16312 Aug 26 20:38	20° \approx 42'38	1°37'36
evening rise	16311 Sep 25 18:21	28° \approx 19'51			16312 Sep 01 07:47	0° \approx	
	16311 Sep 26 15:58	0° \approx		evening rise	16312 Sep 07 16:34	11° \approx 07'33	
evening max el	16311 Oct 11 16:30	23° \approx 44'35	18°13'35	asc. node	16312 Sep 08 18:40	13° \approx 02'31	
retrograde	16311 Oct 18 23:44	27° \approx 28'31			16312 Sep 18 20:41	0° \approx	
evening set	16311 Oct 21 02:08	27° \approx 10'34		evening max el	16312 Sep 24 05:29	6° \approx 49'11	18°01'20
desc. node	16311 Oct 25 08:59	24° \approx 57'15		retrograde	16312 Sep 30 20:36	10° \approx 14'54	
inferior conj	16311 Oct 28 12:22	22° \approx 26'25	-1°00'37	evening set	16312 Oct 03 06:26	9° \approx 47'26	
minimum elong	16311 Oct 28 10:09	22° \approx 31'10	0°59'12	inferior conj	16312 Oct 10 00:03	4° \approx 43'38	0°23'33
min. Earth dist.	16311 Oct 31 18:20	19° \approx 41'09	0.59001 AU	minimum elong	16312 Oct 10 00:47	4° \approx 41'50	0°23'35
morning rise	16311 Nov 04 14:44	16° \approx 57'57		desc. node	16312 Oct 11 06:17	3° \approx 28'59	
direct	16311 Nov 11 02:10	15° \approx 04'26		min. Earth dist.	16312 Oct 13 01:04	1° \approx 45'29	0.61293 AU
morning max el	16311 Nov 25 09:02	22° \approx 45'20	27°34'24		16312 Oct 15 01:02	30° \approx 8'11	
	16311 Dec 01 20:11	0° \approx		morning rise	16312 Oct 16 16:13	28° \approx 46'54	
asc. node	16311 Dec 19 22:18	28° \approx 38'08		direct	16312 Oct 23 08:32	26° \approx 30'52	
	16311 Dec 20 15:25	0° \approx			16312 Nov 01 09:23	0° \approx	
morning set	16311 Dec 26 19:58	12° \approx 33'56		morning max el	16312 Nov 06 13:12	4° \approx 25'31	27°58'55
					16312 Nov 25 15:16	0° \approx	
superior conj	16312 Jan 02 18:01	27° \approx 34'55	1°35'58	asc. node	16312 Dec 05 19:20	18° \approx 37'14	
minimum elong	16312 Jan 02 17:08	27° \approx 34'15	1°36'33	morning set	16312 Dec 09 22:06	26° \approx 35'29	

	16312 Dec 11 13:02	0°♄		morning set	16313 Nov 23 16:41	10°♄13'33	
max. Earth dist.	16312 Dec 15 14:09	8°♄46'11	1.31285 AU	max. Earth dist.	16313 Nov 28 13:56	20°♄21'00	1.32166 AU
superior conj	16312 Dec 17 04:24	12°♄17'52	1°27'45	superior conj	16313 Dec 01 11:45	26°♄37'14	1°13'23
minimum elong	16312 Dec 17 02:38	12°♄08'03	1°28'16	minimum elong	16313 Dec 01 09:27	26°♄24'43	1°13'45
evening rise	16312 Dec 23 21:07	27°♄06'27			16313 Dec 03 00:52	0°♄	
	16312 Dec 25 05:26	0°♄		evening rise	16313 Dec 08 07:51	11°♄33'34	
desc. node	16313 Jan 07 04:59	24°♄17'23			16313 Dec 17 13:13	0°♄	
	16313 Jan 11 01:18	0°♄		desc. node	16313 Dec 25 01:52	11°♄57'48	
evening max el	16313 Jan 19 10:09	9°♄50'40	25°11'43	evening max el	16313 Dec 31 20:14	19°♄53'32	23°31'15
retrograde	16313 Feb 02 06:29	16°♄47'27		retrograde	16314 Jan 14 04:58	26°♄30'16	
evening set	16313 Feb 07 21:34	15°♄36'05		evening set	16314 Jan 18 17:35	25°♄46'00	
min. Earth dist.	16313 Feb 12 22:39	12°♄52'32	0.56449 AU	min. Earth dist.	16314 Jan 25 07:20	22°♄38'43	0.55013 AU
inferior conj	16313 Feb 15 14:02	11°♄09'12	-4°43'07	inferior conj	16314 Jan 26 20:03	21°♄45'13	-5°46'52
minimum elong	16313 Feb 15 23:30	10°♄53'46	4°40'18	minimum elong	16314 Jan 27 02:05	21°♄36'25	5°45'38
morning rise	16313 Feb 24 04:07	6°♄59'40		morning rise	16314 Feb 04 12:00	17°♄52'00	
direct	16313 Feb 26 05:48	6°♄47'20		direct	16314 Feb 07 02:57	17°♄35'13	
asc. node	16313 Mar 03 17:24	8°♄19'53		morning max el	16314 Feb 18 03:36	22°♄55'39	20°28'51
morning max el	16313 Mar 07 16:21	11°♄23'48	19°15'06	asc. node	16314 Feb 18 14:43	23°♄23'07	
	16313 Mar 20 01:53	0°♄			16314 Feb 23 23:57	0°♄	
morning set	16313 Mar 24 11:10	8°♄33'02		morning set	16314 Mar 08 18:01	23°♄09'57	
					16314 Mar 12 01:18	0°♄	
superior conj	16313 Apr 01 18:04	24°♄55'59	0°29'26	superior conj	16314 Mar 16 07:44	8°♄45'53	0°55'43
minimum elong	16313 Apr 01 19:47	25°♄04'19	0°28'55	minimum elong	16314 Mar 16 10:14	8°♄58'29	0°55'17
	16313 Apr 04 09:47	0°♄		max. Earth dist.	16314 Mar 21 19:03	19°♄33'49	1.36222 AU
desc. node	16313 Apr 05 06:07	1°♄35'23		desc. node	16314 Mar 23 02:46	22°♄04'33	
max. Earth dist.	16313 Apr 08 11:44	7°♄31'53	1.38453 AU	evening rise	16314 Mar 25 14:46	26°♄43'09	
evening rise	16313 Apr 12 05:17	14°♄08'11			16314 Mar 27 10:18	0°♄	
	16313 Apr 21 20:07	0°♄			16314 Apr 15 06:19	0°♄	
	16313 May 13 14:01	0°♄		evening max el	16314 Apr 30 01:36	18°♄03'39	25°57'42
evening max el	16313 May 17 11:59	4°♄10'51	24°44'58	retrograde	16314 May 12 17:17	25°♄19'51	
retrograde	16313 May 29 05:51	11°♄02'10		asc. node	16314 May 17 12:14	23°♄48'37	
asc. node	16313 May 30 15:07	10°♄54'06		evening set	16314 May 18 20:23	22°♄48'46	
evening set	16313 Jun 03 22:17	8°♄37'46		min. Earth dist.	16314 May 23 00:30	18°♄21'21	0.67447 AU
min. Earth dist.	16313 Jun 08 09:12	3°♄34'05	0.68483 AU	inferior conj	16314 May 24 15:33	16°♄18'39	2°00'27
inferior conj	16313 Jun 09 11:11	2°♄07'34	2°33'28	minimum elong	16314 May 24 13:22	16°♄25'33	1°59'10
minimum elong	16313 Jun 09 09:13	2°♄14'09	2°32'21	morning rise	16314 May 30 07:01	10°♄31'27	
	16313 Jun 11 02:20	30°♄		direct	16314 Jun 02 15:01	9°♄28'04	
morning rise	16313 Jun 14 20:22	26°♄09'42		morning max el	16314 Jun 09 06:31	13°♄01'48	18°44'09
direct	16313 Jun 18 15:06	24°♄47'40		desc. node	16314 Jun 19 03:12	25°♄45'33	
morning max el	16313 Jun 25 22:20	28°♄50'06	19°36'59		16314 Jun 21 23:00	0°♄	
	16313 Jun 27 01:34	0°♄		greatest brilliancy	16314 Jun 23 10:44	2°♄16'23	-0.8m
desc. node	16313 Jul 02 06:08	6°♄18'56		morning set	16314 Jul 01 07:01	14°♄25'50	
greatest brilliancy	16313 Jul 08 18:32	15°♄29'22	-0.6m		16314 Jul 11 07:00	0°♄	
	16313 Jul 18 10:47	0°♄		max. Earth dist.	16314 Jul 16 04:51	7°♄39'07	1.45905 AU
morning set	16313 Jul 21 17:59	5°♄02'45					
max. Earth dist.	16313 Aug 02 10:02	23°♄10'21	1.45106 AU	superior conj	16314 Jul 17 09:54	9°♄32'29	-2°14'22
				minimum elong	16314 Jul 17 09:59	9°♄32'49	2°14'56
superior conj	16313 Aug 06 20:26	0°♄12'30	-2°04'26		16314 Jul 30 09:29	0°♄	
minimum elong	16313 Aug 07 03:02	0°♄38'54	2°04'27	evening rise	16314 Aug 01 21:01	3°♄57'23	
	16313 Aug 06 17:18	0°♄		asc. node	16314 Aug 13 12:05	22°♄19'01	
evening rise	16313 Aug 20 19:02	23°♄03'50			16314 Aug 18 22:04	0°♄	
	16313 Aug 24 22:30	0°♄		evening max el	16314 Aug 22 10:08	4°♄01'26	18°31'57
asc. node	16313 Aug 26 15:23	2°♄49'47		retrograde	16314 Aug 28 21:37	7°♄30'17	
evening max el	16313 Sep 07 20:29	20°♄17'52	18°07'45	evening set	16314 Sep 01 01:17	6°♄34'09	
retrograde	16313 Sep 14 05:13	23°♄38'30		inferior conj	16314 Sep 06 18:45	0°♄57'47	2°14'51
evening set	16313 Sep 16 23:39	22°♄58'02		minimum elong	16314 Sep 06 21:02	0°♄50'51	2°14'12
inferior conj	16313 Sep 23 03:30	17°♄36'55	1°28'19		16314 Sep 07 13:44	30°♄	
minimum elong	16313 Sep 23 05:35	17°♄31'10	1°27'46	min. Earth dist.	16314 Sep 08 19:38	28°♄30'01	0.65500 AU
min. Earth dist.	16313 Sep 25 17:46	14°♄45'51	0.63525 AU	morning rise	16314 Sep 12 15:34	24°♄33'34	
desc. node	16313 Sep 28 03:34	12°♄23'42		desc. node	16314 Sep 15 00:54	22°♄57'05	
morning rise	16313 Sep 29 09:28	11°♄22'02		direct	16314 Sep 19 01:07	21°♄56'36	
direct	16313 Oct 06 00:50	8°♄51'01		morning max el	16314 Oct 02 09:17	29°♄46'39	26°59'11
morning max el	16313 Oct 19 22:10	16°♄49'34	27°45'09		16314 Oct 02 14:34	0°♄	
	16313 Oct 30 21:16	0°♄			16314 Oct 24 19:34	0°♄	
	16313 Nov 18 10:00	0°♄		morning set	16314 Nov 07 00:54	23°♄21'56	
asc. node	16313 Nov 22 16:17	8°♄11'50					

asc. node	16314 Nov 09 13:10	28°♄16'42			16315 Sep 28 13:36	0°♄	
	16314 Nov 10 09:51	0°♄			16315 Oct 17 12:49	0°♄	
max. Earth dist.	16314 Nov 11 05:02	1°♄36'39	1.33609 AU	morning set	16315 Oct 20 19:16	5°♄52'25	
				max. Earth dist.	16315 Oct 24 10:49	12°♄41'41	1.35555 AU
superior conj	16314 Nov 15 13:52	10°♄39'24	0°52'50	asc. node	16315 Oct 27 09:58	18°♄26'56	
minimum elong	16314 Nov 15 11:35	10°♄27'21	0°53'04				
evening rise	16314 Nov 22 18:05	25°♄58'27		superior conj	16315 Oct 30 07:59	24°♄16'53	0°26'12
	16314 Nov 24 16:03	0°♄		minimum elong	16315 Oct 30 06:30	24°♄09'27	0°26'26
desc. node	16314 Dec 11 22:49	28°♄26'16			16315 Nov 02 03:03	0°♄	
	16314 Dec 13 11:21	0°♄		evening rise	16315 Nov 07 01:47	10°♄15'24	
evening max el	16314 Dec 13 08:08	29°♄52'09	21°49'09		16315 Nov 17 11:16	0°♄	
retrograde	16314 Dec 25 16:22	5°♄58'10		evening max el	16315 Nov 25 06:55	10°♄21'26	20°20'57
evening set	16314 Dec 28 22:31	5°♄34'23		desc. node	16315 Nov 28 19:53	13°♄19'01	
inferior conj	16315 Jan 06 12:34	1°♄44'18	-5°59'37	retrograde	16315 Dec 06 03:18	15°♄45'24	
minimum elong	16315 Jan 06 09:35	1°♄48'28	5°58'50	evening set	16315 Dec 08 10:03	15°♄32'11	
min. Earth dist.	16315 Jan 06 12:37	1°♄44'14	0.54389 AU	inferior conj	16315 Dec 17 05:06	11°♄37'00	-5°11'17
	16315 Jan 09 17:30	30°♄		minimum elong	16315 Dec 16 19:35	11°♄51'01	5°08'27
morning rise	16315 Jan 14 21:21	27°♄56'34		min. Earth dist.	16315 Dec 18 18:11	10°♄42'21	0.54700 AU
direct	16315 Jan 18 12:01	27°♄27'59		morning rise	16315 Dec 25 04:37	7°♄35'59	
	16315 Jan 26 13:26	0°♄		direct	16315 Dec 29 21:11	6°♄48'33	
morning max el	16315 Jan 30 23:47	3°♄31'14	22°04'33	morning max el	16316 Jan 12 09:46	13°♄27'59	23°53'47
asc. node	16315 Feb 05 11:59	9°♄51'16		asc. node	16316 Jan 23 09:14	27°♄25'01	
	16315 Feb 17 08:41	0°♄			16316 Jan 24 23:32	0°♄	
morning set	16315 Feb 21 04:28	7°♄53'31		morning set	16316 Feb 05 16:25	22°♄36'40	
					16316 Feb 09 02:06	0°♄	
superior conj	16315 Feb 28 06:44	22°♄59'34	1°15'39				
minimum elong	16315 Feb 28 09:07	23°♄12'06	1°15'29	superior conj	16316 Feb 12 12:05	7°♄27'58	1°29'15
	16315 Mar 03 15:37	0°♄		minimum elong	16316 Feb 12 13:48	7°♄37'17	1°29'25
max. Earth dist.	16315 Mar 04 08:11	1°♄24'22	1.34256 AU	max. Earth dist.	16316 Feb 15 04:45	13°♄16'23	1.32690 AU
evening rise	16315 Mar 08 15:27	9°♄54'48		evening rise	16316 Feb 20 03:51	23°♄33'36	
desc. node	16315 Mar 09 23:28	12°♄27'20			16316 Feb 23 10:39	0°♄	
	16315 Mar 19 22:32	0°♄		desc. node	16316 Feb 24 20:10	2°♄38'34	
	16315 Apr 10 21:13	0°♄			16316 Mar 12 13:42	0°♄	
evening max el	16315 Apr 12 15:28	1°♄46'36	26°54'56	evening max el	16316 Mar 25 04:21	15°♄08'01	27°29'28
retrograde	16315 Apr 25 23:02	9°♄15'49		retrograde	16316 Apr 07 22:15	22°♄40'37	
evening set	16315 May 02 11:07	6°♄43'34		evening set	16316 Apr 14 16:16	20°♄13'55	
asc. node	16315 May 04 09:23	5°♄00'09		min. Earth dist.	16316 Apr 18 11:21	16°♄51'35	0.64116 AU
min. Earth dist.	16315 May 06 09:51	2°♄50'31	0.65976 AU	asc. node	16316 Apr 20 06:36	14°♄58'22	
inferior conj	16315 May 08 13:53	0°♄19'27	1°15'08	inferior conj	16316 Apr 21 03:28	14°♄02'59	0°16'18
minimum elong	16315 May 08 12:06	0°♄24'37	1°13'58	minimum elong	16316 Apr 21 03:00	14°♄04'13	0°15'42
	16315 May 08 20:34	30°♄		transit middle	16316 Apr 21 03:00	14°♄04'13	0°15'42
morning rise	16315 May 14 14:28	24°♄44'42		transit begin	16316 Apr 21 02:25	14°♄05'45	
direct	16315 May 17 12:38	23°♄57'57		transit end	16316 Apr 21 03:35	14°♄02'41	
morning max el	16315 May 23 20:24	27°♄15'56	18°08'00	morning rise	16316 Apr 27 16:01	8°♄42'54	
	16315 May 26 08:22	0°♄		direct	16316 Apr 30 05:15	8°♄10'02	
desc. node	16315 Jun 06 00:12	15°♄36'47		morning max el	16316 May 06 13:36	11°♄24'48	17°49'07
morning set	16315 Jun 11 20:03	24°♄58'59			16316 May 19 10:56	0°♄	
	16315 Jun 14 22:54	0°♄		desc. node	16316 May 22 21:10	5°♄45'45	
				morning set	16316 May 23 12:17	6°♄49'28	
superior conj	16315 Jun 26 19:38	18°♄48'32	-2°04'14				
minimum elong	16315 Jun 26 12:44	18°♄21'30	2°04'31	superior conj	16316 Jun 05 18:21	28°♄44'24	-1°37'17
max. Earth dist.	16315 Jun 29 01:38	22°♄19'36	1.45953 AU	minimum elong	16316 Jun 05 09:56	28°♄10'31	1°37'05
	16315 Jul 03 23:57	0°♄			16316 Jun 06 13:10	0°♄	
evening rise	16315 Jul 12 22:55	13°♄52'13		max. Earth dist.	16316 Jun 10 21:21	6°♄54'26	1.45252 AU
	16315 Jul 23 11:20	0°♄		evening rise	16316 Jun 21 10:30	23°♄16'37	
greatest brilliancy	16315 Jul 24 17:50	1°♄54'31	-0.7m		16316 Jun 25 20:38	0°♄	
asc. node	16315 Jul 31 08:50	11°♄23'38		asc. node	16316 Jul 17 05:37	29°♄55'21	
evening max el	16315 Aug 05 19:48	17°♄52'39	19°12'59		16316 Jul 17 07:17	0°♄	
retrograde	16315 Aug 12 18:33	21°♄42'48		evening max el	16316 Jul 18 23:46	1°♄46'47	20°09'30
evening set	16315 Aug 16 07:58	20°♄29'22		retrograde	16316 Jul 26 17:31	6°♄10'09	
inferior conj	16315 Aug 21 18:27	14°♄39'27	2°45'35	evening set	16316 Jul 30 17:16	4°♄38'53	
minimum elong	16315 Aug 21 20:15	14°♄33'36	2°45'02		16316 Aug 03 23:13	30°♄	
min. Earth dist.	16315 Aug 23 05:18	12°♄46'17	0.67102 AU	inferior conj	16316 Aug 04 23:50	28°♄36'54	3°02'50
morning rise	16315 Aug 27 07:51	8°♄12'32		minimum elong	16316 Aug 05 00:49	28°♄33'35	3°02'20
desc. node	16315 Sep 01 22:15	5°♄38'39		min. Earth dist.	16316 Aug 05 20:54	27°♄25'13	0.68266 AU
direct	16315 Sep 02 08:14	5°♄37'58		morning rise	16316 Aug 10 07:59	22°♄12'01	
morning max el	16315 Sep 14 20:45	13°♄05'34	25°49'20	direct	16316 Aug 15 21:18	19°♄46'42	

desc. node	16316 Aug 18 19:36	20°Ω20'49		morning rise	16317 Jul 25 13:47	6°Ω25'14	
morning max el	16316 Aug 27 07:51	26°Ω37'27	24°25'06	direct	16317 Jul 30 15:10	4°Ω14'22	
	16316 Aug 30 11:02	0°♊		desc. node	16317 Aug 05 16:55	6°Ω40'16	
	16316 Sep 21 03:18	0°♊		morning max el	16317 Aug 09 19:31	10°Ω16'45	22°55'51
morning set	16316 Oct 01 19:50	17°♊36'29			16317 Aug 25 10:17	0°♊	
max. Earth dist.	16316 Oct 05 10:14	23°♊57'59	1.37853 AU	morning set	16317 Sep 12 22:27	28°♊24'03	
	16316 Oct 08 17:25	0°♋			16317 Sep 13 21:40	0°♊	
				max. Earth dist.	16317 Sep 17 09:24	5°♊52'08	1.40272 AU
superior conj	16316 Oct 12 14:50	7°♋22'14	-0°05'57				
minimum elong	16316 Oct 12 15:12	7°♋24'01	0°05'31	superior conj	16317 Sep 25 06:22	19°♊45'42	-0°41'59
behind sun begin	16316 Oct 12 08:46	6°♋53'03		minimum elong	16317 Sep 25 09:38	20°♊00'33	0°41'16
behind sun end	16316 Oct 12 21:38	7°♋55'04		asc. node	16317 Sep 30 03:28	28°♊49'01	
asc. node	16316 Oct 13 06:44	8°♋39'04			16317 Sep 30 18:30	0°♋	
evening rise	16316 Oct 21 04:35	24°♋18'44		evening rise	16317 Oct 04 23:25	8°♋00'17	
	16316 Oct 24 01:40	0°♌			16317 Oct 17 16:58	0°♌	
evening max el	16316 Nov 06 20:21	21°♌40'30	19°14'08	evening max el	16317 Oct 20 22:16	3°♌47'49	18°29'39
desc. node	16316 Nov 14 17:00	26°♌12'55		retrograde	16317 Oct 28 19:28	7°♌47'50	
retrograde	16316 Nov 16 02:09	26°♌18'56		evening set	16317 Oct 30 18:42	7°♌33'38	
evening set	16316 Nov 17 23:45	26°♌08'00		desc. node	16317 Nov 01 14:12	6°♌57'07	
inferior conj	16316 Nov 26 11:36	21°♌57'19	-3°40'14	inferior conj	16317 Nov 07 15:02	3°♌02'13	-1°56'44
minimum elong	16316 Nov 26 02:46	22°♌12'05	3°36'29	minimum elong	16317 Nov 07 10:25	3°♌11'13	1°54'17
min. Earth dist.	16316 Nov 29 03:48	20°♌10'12	0.55893 AU	min. Earth dist.	16317 Nov 10 19:56	0°♌33'05	0.57750 AU
morning rise	16316 Dec 04 03:22	17°♌25'34			16317 Nov 11 14:01	30°♋♋	
direct	16316 Dec 09 17:40	16°♌13'35		morning rise	16317 Nov 14 22:45	27°♋53'48	
morning max el	16316 Dec 23 19:04	23°♌22'01	25°39'23	direct	16317 Nov 21 04:40	26°♋14'46	
	16316 Dec 29 18:17	0°♍			16317 Dec 01 00:23	0°♌	
asc. node	16317 Jan 09 06:27	15°♍48'39		morning max el	16317 Dec 05 10:40	3°♌45'33	27°02'23
	16317 Jan 16 17:30	0°♍			16317 Dec 24 11:30	0°♍	
morning set	16317 Jan 20 03:58	7°♍14'26		asc. node	16317 Dec 27 03:36	4°♍49'11	
				morning set	16318 Jan 04 13:24	21°♍42'06	
					16318 Jan 08 08:24	0°♍	
superior conj	16317 Jan 26 21:23	22°♍04'37	1°36'38				
minimum elong	16317 Jan 26 22:09	22°♍08'48	1°37'05	superior conj	16318 Jan 11 08:37	6°♍43'34	1°37'57
max. Earth dist.	16317 Jan 28 07:50	25°♍15'08	1.31608 AU	minimum elong	16318 Jan 11 08:19	6°♍41'52	1°38'32
	16317 Jan 30 11:54	0°♎		max. Earth dist.	16318 Jan 11 14:50	7°♍18'22	1.31047 AU
evening rise	16317 Feb 03 01:05	7°♎32'46		evening rise	16318 Jan 18 04:42	21°♍46'33	
desc. node	16317 Feb 10 16:53	22°♎33'02			16318 Jan 22 04:06	0°♎	
	16317 Feb 14 22:08	0°♏		desc. node	16318 Jan 28 13:38	12°♎04'12	
evening max el	16317 Mar 07 14:26	27°♏55'53	27°34'35		16318 Feb 09 02:48	0°♏	
	16317 Mar 09 21:32	0°♐		evening max el	16318 Feb 17 19:24	9°♏59'37	27°05'33
retrograde	16317 Mar 21 13:59	5°♐23'59		retrograde	16318 Mar 03 20:32	17°♏17'17	
evening set	16317 Mar 28 09:15	3°♐10'32		evening set	16318 Mar 10 11:03	15°♏24'26	
min. Earth dist.	16317 Apr 01 03:32	0°♐12'50	0.61972 AU	min. Earth dist.	16318 Mar 14 09:42	12°♏42'29	0.59709 AU
	16317 Apr 01 09:13	30°♑		inferior conj	16318 Mar 17 15:09	10°♏04'21	-2°22'14
inferior conj	16317 Apr 04 05:06	27°♑20'57	-0°56'42	minimum elong	16318 Mar 17 20:34	9°♏53'16	2°20'11
minimum elong	16317 Apr 04 07:04	27°♑16'21	0°56'09	morning rise	16318 Mar 25 09:40	5°♑20'58	
asc. node	16317 Apr 07 03:54	24°♑44'26		asc. node	16318 Mar 25 01:14	5°♑26'45	
morning rise	16317 Apr 11 08:02	22°♑18'00		direct	16318 Mar 27 09:53	5°♑05'28	
direct	16317 Apr 13 13:38	21°♑55'38		morning max el	16318 Apr 03 21:13	8°♑48'47	18°05'19
morning max el	16317 Apr 20 07:01	25°♑19'02	17°47'54		16318 Apr 17 15:08	0°♐	
	16317 Apr 24 05:27	0°♐		morning set	16318 Apr 19 11:14	3°♐24'14	
morning set	16317 May 06 03:17	19°♐43'33		desc. node	16318 Apr 26 14:50	16°♐35'15	
desc. node	16317 May 09 18:02	26°♐06'39					
	16317 May 11 23:23	0°♑		superior conj	16318 Apr 29 11:08	21°♐41'39	-0°23'27
superior conj	16317 May 17 15:12	9°♑41'44	-1°01'16	minimum elong	16318 Apr 29 09:11	21°♐32'59	0°23'36
minimum elong	16317 May 17 09:36	9°♑18'07	1°01'05		16318 May 04 05:31	0°♑	
max. Earth dist.	16317 May 24 13:30	21°♑06'58	1.43885 AU	max. Earth dist.	16318 May 07 01:20	4°♑46'31	1.42000 AU
	16317 May 30 03:42	0°♒		evening rise	16318 May 12 06:03	13°♑17'02	
evening rise	16317 Jun 01 00:17	2°♒53'39			16318 May 23 01:46	0°♒	
	16317 Jun 19 07:43	0°♓		evening max el	16318 Jun 14 14:51	29°♒36'09	22°37'28
evening max el	16317 Jul 01 21:42	15°♓41'04	21°19'03		16318 Jun 15 00:32	0°♓	
asc. node	16317 Jul 04 02:30	17°♓42'25		asc. node	16318 Jun 20 23:26	4°♓30'28	
retrograde	16317 Jul 10 16:23	20°♓46'08		retrograde	16318 Jun 24 13:36	5°♓25'37	
evening set	16317 Jul 15 03:08	18°♓57'25		evening set	16318 Jun 29 11:53	3°♓20'51	
inferior conj	16317 Jul 20 08:34	12°♓44'50	3°08'19		16318 Jul 02 13:25	30°♒♒	
minimum elong	16317 Jul 20 08:35	12°♓44'46	3°07'45	inferior conj	16318 Jul 04 18:35	26°♒59'26	3°03'02
min. Earth dist.	16317 Jul 20 16:15	12°♓18'04	0.68962 AU	minimum elong	16318 Jul 04 17:41	27°♒02'34	3°02'18

min. Earth dist.	16318 Jul 04 13:09	27°  18'22	0.69171 AU	minimum elong	16319 Jun 19 02:17	11°  21'36	2°46'21
morning rise	16318 Jul 09 23:20	20°  47'17		morning rise	16319 Jun 24 10:46	5°  12'40	
direct	16318 Jul 14 12:36	18°  54'20		direct	16319 Jun 28 12:08	3°  39'19	
morning max el	16318 Jul 23 10:30	24°  04'44	21°30'07	morning max el	16319 Jul 06 07:32	8°  03'09	20°14'20
desc. node	16318 Jul 23 14:10	24°  13'56		desc. node	16319 Jul 10 11:20	12°  42'13	
	16318 Jul 28 16:05	0°  ♁			16319 Jul 22 23:13	0°  ♁	
	16318 Aug 18 18:41	0°  ♐		morning set	16319 Aug 03 09:43	17°  ♁15'02	
morning set	16318 Aug 24 01:19	8°  ♐11'55			16319 Aug 11 13:53	0°  ♐	
max. Earth dist.	16318 Aug 30 14:06	18°  ♐41'43	1.42524 AU	max. Earth dist.	16319 Aug 13 01:48	2°  ♐22'40	1.44339 AU
	16318 Sep 06 08:01	0°  ♑					
superior conj	16318 Sep 07 02:16	1°  ♑18'20	-1°18'47	superior conj	16319 Aug 18 23:03	11°  ♐52'50	-1°50'54
minimum elong	16318 Sep 07 08:44	1°  ♑46'14	1°17'57	minimum elong	16319 Aug 19 06:57	12°  ♐25'10	1°50'29
asc. node	16318 Sep 17 00:11	18°  ♑53'30			16319 Aug 29 18:04	0°  ♑	
evening rise	16318 Sep 18 06:29	21°  ♑11'02		evening rise	16319 Aug 31 20:56	3°  ♑38'46	
	16318 Sep 23 03:56	0°  ♒		asc. node	16319 Sep 03 20:54	8°  ♑48'39	
evening max el	16318 Oct 04 08:27	16°  ♒34'34	18°06'02	evening max el	16319 Sep 17 22:43	29°  ♑50'42	18°01'49
retrograde	16318 Oct 11 07:20	20°  ♒08'42			16319 Sep 18 02:31	0°  ♒	
evening set	16318 Oct 13 12:51	19°  ♒47'02		retrograde	16319 Sep 24 09:52	3°  ♒12'39	
desc. node	16318 Oct 19 11:27	15°  ♒57'29		evening set	16319 Sep 26 23:20	2°  ♒39'54	
inferior conj	16318 Oct 20 15:45	14°  ♒54'16	-0°22'33		16319 Sep 30 20:51	30°  ♒♑	
minimum elong	16318 Oct 20 14:59	14°  ♒56'00	0°21'49	inferior conj	16319 Oct 03 10:38	27°  ♑28'06	0°53'24
min. Earth dist.	16318 Oct 23 20:38	12°  ♒01'05	0.59974 AU	minimum elong	16319 Oct 03 12:07	27°  ♑24'16	0°53'07
morning rise	16318 Oct 27 13:53	9°  ♒12'57		desc. node	16319 Oct 06 08:42	24°  ♑27'53	
direct	16318 Nov 03 04:25	7°  ♒09'02		min. Earth dist.	16319 Oct 06 07:26	24°  ♑31'03	0.62264 AU
morning max el	16318 Nov 17 10:29	14°  ♒56'06	27°49'46	morning rise	16319 Oct 09 22:24	21°  ♑22'34	
	16318 Nov 29 15:58	0°  ♓		direct	16319 Oct 16 14:54	18°  ♑59'28	
asc. node	16318 Dec 14 00:39	24°  ♓16'25		morning max el	16319 Oct 30 17:04	26°  ♑56'21	27°57'37
	16318 Dec 16 22:12	0°  ♑			16319 Nov 02 14:40	0°  ♒	
morning set	16318 Dec 19 18:44	5°  ♑54'12			16319 Nov 23 08:06	0°  ♓	
max. Earth dist.	16318 Dec 25 22:07	19°  ♑17'35	1.31036 AU	asc. node	16319 Nov 30 21:37	14°  ♓♑03'03	
				morning set	16319 Dec 03 17:57	19°  ♓46'32	
superior conj	16318 Dec 26 19:48	21°  ♑18'39	1°33'13		16319 Dec 08 14:02	0°  ♑	
minimum elong	16318 Dec 26 18:30	21°  ♑11'25	1°33'48	max. Earth dist.	16319 Dec 09 01:56	1°  ♑04'36	1.31590 AU
	16318 Dec 30 17:11	0°  ♒					
evening rise	16319 Jan 02 12:32	6°  ♒08'53		superior conj	16319 Dec 11 05:07	5°  ♑45'17	1°22'25
	16319 Jan 14 19:33	0°  ♐		minimum elong	16319 Dec 11 03:04	5°  ♑34'00	1°22'52
desc. node	16319 Jan 15 10:26	1°  ♐02'21		evening rise	16319 Dec 17 22:44	20°  ♑35'43	
evening max el	16319 Jan 30 16:36	21°  ♐10'02	26°01'49		16319 Dec 22 10:16	0°  ♒	
retrograde	16319 Feb 13 15:37	28°  ♐14'22		desc. node	16320 Jan 02 07:17	19°  ♒15'44	
evening set	16319 Feb 19 17:57	26°  ♐47'10			16320 Jan 10 17:06	0°  ♐	
min. Earth dist.	16319 Feb 24 05:43	24°  ♐08'55	0.57545 AU	evening max el	16320 Jan 12 05:26	1°  ♐30'52	24°30'23
inferior conj	16319 Feb 27 05:51	22°  ♐01'40	-3°53'39	retrograde	16320 Jan 25 21:38	8°  ♐19'54	
minimum elong	16319 Feb 27 14:35	21°  ♐46'14	3°50'38	evening set	16320 Jan 31 02:47	7°  ♐20'10	
morning rise	16319 Mar 07 14:22	17°  ♐39'47		min. Earth dist.	16320 Feb 05 17:17	4°  ♐29'13	0.55755 AU
direct	16319 Mar 09 13:35	17°  ♐27'22		inferior conj	16320 Feb 07 23:10	3°  ♐06'09	-5°14'47
asc. node	16319 Mar 11 22:34	17°  ♐46'20		minimum elong	16320 Feb 08 08:02	2°  ♐52'28	5°12'31
morning max el	16319 Mar 18 04:08	21°  ♐41'23	18°43'13		16320 Feb 13 16:07	30°  ♐♒	
	16319 Mar 24 14:06	0°  ♑		morning rise	16320 Feb 16 15:24	29°  ♒04'44	
morning set	16319 Apr 03 06:59	17°  ♑35'26		direct	16320 Feb 18 21:27	28°  ♒51'13	
	16319 Apr 09 16:49	0°  ♒			16320 Feb 23 19:19	0°  ♐	
superior conj	16319 Apr 12 02:39	4°  ♒33'40	0°11'33	asc. node	16320 Feb 26 19:51	1°  ♐52'33	
minimum elong	16319 Apr 12 03:25	4°  ♒37'13	0°11'06	morning max el	16320 Feb 28 23:37	3°  ♐45'20	19°43'39
behind sun begin	16319 Apr 11 22:25	4°  ♒13'47			16320 Mar 16 09:39	0°  ♑	
behind sun end	16319 Apr 12 08:24	5°  ♒00'36		morning set	16320 Mar 17 10:38	2°  ♑05'40	
desc. node	16319 Apr 13 11:34	7°  ♒06'59					
max. Earth dist.	16319 Apr 19 09:13	17°  ♒44'59	1.39789 AU	superior conj	16320 Mar 25 09:27	18°  ♑06'01	0°41'20
evening rise	16319 Apr 23 08:50	24°  ♒35'21		minimum elong	16320 Mar 25 11:38	18°  ♑16'44	0°40'49
	16319 Apr 26 15:11	0°  ♒		desc. node	16320 Mar 30 08:17	27°  ♑38'24	
	16319 May 16 19:54	0°  ♑		max. Earth dist.	16320 Mar 31 15:28	0°  ♒03'46	1.37486 AU
evening max el	16319 May 28 05:07	13°  ♑31'32	23°59'06		16320 Mar 31 14:40	0°  ♒	
asc. node	16319 Jun 07 20:27	20°  ♑01'10		evening rise	16320 Apr 04 07:57	6°  ♒44'42	
retrograde	16319 Jun 08 07:48	20°  ♑02'07			16320 Apr 18 12:31	0°  ♒	
evening set	16319 Jun 13 17:49	17°  ♑43'43		evening max el	16320 May 09 18:28	27°  ♒26'09	25°17'10
min. Earth dist.	16319 Jun 18 09:27	12°  ♑18'52	0.68882 AU		16320 May 12 13:31	0°  ♑	
inferior conj	16319 Jun 19 03:57	11°  ♑15'56	2°47'19	retrograde	16320 May 21 22:04	4°  ♑29'19	
				asc. node	16320 May 24 17:31	3°  ♑56'47	
				evening set	16320 May 27 19:19	2°  ♑01'11	

	16320 May 29 20:14	30° $\mathbb{R}\mathbb{II}$		min. Earth dist.	16321 May 15 16:08	11° $\mathbb{II}54'47$	0.66868 AU
min. Earth dist.	16320 Jun 01 03:05	27° $\mathbb{II}13'23$	0.68107 AU	inferior conj	16321 May 17 12:51	9° $\mathbb{II}38'34$	1°42'49
inferior conj	16320 Jun 02 10:43	25° $\mathbb{II}30'27$	2°20'51	minimum elong	16321 May 17 10:45	9° $\mathbb{II}44'59$	1°41'33
minimum elong	16320 Jun 02 08:36	25° $\mathbb{II}37'23$	2°19'40	morning rise	16321 May 23 07:52	3° $\mathbb{II}56'34$	
morning rise	16320 Jun 07 22:16	19° $\mathbb{II}37'14$		direct	16321 May 26 11:27	3° $\mathbb{II}00'45$	
direct	16320 Jun 11 12:20	18° $\mathbb{II}23'25$		morning max el	16321 Jun 01 22:52	6° $\mathbb{II}26'30$	18°26'43
morning max el	16320 Jun 18 11:52	22° $\mathbb{II}11'46$	19°12'29	desc. node	16321 Jun 13 05:31	21° $\mathbb{II}29'42$	
	16320 Jun 25 00:14	0° \mathbb{O}			16321 Jun 18 16:34	0° \mathbb{O}	
desc. node	16320 Jun 26 08:27	1° $\mathbb{O}50'59$		morning set	16321 Jun 22 13:29	6° $\mathbb{O}06'13$	
greatest brilliancy	16320 Jul 01 06:39	8° $\mathbb{O}58'51$	-0.7m		16321 Jul 07 19:20	0° \mathbb{O}	
morning set	16320 Jul 12 15:17	26° $\mathbb{O}15'30$					
	16320 Jul 15 01:32	0° \mathbb{O}		superior conj	16321 Jul 08 07:33	0° $\mathbb{O}47'35$	-2°12'31
max. Earth dist.	16320 Jul 25 18:42	16° $\mathbb{O}38'51$	1.45536 AU	minimum elong	16321 Jul 08 04:16	0° $\mathbb{O}34'45$	2°13'02
				max. Earth dist.	16321 Jul 08 14:22	1° $\mathbb{O}14'08$	1.46016 AU
superior conj	16320 Jul 28 21:36	21° $\mathbb{O}33'19$	-2°11'00	evening rise	16321 Jul 24 04:47	25° $\mathbb{O}37'25$	
minimum elong	16320 Jul 29 01:59	21° $\mathbb{O}50'37$	2°11'20		16321 Jul 26 23:36	0° \mathbb{O}	
	16320 Aug 03 05:06	0° \mathbb{O}		greatest brilliancy	16321 Aug 02 01:15	9° $\mathbb{O}29'04$	-0.8m
evening rise	16320 Aug 12 13:25	15° $\mathbb{O}09'38$		asc. node	16321 Aug 07 14:20	17° $\mathbb{O}49'37$	
asc. node	16320 Aug 20 17:36	28° $\mathbb{O}29'12$		evening max el	16321 Aug 15 01:41	27° $\mathbb{O}14'31$	18°47'21
	16320 Aug 21 16:27	0° \mathbb{O}			16321 Aug 18 15:00	0° \mathbb{O}	
evening max el	16320 Aug 31 13:26	13° $\mathbb{O}26'27$	18°15'53	retrograde	16321 Aug 21 17:08	0° $\mathbb{O}51'09$	
retrograde	16320 Sep 06 22:24	16° $\mathbb{O}49'20$			16321 Aug 24 16:46	30° $\mathbb{R}\mathbb{O}$	
evening set	16320 Sep 09 20:37	16° $\mathbb{O}02'32$		evening set	16321 Aug 25 00:46	29° $\mathbb{O}48'00$	
inferior conj	16320 Sep 15 19:36	10° $\mathbb{O}34'30$	1°50'09	inferior conj	16321 Aug 30 14:53	24° $\mathbb{O}05'48$	2°29'38
minimum elong	16320 Sep 15 21:52	10° $\mathbb{O}27'55$	1°49'31	minimum elong	16321 Aug 30 17:01	23° $\mathbb{O}59'05$	2°29'01
min. Earth dist.	16320 Sep 18 04:16	7° $\mathbb{O}51'39$	0.64400 AU	min. Earth dist.	16321 Sep 01 09:53	21° $\mathbb{O}51'20$	0.66233 AU
morning rise	16320 Sep 21 21:27	4° $\mathbb{O}14'24$		morning rise	16321 Sep 05 08:17	17° $\mathbb{O}39'29$	
desc. node	16320 Sep 22 06:02	3° $\mathbb{O}57'52$		desc. node	16321 Sep 09 03:21	15° $\mathbb{O}25'34$	
direct	16320 Sep 28 10:38	1° $\mathbb{O}39'57$		direct	16321 Sep 11 14:15	15° $\mathbb{O}02'20$	
morning max el	16320 Oct 12 03:30	9° $\mathbb{O}37'02$	27°29'09	morning max el	16321 Sep 24 15:02	22° $\mathbb{O}45'29$	26°31'41
	16320 Oct 28 03:40	0° \mathbb{O}			16321 Oct 01 00:55	0° \mathbb{O}	
	16320 Nov 14 16:59	0° \mathbb{O}			16321 Oct 21 10:29	0° \mathbb{O}	
morning set	16320 Nov 16 08:28	3° $\mathbb{O}12'54$		morning set	16321 Oct 30 11:16	16° $\mathbb{O}06'27$	
asc. node	16320 Nov 16 18:32	4° $\mathbb{O}02'45$		max. Earth dist.	16321 Nov 03 09:07	23° $\mathbb{O}39'32$	1.34382 AU
max. Earth dist.	16320 Nov 20 22:26	12° $\mathbb{O}31'46$	1.32712 AU	asc. node	16321 Nov 03 15:25	24° $\mathbb{O}10'42$	
					16321 Nov 06 12:49	0° \mathbb{O}	
superior conj	16320 Nov 24 10:29	19° $\mathbb{O}57'47$	1°05'26				
minimum elong	16320 Nov 24 08:07	19° $\mathbb{O}45'00$	1°05'43	superior conj	16321 Nov 08 09:33	3° $\mathbb{O}50'20$	0°42'15
	16320 Nov 29 01:30	0° \mathbb{O}		minimum elong	16321 Nov 08 07:30	3° $\mathbb{O}39'41$	0°42'28
evening rise	16320 Dec 01 09:28	5° $\mathbb{O}02'13$		evening rise	16321 Nov 15 18:52	19° $\mathbb{O}24'07$	
	16320 Dec 14 13:59	0° \mathbb{O}			16321 Nov 20 23:41	0° \mathbb{O}	
desc. node	16320 Dec 19 04:11	6° $\mathbb{O}28'02$		evening max el	16321 Dec 05 06:26	21° $\mathbb{O}34'02$	21°09'17
evening max el	16320 Dec 23 14:46	11° $\mathbb{O}25'52$	22°46'51	desc. node	16321 Dec 06 01:11	22° $\mathbb{O}18'48$	
retrograde	16321 Jan 05 15:03	17° $\mathbb{O}51'57$		retrograde	16321 Dec 17 00:45	27° $\mathbb{O}23'10$	
evening set	16321 Jan 09 14:33	17° $\mathbb{O}17'27$		evening set	16321 Dec 19 19:03	27° $\mathbb{O}05'19$	
min. Earth dist.	16321 Jan 16 23:58	13° $\mathbb{O}54'01$	0.54631 AU	inferior conj	16321 Dec 28 12:39	23° $\mathbb{O}14'55$	-5°46'05
inferior conj	16321 Jan 17 21:59	13° $\mathbb{O}22'49$	-5°59'45	minimum elong	16321 Dec 28 06:03	23° $\mathbb{O}24'15$	5°44'33
minimum elong	16321 Jan 18 00:32	13° $\mathbb{O}19'12$	5°59'05	min. Earth dist.	16321 Dec 29 05:20	22° $\mathbb{O}51'18$	0.54402 AU
morning rise	16321 Jan 26 11:43	9° $\mathbb{O}34'03$		morning rise	16322 Jan 05 17:14	19° $\mathbb{O}23'35$	
direct	16321 Jan 29 11:36	9° $\mathbb{O}13'23$		direct	16322 Jan 09 19:05	18° $\mathbb{O}47'40$	
morning max el	16321 Feb 10 04:24	14° $\mathbb{O}52'36$	21°07'20	morning max el	16322 Jan 22 19:17	25° $\mathbb{O}08'12$	22°50'17
asc. node	16321 Feb 12 17:07	17° $\mathbb{O}33'48$			16322 Jan 27 05:32	0° \mathbb{O}	
	16321 Feb 21 04:40	0° \mathbb{O}		asc. node	16322 Jan 30 14:24	4° $\mathbb{O}31'58$	
morning set	16321 Mar 01 19:17	16° $\mathbb{O}46'02$			16322 Feb 13 13:39	0° \mathbb{O}	
	16321 Mar 08 02:54	0° \mathbb{O}		morning set	16322 Feb 14 06:33	1° $\mathbb{O}29'38$	
superior conj	16321 Mar 09 03:30	2° $\mathbb{O}07'21$	1°04'57	superior conj	16322 Feb 21 05:29	16° $\mathbb{O}28'00$	1°22'11
minimum elong	16321 Mar 09 06:02	2° $\mathbb{O}20'23$	1°04'37	minimum elong	16322 Feb 21 07:38	16° $\mathbb{O}39'29$	1°22'10
max. Earth dist.	16321 Mar 14 00:31	11° $\mathbb{O}57'16$	1.35334 AU	max. Earth dist.	16322 Feb 24 16:25	23° $\mathbb{O}45'32$	1.33526 AU
desc. node	16321 Mar 17 05:00	18° $\mathbb{O}05'37$			16322 Feb 27 17:52	0° \mathbb{O}	
evening rise	16321 Mar 18 00:18	19° $\mathbb{O}36'17$		evening rise	16322 Mar 01 06:19	3° $\mathbb{O}00'28$	
	16321 Mar 23 18:51	0° \mathbb{O}		desc. node	16322 Mar 04 01:41	8° $\mathbb{O}24'10$	
	16321 Apr 12 13:19	0° \mathbb{O}			16322 Mar 16 15:38	0° \mathbb{O}	
evening max el	16321 Apr 22 08:03	11° $\mathbb{O}15'44$	26°24'21	evening max el	16322 Apr 04 21:43	24° $\mathbb{O}51'12$	27°13'01
retrograde	16321 May 05 07:25	18° $\mathbb{O}39'45$			16322 Apr 11 06:47	0° \mathbb{O}	
evening set	16321 May 11 14:37	16° $\mathbb{O}07'08$		retrograde	16322 Apr 18 10:45	2° $\mathbb{O}23'36$	
asc. node	16321 May 11 14:37	16° $\mathbb{O}07'08$			16322 Apr 24 21:54	30° $\mathbb{R}\mathbb{O}$	

evening set	16322 Apr 25 01:35	29° 8 53'01		desc. node	16323 Feb 18 22:25	28° 8 29'35	
asc. node	16322 Apr 28 11:49	26° 8 42'09			16323 Feb 19 18:00	0° 9	
min. Earth dist.	16322 Apr 28 22:31	26° 8 13'21	0.65216 AU		16323 Mar 11 04:35	0° 8	
inferior conj	16322 May 01 07:50	23° 8 33'15	0°51'56	evening max el	16323 Mar 18 09:58	8° 8 01'05	27°35'44
minimum elong	16322 May 01 06:29	23° 8 37'02	0°50'56	retrograde	16323 Apr 01 06:47	15° 8 31'54	
morning rise	16322 May 07 13:09	18° 8 04'18		evening set	16323 Apr 08 01:53	13° 8 10'16	
direct	16322 May 10 07:18	17° 8 23'55		min. Earth dist.	16323 Apr 11 20:20	9° 8 59'04	0.63230 AU
morning max el	16322 May 16 14:27	20° 8 39'27	17°57'52	inferior conj	16323 Apr 14 16:47	7° 8 07'28	-0°12'53
	16322 May 23 21:02	0° II		minimum elong	16323 Apr 14 17:12	7° 8 06'25	0°13'04
desc. node	16322 May 31 02:31	11° II 29'30		transit middle	16323 Apr 14 17:12	7° 8 06'25	0°13'04
morning set	16322 Jun 03 14:22	17° II 13'26		transit begin	16323 Apr 14 15:22	7° 8 11'02	
	16322 Jun 11 10:34	0° III		transit end	16323 Apr 14 19:02	7° 8 01'48	
				asc. node	16323 Apr 15 09:03	6° 8 26'46	
superior conj	16322 Jun 17 21:09	10° III 16'53	-1°54'28	morning rise	16323 Apr 21 11:09	1° 8 53'58	
minimum elong	16322 Jun 17 12:51	9° III 44'06	1°54'30	direct	16323 Apr 23 21:00	1° 8 25'55	
max. Earth dist.	16322 Jun 21 10:38	15° III 53'07	1.45743 AU	morning max el	16323 Apr 30 08:03	4° 8 42'59	17°46'23
	16322 Jun 30 12:55	0° IV		morning set	16323 May 16 17:00	29° 8 33'24	
evening rise	16322 Jul 03 22:49	5° IV 14'39			16323 May 16 23:10	0° II	
greatest brilliancy	16322 Jul 17 14:48	25° IV 52'44	-0.6m	desc. node	16323 May 17 23:27	1° II 44'23	
	16322 Jul 20 11:25	0° V					
asc. node	16322 Jul 25 11:07	6° V 41'56		superior conj	16323 May 29 04:37	20° II 37'08	-1°22'39
evening max el	16322 Jul 29 09:10	11° V 08'16	19°35'14	minimum elong	16323 May 28 21:05	20° II 06'15	1°22'23
retrograde	16322 Aug 05 15:07	15° V 10'57			16323 Jun 03 24:00	0° VI	
evening set	16322 Aug 09 08:51	13° V 50'04		max. Earth dist.	16323 Jun 04 05:24	0° VI 21'29	1.44752 AU
inferior conj	16322 Aug 14 17:21	7° V 55'07	2°54'23	evening rise	16323 Jun 13 09:17	14° VI 39'32	
minimum elong	16322 Aug 14 18:49	7° V 50'13	2°53'52		16323 Jun 23 13:49	0° VII	
min. Earth dist.	16322 Aug 15 22:22	6° V 18'43	0.67663 AU	asc. node	16323 Jul 12 07:57	24° VII 56'30	
morning rise	16322 Aug 20 04:15	1° V 28'38		evening max el	16323 Jul 12 10:39	25° VII 03'15	20°37'41
	16322 Aug 22 05:03	30° VII		retrograde	16323 Jul 20 14:10	29° VII 42'59	
direct	16322 Aug 26 00:14	28° VII 56'58		evening set	16323 Jul 24 18:38	28° VII 04'03	
desc. node	16322 Aug 27 00:42	29° VII 01'06		inferior conj	16323 Jul 30 00:25	21° VII 57'31	3°06'29
	16322 Aug 30 03:49	0° VIII		minimum elong	16323 Jul 30 00:59	21° VII 55'32	3°05'59
morning max el	16322 Sep 07 02:08	6° VIII 10'20	25°14'31	min. Earth dist.	16323 Jul 30 15:42	21° VII 04'49	0.68631 AU
	16322 Sep 25 14:19	0° IX		morning rise	16323 Aug 04 07:03	15° VII 34'49	
morning set	16322 Oct 12 22:36	28° IX 18'39		direct	16323 Aug 09 15:26	13° VII 15'08	
	16322 Oct 13 21:08	0° X		desc. node	16323 Aug 13 22:03	14° VII 27'46	
max. Earth dist.	16322 Oct 16 11:15	4° X 44'54	1.36505 AU	morning max el	16323 Aug 20 13:10	19° VII 45'28	23°47'10
asc. node	16322 Oct 21 12:15	14° X 22'43			16323 Aug 29 06:36	0° XI	
					16323 Sep 18 17:51	0° XI	
superior conj	16322 Oct 22 23:22	17° X 15'51	0°13'11	morning set	16323 Sep 24 14:15	9° XI 39'40	
minimum elong	16322 Oct 22 22:33	17° X 11'46	0°13'29	max. Earth dist.	16323 Sep 28 10:12	16° XI 16'25	1.38893 AU
behind sun begin	16322 Oct 22 19:00	16° X 54'12			16323 Oct 05 23:12	0° XII	
behind sun end	16322 Oct 23 02:05	17° X 29'22					
	16322 Oct 29 06:25	0° XIII		superior conj	16323 Oct 06 00:17	0° XII 05'05	-0°20'54
evening rise	16322 Oct 31 00:48	3° XIII 36'21		minimum elong	16323 Oct 06 01:46	0° XII 12'06	0°20'20
	16322 Nov 15 07:07	0° XIV		asc. node	16323 Oct 08 09:01	4° XII 34'40	
evening max el	16322 Nov 17 11:37	2° XIV 24'45	19°49'47	evening rise	16323 Oct 15 00:39	17° XII 31'55	
desc. node	16322 Nov 22 22:16	6° XIV 24'12			16323 Oct 21 14:04	0° XV	
retrograde	16322 Nov 27 14:59	7° XIV 28'26		evening max el	16323 Oct 31 06:48	14° XV 05'09	18°52'27
evening set	16322 Nov 29 16:20	7° XIV 16'55		retrograde	16323 Nov 08 21:26	18° XV 25'58	
inferior conj	16322 Dec 08 09:47	3° XIV 16'28	-4°36'02	desc. node	16323 Nov 09 19:25	18° XV 23'10	
minimum elong	16322 Dec 07 23:47	3° XIV 31'53	4°32'29	evening set	16323 Nov 10 18:58	18° XV 14'07	
min. Earth dist.	16322 Dec 10 12:15	1° XIV 58'43	0.55112 AU	inferior conj	16323 Nov 19 00:45	13° XV 54'33	-2°56'10
	16322 Dec 14 01:40	30° XV		minimum elong	16323 Nov 18 17:35	14° XV 07'21	2°52'48
morning rise	16322 Dec 16 05:54	29° XV 04'10		min. Earth dist.	16323 Nov 21 23:57	11° XV 48'05	0.56622 AU
direct	16322 Dec 21 08:44	28° XV 06'34		morning rise	16323 Nov 26 13:18	9° XV 07'33	
	16322 Dec 28 11:00	0° XVI		direct	16323 Dec 02 11:04	7° XV 44'25	
morning max el	16323 Jan 04 03:37	4° XVI 59'01	24°40'19	morning max el	16323 Dec 16 15:00	15° XV 02'11	26°18'32
asc. node	16323 Jan 17 11:39	22° XVI 29'20			16323 Dec 28 14:52	0° XVII	
	16323 Jan 21 18:15	0° XVII		asc. node	16324 Jan 04 08:50	11° XVII 10'15	
morning set	16323 Jan 29 18:34	16° XVII 11'30			16324 Jan 13 20:57	0° XVIII	
	16323 Feb 05 01:41	0° XVIII		morning set	16324 Jan 14 05:27	0° XVIII 45'39	
superior conj	16323 Feb 05 12:47	1° XVIII 01'03	1°33'07	superior conj	16324 Jan 20 23:07	15° XVIII 39'07	1°37'55
minimum elong	16323 Feb 05 14:07	1° XVIII 08'22	1°33'25	minimum elong	16324 Jan 20 23:26	15° XVIII 40'50	1°38'27
max. Earth dist.	16323 Feb 07 16:11	5° XVIII 41'34	1.32168 AU	max. Earth dist.	16324 Jan 21 21:32	17° XVIII 44'00	1.31307 AU
evening rise	16323 Feb 12 22:52	16° XVIII 49'29		evening rise	16324 Jan 27 23:05	0° XIX 55'26	

	16324 Jan 27 12:34	0° H			16325 Jan 04 07:31	0° \approx	
desc. node	16324 Feb 05 19:08	18° H 15'06		evening rise	16325 Jan 11 04:43	15° \approx 13'09	
	16324 Feb 12 17:54	0° Y			16325 Jan 18 11:46	0° H	
evening max el	16324 Feb 28 18:11	20° Y 31'08	27°26'32	desc. node	16325 Jan 22 15:52	7° H 33'19	
retrograde	16324 Mar 13 18:24	27° Y 54'37			16325 Feb 07 15:31	0° Y	
evening set	16324 Mar 20 12:42	25° Y 49'06		evening max el	16325 Feb 09 19:47	2° Y 11'19	26°42'17
min. Earth dist.	16324 Mar 24 08:05	22° Y 59'34	0.61018 AU	retrograde	16325 Feb 23 20:23	9° Y 24'09	
inferior conj	16324 Mar 27 12:12	20° Y 11'33	-1°31'39	evening set	16325 Mar 02 06:51	7° Y 41'23	
minimum elong	16324 Mar 27 15:32	20° Y 04'09	1°30'29	min. Earth dist.	16325 Mar 06 09:32	5° Y 02'58	0.58760 AU
asc. node	16324 Apr 01 06:20	16° Y 28'54		inferior conj	16325 Mar 09 14:19	2° Y 35'44	-3°01'04
morning rise	16324 Apr 03 21:43	15° Y 16'38		minimum elong	16325 Mar 09 21:17	2° Y 22'20	2°58'27
direct	16324 Apr 06 00:50	14° Y 57'31			16325 Mar 13 05:16	30° R H	
morning max el	16324 Apr 13 00:29	18° Y 27'37	17°52'59	morning rise	16325 Mar 17 15:17	28° H 01'49	
	16324 Apr 21 09:22	0° B		asc. node	16325 Mar 19 03:40	27° H 48'51	
morning set	16324 Apr 28 15:50	12° B 49'05		direct	16325 Mar 19 14:20	27° H 48'08	
desc. node	16324 May 03 20:18	22° B 09'05			16325 Mar 25 12:23	0° Y	
	16324 May 08 07:20	0° II		morning max el	16325 Mar 27 12:08	1° Y 42'59	18°18'55
				morning set	16325 Apr 12 05:16	26° Y 43'44	
superior conj	16324 May 09 11:28	2° II 01'36	-0°45'07		16325 Apr 13 22:40	0° B	
minimum elong	16324 May 09 07:28	1° II 44'21	0°45'03	desc. node	16325 Apr 20 17:03	12° B 39'20	
max. Earth dist.	16324 May 16 20:12	14° II 22'49	1.43136 AU				
evening rise	16324 May 23 04:35	24° II 33'14		superior conj	16325 Apr 21 16:13	14° B 25'01	-0°08'05
	16324 May 26 16:40	0° E		minimum elong	16325 Apr 21 15:35	14° B 22'04	0°08'23
	16324 Jun 16 13:59	0° Ω		behind sun begin	16325 Apr 21 09:15	13° B 53'16	
evening max el	16324 Jun 24 06:15	8° Ω 57'40	21°51'36	behind sun end	16325 Apr 21 21:54	14° B 50'49	
asc. node	16324 Jun 28 04:49	12° Ω 20'40		max. Earth dist.	16325 Apr 29 05:52	27° B 43'57	1.41076 AU
retrograde	16324 Jul 03 12:33	14° Ω 21'38			16325 Apr 30 14:02	0° II	
evening set	16324 Jul 08 04:14	12° Ω 25'35		evening rise	16325 May 03 18:57	5° II 18'59	
inferior conj	16324 Jul 13 09:55	6° Ω 08'53	3°07'21		16325 May 19 20:56	0° E	
minimum elong	16324 Jul 13 09:32	6° Ω 10'13	3°06'45	evening max el	16325 Jun 06 21:40	22° E 51'53	23°12'14
min. Earth dist.	16324 Jul 13 11:54	6° Ω 01'56	0.69109 AU	asc. node	16325 Jun 15 01:45	28° E 37'58	
	16324 Jul 18 11:11	30° R E		retrograde	16325 Jun 17 08:44	29° E 00'26	
morning rise	16324 Jul 18 14:38	29° E 52'26		evening set	16325 Jun 22 11:58	26° E 49'22	
direct	16324 Jul 23 10:48	27° E 49'08		inferior conj	16325 Jun 27 19:51	20° E 24'37	2°57'40
	16324 Jul 29 01:41	0° Ω		minimum elong	16325 Jun 27 18:36	20° E 28'57	2°56'51
desc. node	16324 Jul 30 19:20	1° Ω 21'40		min. Earth dist.	16325 Jun 27 08:48	21° E 02'50	0.69097 AU
morning max el	16324 Aug 02 02:03	3° Ω 29'10	22°18'40	morning rise	16325 Jul 03 01:09	14° E 16'02	
	16324 Aug 22 07:27	0° H		direct	16325 Jul 07 09:11	12° E 31'31	
morning set	16324 Sep 04 06:51	20° H 02'42		morning max el	16325 Jul 15 19:24	17° E 21'36	20°56'27
max. Earth dist.	16324 Sep 09 11:48	28° H 36'02	1.41267 AU	desc. node	16325 Jul 17 16:32	19° E 20'27	
	16324 Sep 10 07:47	0° Ω			16325 Jul 26 02:44	0° Ω	
				morning set	16325 Aug 15 00:39	29° Ω 28'22	
superior conj	16324 Sep 17 08:03	12° Ω 08'41	-0°57'45		16325 Aug 15 08:46	0° H	
minimum elong	16324 Sep 17 12:43	12° Ω 29'27	0°56'56	max. Earth dist.	16325 Aug 22 19:05	11° H 47'11	1.43354 AU
asc. node	16324 Sep 24 05:44	24° Ω 43'19					
	16324 Sep 27 01:40	0° M		superior conj	16325 Aug 29 18:19	23° H 16'43	-1°33'22
evening rise	16324 Sep 27 15:06	1° M 02'48		minimum elong	16325 Aug 30 01:48	23° H 48'15	1°32'38
evening max el	16324 Oct 13 12:43	26° M 30'46	18°17'02		16325 Sep 02 17:01	0° Ω	
	16324 Oct 18 20:26	0° J		evening rise	16325 Sep 10 15:45	13° Ω 56'54	
retrograde	16324 Oct 20 23:20	0° J 18'33		asc. node	16325 Sep 11 02:25	14° Ω 44'18	
evening set	16324 Oct 23 00:44	0° J 01'46			16325 Sep 19 22:48	0° M	
	16324 Oct 23 03:17	30° R M		evening max el	16325 Sep 27 01:07	9° M 31'20	18°01'57
desc. node	16324 Oct 26 16:36	28° M 18'14		retrograde	16325 Oct 03 17:55	12° M 58'45	
inferior conj	16324 Oct 30 13:35	25° M 20'52	-1°14'54	evening set	16325 Oct 06 02:35	12° M 32'54	
minimum elong	16324 Oct 30 10:47	25° M 26'44	1°13'14	inferior conj	16325 Oct 12 22:33	7° M 32'01	0°11'59
min. Earth dist.	16324 Nov 02 19:38	22° M 39'04	0.58670 AU	minimum elong	16325 Oct 12 22:57	7° M 31'05	0°12'12
morning rise	16324 Nov 06 17:22	19° M 57'16		transit middle	16325 Oct 12 22:57	7° M 31'05	0°12'12
direct	16324 Nov 13 03:32	18° M 07'21		transit begin	16325 Oct 12 20:48	7° M 36'14	
morning max el	16324 Nov 27 10:26	25° M 46'02	27°27'19	transit end	16325 Oct 13 01:05	7° M 25'55	
	16324 Dec 01 09:45	0° J		desc. node	16325 Oct 13 13:51	6° M 55'03	
asc. node	16324 Dec 21 05:58	0° Z 23'28		min. Earth dist.	16325 Oct 16 00:50	4° M 34'26	0.60954 AU
	16324 Dec 21 01:00	0° Z		morning rise	16325 Oct 19 16:16	1° M 38'58	
morning set	16324 Dec 28 13:23	15° Z 07'32			16325 Oct 22 22:54	30° R Ω	
				direct	16325 Oct 26 08:23	29° Ω 25'42	
superior conj	16325 Jan 04 10:33	0° \approx 17'01	1°36'41		16325 Oct 29 20:57	0° M	
minimum elong	16325 Jan 04 09:49	0° \approx 12'52	1°37'17	morning max el	16325 Nov 09 13:32	7° M 18'49	27°57'45
max. Earth dist.	16325 Jan 04 05:08	29° Z 46'41	1.30976 AU		16325 Nov 26 20:06	0° J	
















































































































asc. node	16325 Dec 08 03:00	19°♊59'53		asc. node	16326 Nov 24 23:57	9°♊52'37	
morning set	16325 Dec 12 16:25	29°♊12'14		morning set	16326 Nov 26 12:15	12°♊54'09	
	16325 Dec 13 01:32	0°♊		max. Earth dist.	16326 Dec 01 12:11	23°♊19'20	1.31999 AU
max. Earth dist.	16325 Dec 18 11:16	11°♊41'09	1.31199 AU				
superior conj	16325 Dec 19 21:12	14°♊49'34	1°29'24	superior conj	16326 Dec 04 05:08	29°♊11'08	1°16'00
minimum elong	16325 Dec 19 19:33	14°♊40'22	1°29'56	minimum elong	16326 Dec 04 02:53	28°♊58'50	1°16'22
evening rise	16325 Dec 26 13:46	29°♊38'01			16326 Dec 04 14:05	0°♊	
	16325 Dec 26 17:50	0°♊		evening rise	16326 Dec 11 00:26	14°♊05'24	
					16326 Dec 18 20:25	0°♊	
desc. node	16326 Jan 09 12:41	26°♋14'17		desc. node	16326 Dec 27 09:34	14°♋03'57	
	16326 Jan 11 23:07	0°♋		evening max el	16327 Jan 03 23:53	23°♋06'17	23°46'49
evening max el	16326 Jan 22 13:14	12°♋59'29	25°25'33	retrograde	16327 Jan 17 10:50	29°♋46'16	
retrograde	16326 Feb 05 10:36	19°♋58'25		evening set	16327 Jan 22 03:59	28°♋58'11	
evening set	16326 Feb 11 04:47	18°♋43'02		min. Earth dist.	16327 Jan 28 11:18	25°♋55'47	0.55180 AU
min. Earth dist.	16326 Feb 16 01:58	16°♋01'20	0.56714 AU	inferior conj	16327 Jan 30 04:48	24°♋54'34	-5°39'55
inferior conj	16326 Feb 18 20:01	14°♋11'27	-4°30'45	minimum elong	16327 Jan 30 11:48	24°♋44'14	5°38'27
minimum elong	16326 Feb 19 05:26	13°♋55'45	4°27'48	morning rise	16327 Feb 07 21:10	20°♋59'29	
morning rise	16326 Feb 27 08:55	9°♋58'43		direct	16327 Feb 10 09:30	20°♋43'43	
direct	16326 Mar 01 09:34	9°♋46'34		asc. node	16327 Feb 20 22:18	25°♋43'06	
asc. node	16326 Mar 06 00:59	10°♋54'30		morning max el	16327 Feb 21 04:14	25°♋57'19	20°16'24
morning max el	16326 Mar 10 14:48	14°♋17'08	19°06'05		16327 Feb 24 18:35	0°♋	
	16326 Mar 21 10:18	0°♋		morning set	16327 Mar 11 10:57	25°♋40'05	
morning set	16326 Mar 27 04:49	11°♋04'30			16327 Mar 13 13:31	0°♋	
superior conj	16326 Apr 04 14:49	27°♌36'02	0°24'54	superior conj	16327 Mar 19 02:51	11°♌21'45	0°52'07
minimum elong	16326 Apr 04 16:19	27°♌43'16	0°24'22	minimum elong	16327 Mar 19 05:17	11°♌34'00	0°51'39
	16326 Apr 05 21:01	0°♌		max. Earth dist.	16327 Mar 24 19:12	22°♌29'15	1.36545 AU
desc. node	16326 Apr 07 13:47	3°♌11'40		desc. node	16327 Mar 25 10:30	23°♌41'38	
max. Earth dist.	16326 Apr 11 12:10	10°♌23'03	1.38800 AU	evening rise	16327 Mar 28 13:43	29°♌29'30	
evening rise	16326 Apr 15 06:46	17°♌00'43			16327 Mar 28 20:27	0°♌	
	16326 Apr 23 03:20	0°♌			16327 Apr 16 09:17	0°♌	
	16326 May 14 08:10	0°♌		evening max el	16327 May 03 00:59	20°♌41'19	25°47'34
evening max el	16326 May 20 11:22	6°♌47'32	24°33'16	retrograde	16327 May 15 13:37	27°♌54'10	
retrograde	16326 Jun 01 01:28	13°♌33'43		asc. node	16327 May 19 19:51	26°♌41'17	
asc. node	16326 Jun 01 22:46	13°♌30'25		evening set	16327 May 21 15:16	25°♌23'43	
evening set	16326 Jun 06 16:13	11°♌10'51		min. Earth dist.	16327 May 25 20:19	20°♌51'06	0.67637 AU
min. Earth dist.	16326 Jun 11 04:21	6°♌01'36	0.68605 AU	inferior conj	16327 May 27 09:26	18°♌53'23	2°06'13
inferior conj	16326 Jun 12 04:22	4°♌41'10	2°37'28	minimum elong	16327 May 27 07:15	19°♌00'20	2°04'58
minimum elong	16326 Jun 12 02:27	4°♌47'34	2°36'24	morning rise	16327 Jun 01 23:47	13°♌04'34	
	16326 Jun 16 00:52	30°♋♌		direct	16327 Jun 05 09:23	11°♌58'27	
morning rise	16326 Jun 17 12:50	28°♌41'45		morning max el	16327 Jun 12 02:38	15°♌35'24	18°50'57
direct	16326 Jun 21 09:17	27°♌16'46		desc. node	16327 Jun 21 10:48	27°♌29'44	
	16326 Jun 27 06:32	0°♌			16327 Jun 23 03:34	0°♌	
morning max el	16326 Jun 28 19:25	1°♌24'21	19°46'07	greatest brilliancy	16327 Jun 25 16:23	3°♌48'55	-0.8m
desc. node	16326 Jul 04 13:42	8°♌07'29		morning set	16327 Jul 04 15:50	17°♌38'55	
	16326 Jul 19 17:13	0°♌			16327 Jul 12 14:43	0°♌	
morning set	16326 Jul 25 05:15	8°♌22'59		max. Earth dist.	16327 Jul 19 03:21	10°♌09'53	1.45836 AU
max. Earth dist.	16326 Aug 05 08:43	25°♌43'00	1.44931 AU				
	16326 Aug 08 01:29	0°♌		superior conj	16327 Jul 20 20:33	12°♌50'54	-2°14'09
superior conj	16326 Aug 10 05:06	3°♌26'37	-2°01'21	minimum elong	16327 Jul 20 21:51	12°♌56'00	2°14'40
minimum elong	16326 Aug 10 12:14	3°♌55'17	2°01'15		16327 Jul 31 17:10	0°♌	
evening rise	16326 Aug 23 21:23	26°♌01'16		evening rise	16327 Aug 05 03:13	7°♌04'46	
	16326 Aug 26 06:00	0°♌		asc. node	16327 Aug 15 19:49	24°♌06'04	
asc. node	16326 Aug 28 23:06	4°♌33'33			16327 Aug 19 19:33	0°♌	
evening max el	16326 Sep 10 16:02	22°♌57'00	18°05'42	evening max el	16327 Aug 25 06:04	6°♌38'56	18°27'15
retrograde	16326 Sep 17 01:03	26°♌17'26		retrograde	16327 Aug 31 16:35	10°♌05'49	
evening set	16326 Sep 19 18:13	25°♌39'01		evening set	16327 Sep 03 18:51	9°♌12'05	
inferior conj	16326 Sep 25 23:53	20°♌20'16	1°19'41	inferior conj	16327 Sep 09 13:37	3°♌37'46	2°08'51
minimum elong	16326 Sep 26 01:51	20°♌14'55	1°19'12	minimum elong	16327 Sep 09 15:56	3°♌30'50	2°08'12
min. Earth dist.	16326 Sep 28 15:56	17°♌27'10	0.63207 AU	min. Earth dist.	16327 Sep 11 16:31	1°♌05'48	0.65224 AU
desc. node	16326 Sep 30 11:08	15°♌40'22		morning rise	16327 Sep 12 15:40	30°♋♌	
morning rise	16326 Sep 30 11:08	15°♌40'22		desc. node	16327 Sep 15 11:42	27°♌14'25	
direct	16326 Oct 02 07:20	14°♌07'38		direct	16327 Sep 17 08:28	25°♌55'57	
	16326 Oct 08 23:13	11°♌38'23			16327 Sep 21 22:16	24°♌37'58	
morning max el	16326 Oct 22 21:50	19°♌36'36	27°49'27		16327 Oct 02 17:18	0°♌	
	16326 Oct 31 19:15	0°♌		morning max el	16327 Oct 05 08:53	2°♌30'04	27°07'49
	16326 Nov 19 19:38	0°♌			16327 Oct 26 01:29	0°♌	

morning set	16327 Nov 09 22:14	26°♄07'36			16328 Oct 17 21:58	0°♄	
asc. node	16327 Nov 11 20:52	29°♄56'26		morning set	16328 Oct 22 18:55	8°♄44'12	
	16327 Nov 11 21:35	0°♄		max. Earth dist.	16328 Oct 26 11:54	15°♄43'45	1.35237 AU
max. Earth dist.	16327 Nov 14 04:54	4°♄38'44	1.33362 AU	asc. node	16328 Oct 28 17:42	20°♄06'08	
superior conj	16327 Nov 18 08:12	13°♄16'21	0°56'23	superior conj	16328 Nov 01 03:40	26°♄57'41	0°30'37
minimum elong	16327 Nov 18 05:52	13°♄03'59	0°56'37	minimum elong	16328 Nov 01 02:01	26°♄49'15	0°30'50
evening rise	16327 Nov 25 10:54	28°♄31'10			16328 Nov 02 15:14	0°♄	
	16327 Nov 26 03:39	0°♄		evening rise	16328 Nov 08 19:06	12°♄49'22	
	16327 Dec 13 15:04	0°♄			16328 Nov 17 15:02	0°♄	
desc. node	16327 Dec 14 06:31	0°♄44'42		evening max el	16328 Nov 27 07:29	13°♄25'26	20°32'50
evening max el	16327 Dec 16 10:46	3°♄02'39	22°03'42	desc. node	16328 Nov 30 03:33	15°♄53'21	
retrograde	16327 Dec 28 23:28	9°♄14'17		retrograde	16328 Dec 08 09:51	18°♄56'18	
evening set	16328 Jan 01 10:06	8°♄47'57		evening set	16328 Dec 10 19:04	18°♄42'12	
inferior conj	16328 Jan 09 22:32	4°♄57'07	-6°01'40	inferior conj	16328 Dec 19 14:07	14°♄48'32	-5°22'03
minimum elong	16328 Jan 09 20:59	4°♄59'16	6°01'02	minimum elong	16328 Dec 19 05:07	15°♄01'39	5°19'32
min. Earth dist.	16328 Jan 09 16:41	5°♄05'17	0.54425 AU	min. Earth dist.	16328 Dec 20 22:09	14°♄01'56	0.54593 AU
morning rise	16328 Jan 18 08:45	1°♄09'47		morning rise	16328 Dec 27 14:52	10°♄50'35	
direct	16328 Jan 21 19:28	0°♄43'31		direct	16329 Jan 01 03:38	10°♄06'22	
morning max el	16328 Feb 03 02:33	6°♄40'29	21°49'12	morning max el	16329 Jan 14 13:34	16°♄41'17	23°37'18
asc. node	16328 Feb 07 19:36	11°♄59'20		asc. node	16329 Jan 24 16:52	29°♄24'15	
	16328 Feb 18 18:41	0°♄			16329 Jan 25 02:04	0°♄	
morning set	16328 Feb 23 21:01	10°♄22'52		morning set	16329 Feb 07 08:51	25°♄06'20	
					16329 Feb 09 15:14	0°♄	
superior conj	16328 Mar 02 00:40	25°♄32'15	1°13'01	superior conj	16329 Feb 14 05:13	9°♄58'59	1°27'34
minimum elong	16328 Mar 02 03:06	25°♄45'01	1°12'49	minimum elong	16329 Feb 14 07:04	10°♄08'57	1°27'42
	16328 Mar 04 04:10	0°♄		max. Earth dist.	16329 Feb 17 02:33	16°♄10'31	1.32889 AU
max. Earth dist.	16328 Mar 06 07:15	4°♄20'01	1.34524 AU	evening rise	16329 Feb 21 23:10	26°♄11'03	
evening rise	16328 Mar 10 12:20	12°♄35'50			16329 Feb 23 21:41	0°♄	
desc. node	16328 Mar 11 07:13	14°♄05'30		desc. node	16329 Feb 26 03:56	4°♄18'53	
	16328 Mar 20 06:04	0°♄			16329 Mar 13 15:03	0°♄	
	16328 Apr 10 10:11	0°♄		evening max el	16329 Mar 28 03:52	17°♄51'21	27°26'07
evening max el	16328 Apr 14 14:46	4°♄26'01	26°47'39	retrograde	16329 Apr 10 20:44	25°♄24'33	
retrograde	16328 Apr 27 20:18	11°♄54'10		evening set	16329 Apr 17 14:04	22°♄56'30	
evening set	16328 May 04 07:16	9°♄21'30		min. Earth dist.	16329 Apr 21 09:29	19°♄29'55	0.64407 AU
asc. node	16328 May 05 17:01	8°♄07'29		asc. node	16329 Apr 22 14:14	18°♄13'51	
min. Earth dist.	16328 May 08 06:39	5°♄23'40	0.66221 AU	inferior conj	16329 Apr 23 23:57	16°♄42'57	0°26'12
inferior conj	16328 May 10 08:50	2°♄56'05	1°22'52	minimum elong	16329 Apr 23 23:13	16°♄44'55	0°25'28
minimum elong	16328 May 10 06:57	3°♄01'39	1°21'40	morning rise	16329 Apr 30 10:33	11°♄20'35	
	16328 May 12 23:47	30°♄		direct	16329 May 03 00:59	10°♄45'55	
morning rise	16328 May 16 07:54	27°♄19'30		morning max el	16329 May 09 08:48	14°♄00'34	17°50'52
direct	16328 May 19 07:27	26°♄30'29			16329 May 20 17:51	0°♄	
morning max el	16328 May 25 15:53	29°♄49'59	18°12'21	desc. node	16329 May 25 04:51	7°♄24'46	
	16328 May 25 20:00	0°♄		morning set	16329 May 26 13:17	9°♄40'35	
desc. node	16328 Jun 07 07:52	17°♄17'52			16329 Jun 07 21:32	0°♄	
morning set	16328 Jun 14 00:54	28°♄00'44		superior conj	16329 Jun 09 01:52	1°♄53'41	-1°42'10
	16328 Jun 15 06:41	0°♄		minimum elong	16329 Jun 08 17:19	1°♄19'25	1°42'01
superior conj	16328 Jun 29 05:48	22°♄05'04	-2°07'00	max. Earth dist.	16329 Jun 13 19:54	9°♄26'13	1.45399 AU
minimum elong	16328 Jun 28 23:41	21°♄41'08	2°07'22	evening rise	16329 Jun 24 21:14	26°♄34'15	
max. Earth dist.	16328 Jul 01 00:06	24°♄50'07	1.45993 AU		16329 Jun 27 03:11	0°♄	
	16328 Jul 04 07:41	0°♄		greatest brilliancy	16329 Jul 09 16:32	18°♄43'27	-0.6m
evening rise	16328 Jul 15 08:26	17°♄07'37			16329 Jul 17 23:35	0°♄	
	16328 Jul 23 16:27	0°♄		asc. node	16329 Jul 19 13:21	1°♄52'43	
greatest brilliancy	16328 Jul 26 09:58	4°♄08'59	-0.7m	evening max el	16329 Jul 21 21:21	4°♄23'32	20°00'07
asc. node	16328 Aug 01 16:33	13°♄15'03		retrograde	16329 Jul 29 11:53	8°♄41'21	
evening max el	16328 Aug 07 16:27	20°♄29'19	19°05'49	evening set	16329 Aug 02 10:02	7°♄12'50	
retrograde	16328 Aug 14 13:06	24°♄15'42		inferior conj	16329 Aug 07 17:01	1°♄12'38	3°00'59
evening set	16328 Aug 18 00:59	23°♄04'59		minimum elong	16329 Aug 07 18:08	1°♄08'53	3°00'28
inferior conj	16328 Aug 23 12:17	17°♄16'56	2°41'50	min. Earth dist.	16329 Aug 08 16:09	29°♄54'18	0.68127 AU
minimum elong	16328 Aug 23 14:12	17°♄10'47	2°41'15		16329 Aug 08 14:28	30°♄	
min. Earth dist.	16328 Aug 25 01:13	15°♄18'01	0.66888 AU	morning rise	16329 Aug 13 01:48	24°♄47'06	
morning rise	16328 Aug 29 02:40	10°♄49'55		direct	16329 Aug 18 16:52	22°♄19'54	
desc. node	16328 Sep 03 05:50	8°♄18'02		desc. node	16329 Aug 21 03:10	22°♄43'23	
direct	16328 Sep 04 04:30	8°♄14'32		morning max el	16329 Aug 30 07:36	29°♄17'06	24°38'02
morning max el	16328 Sep 16 20:31	15°♄46'50	26°00'52		16329 Aug 31 00:19	0°♄	
	16328 Sep 28 14:48	0°♄					

	16329 Sep 22 09:40	0°♄		morning max el	16330 Aug 12 18:57	12°♄55'06	23°09'02
morning set	16329 Oct 04 22:22	20°♄35'33			16330 Aug 26 13:11	0°♄	
max. Earth dist.	16329 Oct 08 11:37	26°♄55'06	1.37500 AU		16330 Sep 15 06:10	0°♄	
	16329 Oct 10 04:03	0°♄		morning set	16330 Sep 16 04:28	1°♄32'06	
				max. Earth dist.	16330 Sep 20 10:29	8°♄42'39	1.39921 AU
superior conj	16329 Oct 15 12:25	10°♄08'05	-0°00'47				
minimum elong	16329 Oct 15 12:27	10°♄08'12	0°00'23	superior conj	16330 Sep 28 06:34	22°♄38'51	-0°36'23
behind sun begin	16329 Oct 15 05:46	9°♄35'49		minimum elong	16330 Sep 28 09:20	22°♄51'35	0°35'42
behind sun end	16329 Oct 15 19:07	10°♄40'39		asc. node	16330 Oct 02 11:15	0°♄28'52	
asc. node	16329 Oct 15 14:30	10°♄18'13			16330 Oct 02 05:09	0°♄	
evening rise	16329 Oct 23 22:46	26°♄54'40		evening rise	16330 Oct 07 19:01	10°♄40'15	
	16329 Oct 25 11:53	0°♄			16330 Oct 18 14:22	0°♄	
evening max el	16329 Nov 09 18:48	24°♄36'37	19°22'40	evening max el	16330 Oct 23 19:08	6°♄37'30	18°34'51
desc. node	16329 Nov 17 00:38	29°♄06'03		retrograde	16330 Oct 31 20:26	10°♄42'21	
retrograde	16329 Nov 19 06:03	29°♄21'21		evening set	16330 Nov 02 19:06	10°♄28'52	
evening set	16329 Nov 21 04:13	29°♄10'28		desc. node	16330 Nov 03 21:46	10°♄09'41	
inferior conj	16329 Nov 29 17:50	25°♄02'48	-3°55'24	inferior conj	16330 Nov 10 17:59	6°♄00'34	-2°12'06
minimum elong	16329 Nov 29 08:33	25°♄18'00	3°51'38	minimum elong	16330 Nov 10 12:42	6°♄10'38	2°09'24
min. Earth dist.	16329 Dec 02 07:03	23°♄22'53	0.55666 AU	min. Earth dist.	16330 Nov 13 21:52	3°♄36'48	0.57446 AU
morning rise	16329 Dec 07 10:42	20°♄36'19		morning rise	16330 Nov 18 03:00	0°♄57'46	
direct	16329 Dec 12 22:15	19°♄28'04			16330 Nov 20 10:55	30°♄	
morning max el	16329 Dec 26 22:17	26°♄32'52	25°24'43	direct	16330 Nov 24 07:09	29°♄22'46	
	16329 Dec 30 05:38	0°♄			16330 Nov 28 04:40	0°♄	
asc. node	16330 Jan 11 14:05	17°♄41'14		morning max el	16330 Dec 08 12:37	6°♄50'10	26°52'08
	16330 Jan 18 04:24	0°♄			16330 Dec 25 17:25	0°♄	
morning set	16330 Jan 22 20:33	9°♄45'03		asc. node	16330 Dec 29 11:15	6°♄37'00	
				morning set	16331 Jan 07 06:23	24°♄14'25	
superior conj	16330 Jan 29 14:03	24°♄34'45	1°35'54		16331 Jan 09 21:48	0°♄	
minimum elong	16330 Jan 29 14:58	24°♄39'48	1°36'19				
max. Earth dist.	16330 Jan 31 04:44	28°♄08'10	1.31732 AU	superior conj	16331 Jan 14 01:05	9°♄13'32	1°38'09
	16330 Feb 01 01:10	0°♄		minimum elong	16331 Jan 14 00:56	9°♄12'44	1°38'42
evening rise	16330 Feb 05 19:15	10°♄07'42		max. Earth dist.	16331 Jan 14 11:26	10°♄11'29	1.31097 AU
desc. node	16330 Feb 13 00:38	24°♄16'19		evening rise	16331 Jan 20 22:02	24°♄19'39	
	16330 Feb 16 05:23	0°♄			16331 Jan 23 15:24	0°♄	
	16330 Mar 09 20:00	0°♄		desc. node	16331 Jan 30 21:20	13°♄51'22	
evening max el	16330 Mar 10 14:36	0°♄45'23	27°36'02		16331 Feb 10 00:04	0°♄	
retrograde	16330 Mar 24 13:44	8°♄14'34		evening max el	16331 Feb 20 20:32	12°♄56'18	27°12'10
evening set	16330 Mar 31 09:03	5°♄58'50		retrograde	16331 Mar 06 21:31	20°♄15'20	
min. Earth dist.	16330 Apr 04 03:14	2°♄57'48	0.62301 AU	evening set	16331 Mar 13 13:13	18°♄19'07	
inferior conj	16330 Apr 07 03:36	0°♄05'25	-0°44'41	min. Earth dist.	16331 Mar 17 10:51	15°♄35'30	0.60049 AU
minimum elong	16330 Apr 07 05:07	0°♄01'47	0°44'22	inferior conj	16331 Mar 20 16:10	12°♄54'21	-2°08'39
	16330 Apr 07 05:52	30°♄		minimum elong	16331 Mar 20 21:01	12°♄44'12	2°06'49
asc. node	16330 Apr 09 11:32	27°♄57'01		asc. node	16331 Mar 27 08:48	8°♄26'45	
morning rise	16330 Apr 14 04:15	24°♄59'35		morning rise	16331 Mar 28 08:21	8°♄07'46	
direct	16330 Apr 16 10:51	24°♄35'53		direct	16331 Mar 30 09:14	7°♄51'25	
morning max el	16330 Apr 23 02:22	27°♄57'26	17°46'53	morning max el	16331 Apr 06 17:12	11°♄30'57	18°01'27
	16330 Apr 24 23:37	0°♄			16331 Apr 19 00:15	0°♄	
morning set	16330 May 09 01:14	22°♄26'11		morning set	16331 Apr 22 06:58	6°♄00'37	
desc. node	16330 May 12 01:43	27°♄44'05		desc. node	16331 Apr 28 22:33	18°♄11'37	
	16330 May 13 08:53	0°♄					
superior conj	16330 May 20 19:09	12°♄41'01	-1°07'01	superior conj	16331 May 02 11:43	24°♄31'27	-0°29'04
minimum elong	16330 May 20 12:59	12°♄15'16	1°06'46	minimum elong	16331 May 02 09:15	24°♄20'36	0°29'11
max. Earth dist.	16330 May 27 12:38	23°♄42'42	1.44128 AU		16331 May 05 15:14	0°♄	
	16330 May 31 11:32	0°♄		max. Earth dist.	16331 May 10 01:17	7°♄28'00	1.42311 AU
evening rise	16330 Jun 04 09:36	6°♄06'42		evening rise	16331 May 15 12:23	16°♄21'29	
	16330 Jun 20 10:46	0°♄			16331 May 24 07:52	0°♄	
evening max el	16330 Jul 04 20:13	18°♄18'10	21°07'59		16331 Jun 15 11:24	0°♄	
asc. node	16330 Jul 06 10:13	19°♄47'29		evening max el	16331 Jun 17 13:56	2°♄12'38	22°25'26
retrograde	16330 Jul 13 10:51	23°♄16'22		asc. node	16331 Jun 23 07:06	6°♄45'10	
evening set	16330 Jul 17 19:56	21°♄30'14		retrograde	16331 Jun 27 08:18	7°♄55'19	
inferior conj	16330 Jul 23 01:23	15°♄19'15	3°08'09	evening set	16331 Jul 02 04:55	5°♄52'41	
minimum elong	16330 Jul 23 01:33	15°♄18'40	3°07'37	inferior conj	16331 Jul 07 11:17	29°♄32'32	3°04'28
min. Earth dist.	16330 Jul 23 11:03	14°♄45'37	0.68896 AU	minimum elong	16331 Jul 07 10:31	29°♄35'12	3°03'48
morning rise	16330 Jul 28 06:53	8°♄58'44			16331 Jul 07 03:24	30°♄	
direct	16330 Aug 02 10:09	6°♄45'21		min. Earth dist.	16331 Jul 07 07:47	29°♄44'46	0.69173 AU
desc. node	16330 Aug 08 00:28	8°♄49'33		morning rise	16331 Jul 12 15:58	23°♄19'16	
				direct	16331 Jul 17 07:01	21°♄23'33	

desc. node	16331 Jul 25 21:44	26° \mathfrak{D} 12'58		morning rise	16332 Jun 26 03:13	7° \mathfrak{D} 44'21	
morning max el	16331 Jul 26 09:14	26° \mathfrak{D} 41'17	21°42'25	direct	16332 Jun 30 06:18	6° \mathfrak{D} 08'10	
	16331 Jul 29 10:40	0° \mathfrak{Q}		morning max el	16332 Jul 08 05:20	10° \mathfrak{D} 38'24	20°24'52
	16331 Aug 20 01:15	0° \mathfrak{M}		desc. node	16332 Jul 11 18:57	14° \mathfrak{D} 34'07	
morning set	16331 Aug 27 10:48	11° \mathfrak{M} 28'31			16332 Jul 23 03:52	0° \mathfrak{Q}	
max. Earth dist.	16331 Sep 02 14:28	21° \mathfrak{M} 24'58	1.42212 AU	morning set	16332 Aug 05 21:16	20° \mathfrak{Q} 36'34	
	16331 Sep 07 17:20	0° \mathfrak{L}			16332 Aug 11 21:51	0° \mathfrak{M}	
				max. Earth dist.	16332 Aug 15 01:14	4° \mathfrak{M} 59'15	1.44101 AU
superior conj	16331 Sep 10 05:39	4° \mathfrak{L} 19'39	-1°13'20	superior conj	16332 Aug 21 05:58	15° \mathfrak{M} 02'45	-1°46'38
minimum elong	16331 Sep 10 11:41	4° \mathfrak{L} 45'53	1°12'30	minimum elong	16332 Aug 21 13:54	15° \mathfrak{M} 35'27	1°46'06
asc. node	16331 Sep 19 07:56	20° \mathfrak{L} 34'27			16332 Aug 30 02:53	0° \mathfrak{L}	
evening rise	16331 Sep 21 04:09	23° \mathfrak{L} 56'29		evening rise	16332 Sep 02 21:26	6° \mathfrak{L} 31'38	
	16331 Sep 24 11:56	0° \mathfrak{M}		asc. node	16332 Sep 05 04:37	10° \mathfrak{L} 31'12	
evening max el	16331 Oct 07 04:21	19° \mathfrak{M} 18'59	18°08'14		16332 Sep 17 12:11	0° \mathfrak{M}	
retrograde	16331 Oct 14 05:54	22° \mathfrak{M} 56'15		evening max el	16332 Sep 19 18:15	2° \mathfrak{M} 31'18	18°01'15
evening set	16331 Oct 16 10:18	22° \mathfrak{M} 35'56		retrograde	16332 Sep 26 06:37	5° \mathfrak{M} 54'24	
desc. node	16331 Oct 21 18:59	19° \mathfrak{M} 22'32		evening set	16332 Sep 28 18:46	5° \mathfrak{M} 23'35	
inferior conj	16331 Oct 23 15:43	17° \mathfrak{M} 46'02	-0°35'46	inferior conj	16332 Oct 05 08:14	0° \mathfrak{M} 14'27	0°43'04
minimum elong	16331 Oct 23 14:28	17° \mathfrak{M} 48'49	0°34'48	minimum elong	16332 Oct 05 09:28	0° \mathfrak{M} 11'18	0°42'54
min. Earth dist.	16331 Oct 26 21:07	14° \mathfrak{M} 55'17	0.59633 AU		16332 Oct 05 13:54	30° \mathfrak{R} \mathfrak{L}	
morning rise	16331 Oct 30 15:21	12° \mathfrak{M} 09'06		desc. node	16332 Oct 07 16:16	27° \mathfrak{L} 51'52	
direct	16331 Nov 06 04:57	10° \mathfrak{M} 08'45		min. Earth dist.	16332 Oct 08 06:33	27° \mathfrak{L} 16'40	0.61927 AU
morning max el	16331 Nov 20 11:19	17° \mathfrak{M} 53'31	27°45'15	morning rise	16332 Oct 11 21:31	24° \mathfrak{L} 11'43	
	16331 Nov 30 14:43	0° \mathfrak{J}		direct	16332 Oct 18 14:01	21° \mathfrak{L} 50'59	
asc. node	16331 Dec 16 08:19	26° \mathfrak{J} 00'43		morning max el	16332 Nov 01 17:13	29° \mathfrak{L} 47'17	27°58'49
	16331 Dec 18 09:19	0° \mathfrak{Z}			16332 Nov 01 22:20	0° \mathfrak{M}	
morning set	16331 Dec 22 12:27	8° \mathfrak{Z} 28'55			16332 Nov 23 15:29	0° \mathfrak{J}	
max. Earth dist.	16331 Dec 28 18:59	22° \mathfrak{Z} 11'53	1.31005 AU	asc. node	16332 Dec 02 05:21	15° \mathfrak{J} 44'51	
				morning set	16332 Dec 05 12:44	22° \mathfrak{J} 24'29	
superior conj	16331 Dec 29 12:22	23° \mathfrak{Z} 49'09	1°34'21		16332 Dec 09 03:09	0° \mathfrak{Z}	
minimum elong	16331 Dec 29 11:13	23° \mathfrak{Z} 42'42	1°34'55	max. Earth dist.	16332 Dec 10 23:34	4° \mathfrak{Z} 01'04	1.31474 AU
	16332 Jan 01 06:40	0° \mathfrak{A}					
evening rise	16332 Jan 05 05:21	8° \mathfrak{A} 40'38		superior conj	16332 Dec 12 22:06	8° \mathfrak{Z} 17'11	1°24'28
	16332 Jan 16 01:23	0° \mathfrak{H}		minimum elong	16332 Dec 12 20:09	8° \mathfrak{Z} 06'23	1°24'56
desc. node	16332 Jan 17 18:06	2° \mathfrak{H} 54'45		evening rise	16332 Dec 19 15:20	23° \mathfrak{Z} 06'47	
evening max el	16332 Feb 02 18:53	24° \mathfrak{H} 13'54	26°13'13		16332 Dec 22 21:18	0° \mathfrak{A}	
	16332 Feb 10 21:49	0° \mathfrak{Y}		desc. node	16333 Jan 03 14:55	21° \mathfrak{A} 15'28	
retrograde	16332 Feb 16 18:16	1° \mathfrak{Y} 20'19			16333 Jan 10 00:35	0° \mathfrak{H}	
evening set	16332 Feb 22 23:04	29° \mathfrak{H} 48'58		evening max el	16333 Jan 14 08:44	4° \mathfrak{H} 40'30	24°45'07
	16332 Feb 22 13:34	30° \mathfrak{R} \mathfrak{H}		retrograde	16333 Jan 28 02:33	11° \mathfrak{H} 32'29	
min. Earth dist.	16332 Feb 27 08:05	27° \mathfrak{H} 11'14	0.57851 AU	evening set	16333 Feb 02 11:21	10° \mathfrak{H} 28'39	
inferior conj	16332 Mar 01 09:51	24° \mathfrak{H} 58'21	-3°40'01	min. Earth dist.	16333 Feb 07 20:46	7° \mathfrak{H} 40'40	0.55983 AU
minimum elong	16332 Mar 01 18:11	24° \mathfrak{H} 43'17	3°37'03	inferior conj	16333 Feb 10 06:18	6° \mathfrak{H} 10'19	-5°04'12
morning rise	16332 Mar 09 16:34	20° \mathfrak{H} 33'24		minimum elong	16333 Feb 10 15:30	5° \mathfrak{H} 55'50	5°01'43
direct	16332 Mar 11 15:36	20° \mathfrak{H} 20'45		morning rise	16333 Feb 18 22:01	2° \mathfrak{H} 06'17	
asc. node	16332 Mar 13 06:07	20° \mathfrak{H} 29'35		direct	16333 Feb 21 02:16	1° \mathfrak{H} 53'19	
morning max el	16332 Mar 20 01:27	24° \mathfrak{H} 29'20	18°36'16	asc. node	16333 Feb 28 03:27	4° \mathfrak{H} 19'46	
	16332 Mar 24 14:26	0° \mathfrak{Y}		morning max el	16333 Mar 02 22:55	6° \mathfrak{H} 41'06	19°33'15
morning set	16332 Apr 05 01:12	20° \mathfrak{Y} 07'44			16333 Mar 17 20:34	0° \mathfrak{Y}	
	16332 Apr 10 04:07	0° \mathfrak{B}		morning set	16333 Mar 20 03:53	4° \mathfrak{Y} 35'20	
superior conj	16332 Apr 14 00:36	7° \mathfrak{B} 16'20	0°06'34	superior conj	16333 Mar 28 05:24	20° \mathfrak{Y} 43'16	0°37'12
minimum elong	16332 Apr 14 01:02	7° \mathfrak{B} 18'20	0°06'08	minimum elong	16333 Mar 28 07:26	20° \mathfrak{Y} 53'14	0°36'40
behind sun begin	16332 Apr 13 18:30	6° \mathfrak{B} 47'56		desc. node	16333 Apr 01 16:01	29° \mathfrak{Y} 14'27	
behind sun end	16332 Apr 14 07:34	7° \mathfrak{B} 48'39			16333 Apr 02 01:45	0° \mathfrak{B}	
desc. node	16332 Apr 14 19:18	8° \mathfrak{B} 42'58		max. Earth dist.	16333 Apr 03 15:45	2° \mathfrak{B} 55'46	1.37818 AU
max. Earth dist.	16332 Apr 21 09:42	20° \mathfrak{B} 32'45	1.40126 AU	evening rise	16333 Apr 07 08:12	9° \mathfrak{B} 33'16	
evening rise	16332 Apr 25 11:57	27° \mathfrak{B} 31'12			16333 Apr 19 18:33	0° \mathfrak{I}	
	16332 Apr 26 23:49	0° \mathfrak{I}		evening max el	16333 May 12 17:44	0° \mathfrak{D} 02'15	25°06'07
	16332 May 16 21:19	0° \mathfrak{D}			16333 May 12 16:49	0° \mathfrak{D}	
evening max el	16332 May 30 04:25	16° \mathfrak{D} 07'40	23°47'01	retrograde	16333 May 24 18:04	7° \mathfrak{D} 01'44	
asc. node	16332 Jun 09 04:04	22° \mathfrak{D} 28'51		asc. node	16333 May 27 01:07	6° \mathfrak{D} 39'55	
retrograde	16332 Jun 10 03:04	22° \mathfrak{D} 32'46		evening set	16333 May 30 13:41	4° \mathfrak{D} 34'43	
evening set	16332 Jun 15 11:23	20° \mathfrak{D} 16'03			16333 Jun 03 16:45	30° \mathfrak{R} \mathfrak{I}	
min. Earth dist.	16332 Jun 20 04:16	14° \mathfrak{D} 45'41	0.68953 AU	min. Earth dist.	16333 Jun 03 22:29	29° \mathfrak{I} 41'27	0.68247 AU
inferior conj	16332 Jun 20 20:52	13° \mathfrak{D} 48'56	2°50'23	inferior conj	16333 Jun 05 04:10	28° \mathfrak{I} 04'02	2°25'38
minimum elong	16332 Jun 20 19:18	13° \mathfrak{D} 54'16	2°49'28				

minimum elong	16333 Jun 05 02:05	28° Π 10'53	2°24'28	morning rise	16334 May 26 00:51	6° Π 29'28	
morning rise	16333 Jun 10 14:50	22° Π 09'11		direct	16334 May 29 05:58	5° Π 31'03	
direct	16333 Jun 14 06:29	20° Π 52'35		morning max el	16334 Jun 04 18:39	8° Π 59'24	18°32'27
morning max el	16333 Jun 21 08:37	24° Π 45'40	19°20'44	desc. node	16334 Jun 15 13:13	23° Π 12'06	
	16333 Jun 25 22:36	0° \mathfrak{C}			16334 Jun 19 23:14	0° \mathfrak{C}	
desc. node	16333 Jun 28 16:07	3° \mathfrak{C} 37'32		morning set	16334 Jun 25 20:40	9° \mathfrak{C} 13'51	
greatest brilliancy	16333 Jul 04 01:07	11° \mathfrak{C} 19'36	-0.7m		16334 Jul 09 03:22	0° \mathfrak{Q}	
morning set	16333 Jul 16 01:55	29° \mathfrak{C} 33'38					
	16333 Jul 16 08:47	0° \mathfrak{Q}		superior conj	16334 Jul 11 18:22	4° \mathfrak{Q} 05'28	-2°13'35
max. Earth dist.	16333 Jul 28 17:14	19° \mathfrak{Q} 10'03	1.45401 AU	minimum elong	16334 Jul 11 16:14	3° \mathfrak{Q} 57'11	2°14'10
				max. Earth dist.	16334 Jul 11 12:30	3° \mathfrak{Q} 42'38	1.45996 AU
superior conj	16333 Aug 01 07:28	24° \mathfrak{Q} 50'04	-2°09'03	evening rise	16334 Jul 27 12:33	28° \mathfrak{Q} 47'46	
minimum elong	16333 Aug 01 12:46	25° \mathfrak{Q} 11'02	2°09'16		16334 Jul 28 06:50	0° \mathfrak{N}	
	16333 Aug 04 13:20	0° \mathfrak{N}		greatest brilliancy	16334 Aug 04 11:55	11° \mathfrak{N} 21'48	-0.8m
evening rise	16333 Aug 15 17:29	18° \mathfrak{N} 11'21		asc. node	16334 Aug 09 22:02	19° \mathfrak{N} 37'29	
	16333 Aug 22 21:51	0° \mathfrak{A}		evening max el	16334 Aug 17 21:55	29° \mathfrak{N} 50'53	18°41'37
asc. node	16333 Aug 23 01:18	0° \mathfrak{A} 14'00			16334 Aug 18 01:39	0° \mathfrak{A}	
evening max el	16333 Sep 03 09:08	16° \mathfrak{A} 04'27	18°12'42	retrograde	16334 Aug 24 11:49	3° \mathfrak{A} 24'28	
retrograde	16333 Sep 09 17:53	19° \mathfrak{A} 26'22		evening set	16334 Aug 27 18:03	2° \mathfrak{A} 23'49	
evening set	16333 Sep 12 14:44	18° \mathfrak{A} 41'53			16334 Aug 30 14:00	30° \mathfrak{R} \mathfrak{N}	
inferior conj	16333 Sep 18 15:21	13° \mathfrak{A} 16'15	1°42'40	inferior conj	16334 Sep 02 09:17	26° \mathfrak{N} 43'42	2°24'39
minimum elong	16333 Sep 18 17:35	13° \mathfrak{A} 09'54	1°42'04	minimum elong	16334 Sep 02 11:29	26° \mathfrak{N} 36'51	2°24'00
min. Earth dist.	16333 Sep 21 02:02	10° \mathfrak{A} 30'10	0.64100 AU	min. Earth dist.	16334 Sep 04 06:23	24° \mathfrak{N} 24'17	0.65988 AU
morning rise	16333 Sep 24 18:37	6° \mathfrak{A} 57'44		morning rise	16334 Sep 08 03:51	20° \mathfrak{N} 18'00	
desc. node	16333 Sep 24 13:36	7° \mathfrak{A} 07'41		desc. node	16334 Sep 11 10:58	18° \mathfrak{N} 15'19	
direct	16333 Oct 01 08:38	4° \mathfrak{A} 24'15		direct	16334 Sep 14 11:09	17° \mathfrak{N} 40'40	
morning max el	16333 Oct 15 03:15	12° \mathfrak{A} 22'19	27°35'20	morning max el	16334 Sep 27 14:36	25° \mathfrak{N} 26'31	26°41'41
	16333 Oct 29 06:15	0° \mathfrak{M}			16334 Oct 01 18:53	0° \mathfrak{A}	
	16333 Nov 16 03:48	0° \mathfrak{J}			16334 Oct 22 18:20	0° \mathfrak{M}	
morning set	16333 Nov 19 04:46	5° \mathfrak{J} 55'08		morning set	16334 Nov 02 09:32	18° \mathfrak{M} 53'49	
asc. node	16333 Nov 19 02:17	5° \mathfrak{J} 42'47		asc. node	16334 Nov 05 23:10	25° \mathfrak{M} 49'31	
max. Earth dist.	16333 Nov 23 21:14	15° \mathfrak{J} 30'38	1.32508 AU	max. Earth dist.	16334 Nov 06 09:24	26° \mathfrak{M} 40'24	1.34099 AU
					16334 Nov 08 01:05	0° \mathfrak{J}	
superior conj	16333 Nov 27 04:15	22° \mathfrak{J} 32'17	1°08'25				
minimum elong	16333 Nov 27 01:53	22° \mathfrak{J} 19'31	1°08'44	superior conj	16334 Nov 11 04:26	6° \mathfrak{J} 28'11	0°46'10
	16333 Nov 30 14:33	0° \mathfrak{Z}		minimum elong	16334 Nov 11 02:17	6° \mathfrak{J} 16'57	0°46'24
evening rise	16333 Dec 04 02:07	7° \mathfrak{Z} 33'34		evening rise	16334 Nov 18 11:51	21° \mathfrak{J} 56'24	
	16333 Dec 15 15:59	0° \mathfrak{A}			16334 Nov 22 09:33	0° \mathfrak{Z}	
desc. node	16333 Dec 21 11:50	8° \mathfrak{A} 38'22		desc. node	16334 Dec 08 08:50	24° \mathfrak{Z} 43'00	
evening max el	16333 Dec 26 18:11	14° \mathfrak{A} 37'49	23°02'22	evening max el	16334 Dec 08 08:23	24° \mathfrak{Z} 41'56	21°22'56
retrograde	16334 Jan 08 21:48	21° \mathfrak{A} 08'00			16334 Dec 16 10:21	0° \mathfrak{A}	
evening set	16334 Jan 13 01:54	20° \mathfrak{A} 30'15		retrograde	16334 Dec 20 07:45	0° \mathfrak{A} 37'04	
min. Earth dist.	16334 Jan 20 04:15	17° \mathfrak{A} 12'48	0.54744 AU	evening set	16334 Dec 23 06:01	0° \mathfrak{A} 17'22	
inferior conj	16334 Jan 21 07:33	16° \mathfrak{A} 33'47	-5°56'24		16334 Dec 24 08:59	30° \mathfrak{R} \mathfrak{Z}	
minimum elong	16334 Jan 21 11:26	16° \mathfrak{A} 28'13	5°55'35	inferior conj	16334 Dec 31 22:33	26° \mathfrak{Z} 27'30	-5°52'13
morning rise	16334 Jan 29 22:14	12° \mathfrak{A} 43'39		minimum elong	16334 Dec 31 17:07	26° \mathfrak{Z} 35'08	5°50'59
direct	16334 Feb 01 18:42	12° \mathfrak{A} 24'33		min. Earth dist.	16335 Jan 01 09:32	26° \mathfrak{Z} 12'04	0.54375 AU
morning max el	16334 Feb 13 06:04	17° \mathfrak{A} 57'25	20°53'27	morning rise	16335 Jan 09 04:35	22° \mathfrak{Z} 37'48	
asc. node	16334 Feb 15 00:47	19° \mathfrak{A} 48'07		direct	16335 Jan 13 02:36	22° \mathfrak{Z} 04'33	
	16334 Feb 22 09:24	0° \mathfrak{H}		morning max el	16335 Jan 25 22:39	28° \mathfrak{Z} 19'20	22°34'04
morning set	16334 Mar 04 11:59	19° \mathfrak{H} 14'50			16335 Jan 27 14:29	0° \mathfrak{A}	
	16334 Mar 09 15:38	0° \mathfrak{Y}		asc. node	16335 Feb 01 22:06	6° \mathfrak{A} 35'53	
					16335 Feb 15 01:39	0° \mathfrak{H}	
superior conj	16334 Mar 11 22:02	4° \mathfrak{Y} 41'03	1°01'45	morning set	16335 Feb 16 23:02	3° \mathfrak{H} 58'24	
minimum elong	16334 Mar 12 00:34	4° \mathfrak{Y} 54'00	1°01'23				
max. Earth dist.	16334 Mar 17 00:02	14° \mathfrak{Y} 51'33	1.35637 AU	superior conj	16335 Feb 23 23:02	18° \mathfrak{H} 59'14	1°19'57
desc. node	16334 Mar 19 12:43	19° \mathfrak{Y} 42'30		minimum elong	16335 Feb 24 01:16	19° \mathfrak{H} 11'09	1°19'54
evening rise	16334 Mar 20 22:18	22° \mathfrak{Y} 19'36		max. Earth dist.	16335 Feb 27 14:58	26° \mathfrak{H} 40'19	1.33773 AU
	16334 Mar 25 04:17	0° \mathfrak{B}			16335 Mar 01 06:06	0° \mathfrak{Y}	
	16334 Apr 13 12:57	0° \mathfrak{I}		evening rise	16335 Mar 04 02:31	5° \mathfrak{Y} 39'29	
evening max el	16334 Apr 25 07:21	13° \mathfrak{I} 53'10	26°15'21	desc. node	16335 Mar 06 09:24	10° \mathfrak{Y} 02'26	
retrograde	16334 May 08 04:15	21° \mathfrak{I} 14'51			16335 Mar 17 21:28	0° \mathfrak{B}	
asc. node	16334 May 13 22:15	19° \mathfrak{I} 06'03		evening max el	16335 Apr 07 21:11	27° \mathfrak{B} 31'35	27°07'12
evening set	16334 May 14 10:01	18° \mathfrak{I} 42'41			16335 Apr 10 14:42	0° \mathfrak{I}	
min. Earth dist.	16334 May 18 12:25	14° \mathfrak{I} 25'03	0.67080 AU	retrograde	16335 Apr 21 08:25	5° \mathfrak{I} 02'55	
inferior conj	16334 May 20 07:08	12° \mathfrak{I} 13'21	1°49'26	evening set	16335 Apr 27 22:21	2° \mathfrak{I} 31'42	
minimum elong	16334 May 20 05:00	12° \mathfrak{I} 19'59	1°48'09	asc. node	16335 Apr 30 19:27	29° \mathfrak{B} 53'05	

	16335 Apr 30 16:47	30° 		inferior conj	16336 Apr 16 14:00	9°  47'40	-0°02'08
min. Earth dist.	16335 May 01 19:54	28°  47'22	0.65491 AU	minimum elong	16336 Apr 16 14:04	9°  47'28	0°02'29
inferior conj	16335 May 04 03:22	26°  10'15	1°00'34	transit middle	16336 Apr 16 14:04	9°  47'28	0°02'29
minimum elong	16335 May 04 01:51	26°  14'35	0°59'30	transit begin	16336 Apr 16 10:57	9°  55'28	
morning rise	16335 May 10 06:57	20°  39'08		transit end	16336 Apr 16 17:11	9°  39'29	
direct	16335 May 13 02:30	19°  56'33		asc. node	16336 Apr 16 16:43	9°  40'42	
morning max el	16335 May 19 09:41	23°  12'41	18°01'02	morning rise	16336 Apr 23 06:16	4°  31'49	
	16335 May 24 22:52	0°  II		direct	16336 Apr 25 17:18	4°  02'05	
desc. node	16335 Jun 02 10:13	13°  II08'51		morning max el	16336 May 02 03:10	7°  18'00	17°46'58
morning set	16335 Jun 06 17:26	20°  II09'13			16336 May 17 07:57	0°  II	
	16335 Jun 12 19:04	0°  ☿		morning set	16336 May 18 16:29	2°  II18'57	
				desc. node	16336 May 19 07:07	3°  II21'28	
superior conj	16335 Jun 21 06:18	13°  ☿29'20	-1°58'16				
minimum elong	16335 Jun 20 22:22	12°  ☿58'05	1°58'23	superior conj	16336 May 31 10:29	23°  II40'22	-1°28'01
max. Earth dist.	16335 Jun 24 09:06	18°  ☿22'48	1.45833 AU	minimum elong	16336 May 31 02:35	23°  II08'09	1°27'45
	16335 Jul 01 20:34	0°  ♊			16336 Jun 04 08:37	0°  ☿	
evening rise	16335 Jul 07 09:07	8°  ♊30'38		max. Earth dist.	16336 Jun 06 04:19	2°  ☿54'00	1.44939 AU
greatest brilliancy	16335 Jul 20 10:15	28°  ♊17'46	-0.7m	evening rise	16336 Jun 15 19:32	17°  ☿54'11	
	16335 Jul 21 14:09	0°  ♊			16336 Jun 23 19:38	0°  ♊	
asc. node	16335 Jul 27 18:48	8°  ♊34'34		asc. node	16336 Jul 13 15:36	26°  ♊55'30	
evening max el	16335 Aug 01 06:15	13°  ♊44'12	19°27'07	evening max el	16336 Jul 14 08:34	27°  ♊38'47	20°27'33
retrograde	16335 Aug 08 09:28	17°  ♊42'08			16336 Jul 17 00:24	0°  ♊	
evening set	16335 Aug 12 01:42	16°  ♊23'50		retrograde	16336 Jul 22 08:31	2°  ♊12'38	
inferior conj	16335 Aug 17 10:50	10°  ♊30'40	2°51'29	evening set	16336 Jul 26 11:20	0°  ♊36'18	
minimum elong	16335 Aug 17 12:26	10°  ♊25'23	2°50'56		16336 Jul 27 04:26	30°  ♊♊	
min. Earth dist.	16335 Aug 18 17:53	8°  ♊48'18	0.67477 AU	inferior conj	16336 Jul 31 17:20	24°  ♊31'17	3°05'23
morning rise	16335 Aug 22 22:35	4°  ♊04'00		minimum elong	16336 Jul 31 18:03	24°  ♊28'49	3°04'53
direct	16335 Aug 28 20:10	1°  ♊31'13		min. Earth dist.	16336 Aug 01 10:37	23°  ♊31'58	0.68513 AU
desc. node	16335 Aug 29 08:19	1°  ♊32'14		morning rise	16336 Aug 06 00:28	18°  ♊07'49	
morning max el	16335 Sep 10 01:50	8°  ♊49'40	25°26'57	direct	16336 Aug 11 10:34	15°  ♊46'08	
	16335 Sep 26 18:28	0°  ♋		desc. node	16336 Aug 15 05:38	16°  ♊43'25	
	16335 Oct 15 07:15	0°  ♋		morning max el	16336 Aug 22 12:51	22°  ♊23'43	24°00'30
morning set	16335 Oct 15 23:26	1°  ♋12'45			16336 Aug 29 04:47	0°  ♋	
max. Earth dist.	16335 Oct 19 12:47	7°  ♋45'29	1.36167 AU		16336 Sep 19 01:28	0°  ♋	
asc. node	16335 Oct 23 19:58	16°  ♋01'02		morning set	16336 Sep 26 18:15	12°  ♋41'50	
				max. Earth dist.	16336 Sep 30 11:50	19°  ♋11'28	1.38531 AU
superior conj	16335 Oct 25 19:52	19°  ♋58'19	0°17'57		16336 Oct 06 10:11	0°  ♋	
minimum elong	16335 Oct 25 18:47	19°  ♋52'56	0°18'14				
	16335 Oct 30 18:18	0°  ♌		superior conj	16336 Oct 07 22:54	2°  ♋53'09	-0°15'28
evening rise	16335 Nov 02 18:28	6°  ♌10'36		minimum elong	16336 Oct 07 23:58	2°  ♋58'14	0°14'58
	16335 Nov 15 23:12	0°  ♌		behind sun begin	16336 Oct 07 21:18	2°  ♋45'35	
evening max el	16335 Nov 20 11:18	5°  ♌24'53	20°00'12	behind sun end	16336 Oct 08 02:38	3°  ♋10'53	
desc. node	16335 Nov 25 05:53	9°  ♌05'49		asc. node	16336 Oct 09 16:42	6°  ♋12'57	
retrograde	16335 Nov 30 20:33	10°  ♌35'35		evening rise	16336 Oct 16 19:23	20°  ♋08'57	
evening set	16335 Dec 02 23:32	10°  ♌23'36			16336 Oct 21 21:47	0°  ♌	
inferior conj	16335 Dec 11 17:48	6°  ♌25'08	-4°49'16	evening max el	16336 Nov 02 04:27	16°  ♌57'28	18°59'31
minimum elong	16335 Dec 11 07:48	6°  ♌40'16	4°45'56	retrograde	16336 Nov 11 00:16	21°  ♌24'23	
min. Earth dist.	16335 Dec 13 15:48	5°  ♌15'27	0.54951 AU	desc. node	16336 Nov 11 03:01	21°  ♌24'21	
morning rise	16335 Dec 19 15:04	2°  ♌17'14		evening set	16336 Nov 12 21:37	21°  ♌12'57	
direct	16335 Dec 24 14:29	1°  ♌23'16		inferior conj	16336 Nov 21 05:39	16°  ♌56'29	-3°11'53
morning max el	16336 Jan 07 07:18	8°  ♌11'07	24°24'13	minimum elong	16336 Nov 20 21:50	17°  ♌10'05	3°08'22
asc. node	16336 Jan 19 19:21	24°  ♌25'06		min. Earth dist.	16336 Nov 24 02:40	14°  ♌56'33	0.56356 AU
	16336 Jan 23 01:44	0°  ♍		morning rise	16336 Nov 28 19:19	12°  ♌14'51	
morning set	16336 Feb 01 11:02	18°  ♍40'40		direct	16336 Dec 04 14:33	10°  ♌55'42	
	16336 Feb 06 15:19	0°  ♍		morning max el	16336 Dec 18 17:50	18°  ♌10'18	26°05'27
					16336 Dec 28 14:06	0°  ♍	
superior conj	16336 Feb 08 05:40	3°  ♍30'30	1°31'51	asc. node	16337 Jan 05 16:31	12°  ♍59'51	
minimum elong	16336 Feb 08 07:09	3°  ♍38'34	1°32'06		16337 Jan 14 09:26	0°  ♍	
max. Earth dist.	16336 Feb 10 13:41	8° ♍34'59	1.32342 AU	morning set	16337 Jan 15 22:11	3° ♍16'06	
evening rise	16336 Feb 15 17:39	19° ♍24'48					
desc. node	16336 Feb 21 06:05	0° ♎		superior conj	16337 Jan 22 15:40	18° ♍08'03	1°37'36
	16336 Feb 21 03:59	0° ♎		minimum elong	16337 Jan 22 16:08	18° ♍10'40	1°38'05
	16336 Mar 11 00:48	0° ♎		max. Earth dist.	16337 Jan 23 18:17	20° ♍36'05	1.31398 AU
evening max el	16336 Mar 20 09:42	10° ♎45'33	27°34'11		16337 Jan 28 01:30	0° ♎	
retrograde	16336 Apr 03 05:31	18° ♎16'58		evening rise	16337 Jan 29 16:50	3° ♎28'19	
evening set	16336 Apr 10 00:22	15° ♎53'25		desc. node	16337 Feb 07 02:48	19° ♎58'39	
min. Earth dist.	16336 Apr 13 18:59	12° ♎38'29	0.63546 AU		16337 Feb 12 22:30	0° ♎	

evening max el	16337 Mar 02 18:36	23° Υ 22'08	27°30'08	desc. node	16338 Jan 24 23:32	9° X 21'33	
	16337 Mar 12 12:04	0° B			16338 Feb 08 01:04	0° Υ	
retrograde	16337 Mar 16 18:38	0° B 47'28		evening max el	16338 Feb 12 21:22	5° Υ 10'26	26°51'11
	16337 Mar 20 21:31	30° $\text{R}\Upsilon$		retrograde	16338 Feb 26 22:20	12° Υ 25'18	
evening set	16337 Mar 23 13:27	28° Υ 38'56		evening set	16338 Mar 05 10:19	10° Υ 38'54	
min. Earth dist.	16337 Mar 27 08:15	25° Υ 46'52	0.61351 AU	min. Earth dist.	16338 Mar 09 11:22	7° Υ 59'30	0.59085 AU
inferior conj	16337 Mar 30 11:40	22° Υ 57'01	-1°18'55	inferior conj	16338 Mar 12 16:37	5° Υ 28'02	-2°47'10
minimum elong	16337 Mar 30 14:30	22° Υ 50'38	1°17'58	minimum elong	16338 Mar 12 23:02	5° Υ 15'23	2°44'44
asc. node	16337 Apr 03 13:59	19° Υ 35'55		morning rise	16338 Mar 20 15:23	0° Υ 50'50	
morning rise	16337 Apr 06 18:52	17° Υ 59'20		asc. node	16338 Mar 21 11:18	0° Υ 41'27	
direct	16337 Apr 08 22:48	17° Υ 39'09		direct	16338 Mar 22 14:41	0° Υ 36'38	
morning max el	16337 Apr 15 20:03	21° Υ 06'36	17°50'49	morning max el	16338 Mar 30 08:42	4° Υ 27'18	18°13'45
	16337 Apr 22 14:08	0° B		morning set	16338 Apr 15 00:20	29° Υ 17'41	
morning set	16337 May 01 12:42	15° B 27'40			16338 Apr 15 09:19	0° B	
desc. node	16337 May 06 03:57	23° B 45'03		desc. node	16338 Apr 23 00:44	14° B 14'45	
	16337 May 09 17:16	0° II					
superior conj	16337 May 12 13:54	4° II 55'50	-0°50'54	superior conj	16338 Apr 24 15:40	17° B 11'19	-0°13'30
minimum elong	16337 May 12 09:20	4° II 36'17	0°50'47	minimum elong	16338 Apr 24 14:35	17° B 06'24	0°13'46
max. Earth dist.	16337 May 19 19:39	16° II 59'52	1.43406 AU	behind sun begin	16338 Apr 24 10:45	16° B 49'08	
evening rise	16337 May 26 12:41	27° II 41'40		behind sun end	16338 Apr 24 18:25	17° B 23'40	
	16337 May 28 00:14	0° B			16338 May 01 23:32	0° II	
	16337 Jun 17 13:55	0° Ω		max. Earth dist.	16338 May 02 05:55	0° II 27'00	1.41404 AU
evening max el	16337 Jun 27 04:56	11° Ω 33'13	21°40'00	evening rise	16338 May 06 23:59	8° II 19'31	
asc. node	16337 Jun 30 12:29	14° Ω 28'24			16338 May 21 01:49	0° B	
retrograde	16337 Jul 06 07:08	16° Ω 50'38		evening max el	16338 Jun 09 20:54	25° B 27'36	23°00'01
evening set	16337 Jul 10 21:05	14° Ω 57'06			16338 Jun 15 10:44	0° Ω	
inferior conj	16337 Jul 16 02:36	8° Ω 41'44	3°07'52	asc. node	16338 Jun 17 09:26	0° Ω 57'00	
minimum elong	16337 Jul 16 02:22	8° Ω 42'33	3°07'18	retrograde	16338 Jun 20 03:44	1° Ω 29'40	
min. Earth dist.	16337 Jul 16 06:34	8° Ω 27'53	0.69068 AU		16338 Jun 24 09:26	30° RB	
morning rise	16337 Jul 21 07:28	2° Ω 24'04		evening set	16338 Jun 25 05:12	29° B 20'47	
direct	16337 Jul 26 05:24	0° Ω 18'08		min. Earth dist.	16338 Jun 30 03:34	23° B 28'34	0.69134 AU
desc. node	16337 Aug 02 02:54	3° Ω 25'29		inferior conj	16338 Jun 30 12:37	22° B 57'08	2°59'47
morning max el	16337 Aug 05 01:18	6° Ω 06'08	22°31'33	minimum elong	16338 Jun 30 11:30	23° B 01'03	2°59'01
	16337 Aug 23 12:36	0° M		morning rise	16338 Jul 05 17:41	16° B 47'11	
morning set	16337 Sep 07 14:22	23° M 13'39		direct	16338 Jul 10 03:32	14° B 59'39	
	16337 Sep 11 16:56	0° B		morning max el	16338 Jul 18 17:45	19° B 56'51	21°07'58
max. Earth dist.	16337 Sep 12 12:28	1° B 22'03	1.40925 AU	desc. node	16338 Jul 20 00:09	21° B 15'32	
					16338 Jul 27 03:46	0° Ω	
superior conj	16337 Sep 20 09:27	15° B 03'54	-0°52'07		16338 Aug 16 16:20	0° M	
minimum elong	16337 Sep 20 13:37	15° B 22'36	0°51'20	morning set	16338 Aug 18 11:12	2° M 46'41	
asc. node	16337 Sep 26 13:25	26° B 22'11		max. Earth dist.	16338 Aug 25 18:40	14° M 25'06	1.43072 AU
	16337 Sep 28 11:54	0° M					
evening rise	16337 Sep 30 11:28	3° M 43'51		superior conj	16338 Sep 01 23:10	26° M 20'47	-1°28'18
evening max el	16337 Oct 16 09:04	29° M 16'56	18°20'59	minimum elong	16338 Sep 02 06:21	26° M 51'15	1°27'31
	16337 Oct 17 03:05	0° X			16338 Sep 04 02:31	0° B	
retrograde	16337 Oct 23 23:11	3° X 08'46		asc. node	16338 Sep 13 10:07	16° B 24'41	
evening set	16337 Oct 25 23:43	2° X 52'59		evening rise	16338 Sep 13 14:28	16° B 44'08	
desc. node	16337 Oct 29 00:11	1° X 36'19			16338 Sep 21 03:31	0° M	
	16337 Oct 31 10:03	30° RM		evening max el	16338 Sep 29 20:49	12° M 13'20	18°03'01
inferior conj	16337 Nov 02 15:13	28° M 15'27	-1°29'32	retrograde	16338 Oct 06 15:32	15° M 42'47	
minimum elong	16337 Nov 02 11:47	28° M 22'26	1°27'35	evening set	16338 Oct 08 23:04	15° M 18'29	
min. Earth dist.	16337 Nov 05 21:08	25° M 37'35	0.58345 AU	inferior conj	16338 Oct 15 21:25	10° M 20'27	-0°00'00
morning rise	16337 Nov 09 20:22	22° M 56'56		minimum elong	16338 Oct 15 21:26	10° M 20'26	0°00'23
direct	16337 Nov 16 05:13	21° M 10'42		transit middle	16338 Oct 15 21:26	10° M 20'26	0°00'23
morning max el	16337 Nov 30 11:57	28° M 46'57	27°19'23	transit begin	16338 Oct 15 18:09	10° M 28'10	
	16337 Dec 01 17:09	0° X		transit end	16338 Oct 16 00:43	10° M 12'39	
	16337 Dec 22 09:56	0° B		desc. node	16338 Oct 15 21:25	10° M 20'28	
asc. node	16337 Dec 23 13:37	2° B 08'36		min. Earth dist.	16338 Oct 19 00:47	7° M 24'00	0.60610 AU
morning set	16337 Dec 31 06:39	17° B 40'04		morning rise	16338 Oct 22 16:41	4° M 31'24	
	16338 Jan 05 21:20	0° \approx		direct	16338 Oct 29 08:26	2° M 21'10	
				morning max el	16338 Nov 12 13:55	10° M 12'20	27°55'45
superior conj	16338 Jan 07 03:03	2° \approx 46'27	1°37'17		16338 Nov 27 23:46	0° X	
minimum elong	16338 Jan 07 02:28	2° \approx 43'10	1°37'51	asc. node	16338 Dec 10 10:40	21° X 42'14	
max. Earth dist.	16338 Jan 07 01:42	2° \approx 38'52	1.30986 AU		16338 Dec 14 13:51	0° B	
evening rise	16338 Jan 13 21:48	17° \approx 44'41		morning set	16338 Dec 15 10:35	1° B 47'55	
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























































































































superior conj	16338 Dec 22 13:59	17° ♄ 20'31	1°30'55	superior conj	16339 Dec 06 22:27	1° ♄ 44'02	1°18'26
minimum elong	16338 Dec 22 12:27	17° ♄ 12'00	1°31'27	minimum elong	16339 Dec 06 20:16	1° ♄ 32'02	1°18'50
	16338 Dec 28 06:45	0° ♄		evening rise	16339 Dec 13 17:04	16° ♄ 36'39	
evening rise	16338 Dec 29 06:31	2° ♄ 09'17			16339 Dec 20 05:05	0° ♄	
desc. node	16339 Jan 11 20:20	28° ♄ 09'03		desc. node	16339 Dec 29 17:13	16° ♄ 07'35	
	16339 Jan 13 00:06	0° ♄		evening max el	16340 Jan 07 03:32	26° ♄ 17'56	24°02'12
evening max el	16339 Jan 25 16:10	16° ♄ 06'33	25°38'44		16340 Jan 11 16:58	0° ♄	
retrograde	16339 Feb 08 14:17	23° ♄ 07'22		retrograde	16340 Jan 20 16:26	3° ♄ 01'01	
evening set	16339 Feb 14 11:26	21° ♄ 47'55		evening set	16340 Jan 25 14:00	2° ♄ 08'57	
min. Earth dist.	16339 Feb 19 05:06	19° ♄ 07'41	0.56995 AU		16340 Jan 30 05:07	30° ♄	
inferior conj	16339 Feb 22 01:30	17° ♄ 11'33	-4°17'50	min. Earth dist.	16340 Jan 31 15:07	29° ♄ 10'59	0.55370 AU
minimum elong	16339 Feb 22 10:45	16° ♄ 55'48	4°14'50	inferior conj	16340 Feb 02 13:12	28° ♄ 02'03	-5°31'52
morning rise	16339 Mar 02 13:01	12° ♄ 55'34		minimum elong	16340 Feb 02 21:01	27° ♄ 50'21	5°30'06
direct	16339 Mar 04 12:58	12° ♄ 43'26		morning rise	16340 Feb 11 05:46	24° ♄ 04'54	
asc. node	16339 Mar 08 08:37	13° ♄ 30'30		direct	16340 Feb 13 15:44	23° ♄ 50'03	
morning max el	16339 Mar 13 12:57	17° ♄ 08'09	18°57'37	asc. node	16340 Feb 23 05:57	28° ♄ 04'14	
	16339 Mar 22 17:31	0° ♄		morning max el	16340 Feb 24 04:33	28° ♄ 56'43	20°04'27
morning set	16339 Mar 29 22:39	13° ♄ 35'22			16340 Feb 25 05:25	0° ♄	
				morning set	16340 Mar 13 03:59	28° ♄ 09'18	
superior conj	16339 Apr 07 11:54	0° ♄ 15'51	0°20'14		16340 Mar 14 01:41	0° ♄	
minimum elong	16339 Apr 07 13:10	0° ♄ 21'52	0°19'43	superior conj	16340 Mar 20 22:11	13° ♄ 57'05	0°48'22
	16339 Apr 07 08:34	0° ♄		minimum elong	16340 Mar 21 00:32	14° ♄ 08'53	0°47'53
desc. node	16339 Apr 09 21:30	4° ♄ 46'57		desc. node	16340 Mar 26 18:14	25° ♄ 17'28	
max. Earth dist.	16339 Apr 14 12:40	13° ♄ 12'28	1.39149 AU	max. Earth dist.	16340 Mar 26 19:27	25° ♄ 23'14	1.36871 AU
evening rise	16339 Apr 18 08:42	19° ♄ 53'16			16340 Mar 29 07:08	0° ♄	
	16339 Apr 24 11:15	0° ♄		evening rise	16340 Mar 30 13:00	2° ♄ 15'27	
	16339 May 15 05:25	0° ♄			16340 Apr 16 13:29	0° ♄	
evening max el	16339 May 23 10:48	9° ♄ 23'16	24°21'25	evening max el	16340 May 05 00:22	23° ♄ 17'51	25°37'12
retrograde	16339 Jun 03 20:59	16° ♄ 04'02			16340 May 14 15:11	0° ♄	
asc. node	16339 Jun 04 06:26	16° ♄ 03'23		retrograde	16340 May 17 09:52	0° ♄ 27'24	
evening set	16339 Jun 09 10:05	13° ♄ 42'44			16340 May 20 00:49	30° ♄	
min. Earth dist.	16339 Jun 13 23:26	8° ♄ 27'59	0.68714 AU	asc. node	16340 May 21 03:32	29° ♄ 30'50	
inferior conj	16339 Jun 14 21:29	7° ♄ 13'40	2°41'15	evening set	16340 May 23 10:04	27° ♄ 57'37	
minimum elong	16339 Jun 14 19:40	7° ♄ 19'49	2°40'13	min. Earth dist.	16340 May 27 16:02	23° ♄ 19'48	0.67812 AU
morning rise	16339 Jun 20 05:20	1° ♄ 12'50		inferior conj	16340 May 29 03:14	21° ♄ 27'07	2°11'47
	16339 Jun 22 12:06	30° ♄		minimum elong	16340 May 29 01:03	21° ♄ 34'07	2°10'31
direct	16339 Jun 24 03:31	29° ♄ 44'53		morning rise	16340 Jun 03 16:33	15° ♄ 36'47	
	16339 Jun 25 20:13	0° ♄		direct	16340 Jun 07 03:43	14° ♄ 27'58	
morning max el	16339 Jul 01 16:41	3° ♄ 57'48	19°55'40	morning max el	16340 Jun 13 22:58	18° ♄ 08'33	18°58'10
desc. node	16339 Jul 06 21:22	9° ♄ 56'06		desc. node	16340 Jun 22 18:31	29° ♄ 14'02	
	16339 Jul 20 23:31	0° ♄			16340 Jun 23 07:15	0° ♄	
morning set	16339 Jul 28 16:44	11° ♄ 42'59		greatest brilliancy	16340 Jun 27 04:00	5° ♄ 43'35	-0.7m
max. Earth dist.	16339 Aug 08 07:42	28° ♄ 16'01	1.44737 AU	morning set	16340 Jul 07 01:15	20° ♄ 53'06	
	16339 Aug 09 09:54	0° ♄			16340 Jul 12 22:30	0° ♄	
superior conj	16339 Aug 13 13:24	6° ♄ 38'57	-1°57'57	max. Earth dist.	16340 Jul 21 02:02	12° ♄ 40'44	1.45748 AU
minimum elong	16339 Aug 13 20:55	7° ♄ 09'23	1°57'42	superior conj	16340 Jul 23 07:08	16° ♄ 08'38	-2°13'26
evening rise	16339 Aug 26 23:17	28° ♄ 56'41		minimum elong	16340 Jul 23 09:36	16° ♄ 18'20	2°13'55
	16339 Aug 27 14:11	0° ♄			16340 Aug 01 01:13	0° ♄	
asc. node	16339 Aug 31 06:49	6° ♄ 16'01		evening rise	16340 Aug 07 08:57	10° ♄ 10'20	
evening max el	16339 Sep 13 11:36	25° ♄ 35'50	18°04'01	asc. node	16340 Aug 17 03:31	25° ♄ 51'40	
retrograde	16339 Sep 19 21:08	28° ♄ 56'29			16340 Aug 19 20:36	0° ♄	
evening set	16339 Sep 22 13:02	28° ♄ 20'04		evening max el	16340 Aug 27 01:57	9° ♄ 15'51	18°22'55
inferior conj	16339 Sep 28 20:36	23° ♄ 03'41	1°10'40	retrograde	16340 Sep 02 11:44	12° ♄ 41'05	
minimum elong	16339 Sep 28 22:25	22° ♄ 58'49	1°10'13	evening set	16340 Sep 05 12:34	11° ♄ 49'48	
min. Earth dist.	16339 Oct 01 14:21	20° ♄ 08'56	0.62879 AU	inferior conj	16340 Sep 11 08:45	6° ♄ 17'32	2°02'29
desc. node	16339 Oct 02 18:45	18° ♄ 58'33		minimum elong	16340 Sep 11 11:04	6° ♄ 10'41	2°01'49
morning rise	16339 Oct 05 05:33	16° ♄ 53'26		min. Earth dist.	16340 Sep 13 13:39	3° ♄ 41'36	0.64942 AU
direct	16339 Oct 11 21:45	14° ♄ 26'13		morning rise	16340 Sep 17 08:07	29° ♄ 55'10	
morning max el	16339 Oct 25 21:39	22° ♄ 23'59	27°53'04		16340 Sep 17 05:45	30° ♄	
	16339 Nov 01 14:59	0° ♄		desc. node	16340 Sep 18 16:06	28° ♄ 56'57	
	16339 Nov 21 04:52	0° ♄		direct	16340 Sep 23 19:38	27° ♄ 19'21	
asc. node	16339 Nov 27 07:38	11° ♄ 32'58			16340 Oct 01 04:50	0° ♄	
morning set	16339 Nov 29 07:39	15° ♄ 33'35		morning max el	16340 Oct 07 08:36	5° ♄ 13'22	27°15'51
max. Earth dist.	16339 Dec 04 10:23	26° ♄ 17'15	1.31845 AU		16340 Oct 26 06:51	0° ♄	
	16339 Dec 06 03:26	0° ♄		morning set	16340 Nov 11 19:17	28° ♄ 51'31	

	16340 Nov 12 09:16	0°♊		morning set	16341 Oct 25 18:10	11°♊34'06	
asc. node	16340 Nov 13 04:33	1°♊35'21		max. Earth dist.	16341 Oct 29 12:40	18°♊44'22	1.34926 AU
max. Earth dist.	16340 Nov 16 04:29	7°♊39'16	1.33123 AU	asc. node	16341 Oct 31 01:23	21°♊44'23	
superior conj	16340 Nov 20 02:21	15°♊51'42	0°59'45	superior conj	16341 Nov 03 23:07	29°♊36'53	0°34'54
minimum elong	16340 Nov 19 23:59	15°♊39'06	1°00'01	minimum elong	16341 Nov 03 21:18	29°♊27'34	0°35'07
	16340 Nov 26 15:55	0°♊			16341 Nov 04 03:37	0°♊	
evening rise	16340 Nov 27 03:39	1°♊02'38		evening rise	16341 Nov 11 12:17	15°♊22'01	
	16340 Dec 13 05:10	0°♊			16341 Nov 18 21:15	0°♊	
desc. node	16340 Dec 15 14:09	2°♊59'59		evening max el	16341 Nov 30 08:23	16°♊29'47	20°45'13
evening max el	16340 Dec 18 13:37	6°♊12'48	22°18'37	desc. node	16341 Dec 02 11:10	18°♊24'10	
retrograde	16340 Dec 31 06:38	12°♊29'51		retrograde	16341 Dec 11 16:34	22°♊07'22	
evening set	16341 Jan 03 21:45	12°♊00'48		evening set	16341 Dec 14 04:37	21°♊52'10	
inferior conj	16341 Jan 12 08:27	8°♊08'55	-6°02'20	inferior conj	16341 Dec 22 23:23	17°♊59'57	-5°31'43
minimum elong	16341 Jan 12 08:24	8°♊09'00	6°01'45	minimum elong	16341 Dec 22 15:04	18°♊11'55	5°29'34
min. Earth dist.	16341 Jan 11 20:49	8°♊25'13	0.54479 AU	min. Earth dist.	16341 Dec 24 02:13	17°♊21'21	0.54500 AU
morning rise	16341 Jan 20 20:02	4°♊21'29		morning rise	16341 Dec 31 01:25	14°♊04'41	
direct	16341 Jan 24 02:48	3°♊57'23		direct	16342 Jan 04 10:19	13°♊23'33	
morning max el	16341 Feb 05 05:04	9°♊48'07	21°34'10	morning max el	16342 Jan 17 17:18	19°♊53'52	23°20'49
asc. node	16341 Feb 09 03:16	14°♊08'26			16342 Jan 26 01:47	0°♊	
	16341 Feb 19 03:47	0°♊		asc. node	16342 Jan 27 00:32	1°♊24'26	
morning set	16341 Feb 25 13:34	12°♊51'23		morning set	16342 Feb 10 01:15	27°♊35'28	
					16342 Feb 11 04:11	0°♊	
superior conj	16341 Mar 04 18:43	28°♊04'34	1°10'15	superior conj	16342 Feb 16 22:26	12°♊29'53	1°25'46
minimum elong	16341 Mar 04 21:12	28°♊17'30	1°10'00	minimum elong	16342 Feb 17 00:23	12°♊40'26	1°25'50
	16341 Mar 05 16:56	0°♊		max. Earth dist.	16342 Feb 20 00:29	19°♊04'38	1.33100 AU
max. Earth dist.	16341 Mar 09 06:24	7°♊14'41	1.34800 AU	evening rise	16342 Feb 24 18:41	28°♊48'46	
evening rise	16341 Mar 13 09:28	15°♊16'45			16342 Feb 25 09:07	0°♊	
desc. node	16341 Mar 13 14:55	15°♊42'30		desc. node	16342 Feb 28 11:34	5°♊58'03	
	16341 Mar 21 14:22	0°♊			16342 Mar 14 17:58	0°♊	
	16341 Apr 11 03:31	0°♊		evening max el	16342 Mar 31 03:19	20°♊33'35	27°22'03
evening max el	16341 Apr 17 14:02	7°♊04'11	26°39'54	retrograde	16342 Apr 13 19:02	28°♊06'53	
retrograde	16341 Apr 30 17:31	14°♊31'16		evening set	16342 Apr 20 11:33	25°♊37'45	
evening set	16341 May 07 03:15	11°♊58'25		min. Earth dist.	16342 Apr 24 07:25	22°♊06'41	0.64700 AU
asc. node	16341 May 08 00:42	11°♊12'23		asc. node	16342 Apr 24 21:55	21°♊28'02	
min. Earth dist.	16341 May 11 03:18	7°♊55'39	0.66455 AU	inferior conj	16342 Apr 26 20:09	19°♊21'45	0°35'43
inferior conj	16341 May 13 03:37	5°♊31'44	1°30'20	minimum elong	16342 Apr 26 19:10	19°♊24'25	0°34'53
minimum elong	16341 May 13 01:38	5°♊37'40	1°29'05	morning rise	16342 May 03 04:50	13°♊57'02	
	16341 May 18 20:34	30°♊		direct	16342 May 05 20:31	13°♊20'28	
morning rise	16341 May 19 01:13	29°♊53'20		morning max el	16342 May 12 03:59	16°♊35'15	17°52'54
direct	16341 May 22 02:09	29°♊02'01			16342 May 21 23:57	0°♊	
	16341 May 25 09:42	0°♊		desc. node	16342 May 27 12:30	9°♊03'23	
morning max el	16341 May 28 11:28	2°♊23'24	18°17'03	morning set	16342 May 29 14:44	12°♊32'11	
desc. node	16341 Jun 09 15:33	18°♊58'54			16342 Jun 09 06:06	0°♊	
	16341 Jun 16 14:23	0°♊					
morning set	16341 Jun 17 06:21	1°♊03'39		superior conj	16342 Jun 12 09:47	5°♊03'14	-1°46'48
superior conj	16341 Jul 02 16:16	25°♊21'59	-2°09'22	minimum elong	16342 Jun 12 01:13	4°♊29'03	1°46'42
minimum elong	16341 Jul 02 11:03	25°♊01'37	2°09'48	max. Earth dist.	16342 Jun 16 18:14	11°♊56'18	1.45537 AU
max. Earth dist.	16341 Jul 03 22:25	27°♊19'30	1.46017 AU	evening rise	16342 Jun 28 07:51	29°♊50'57	
	16341 Jul 05 15:38	0°♊			16342 Jun 28 10:14	0°♊	
evening rise	16341 Jul 18 17:37	20°♊21'42		greatest brilliancy	16342 Jul 12 21:59	21°♊43'53	-0.6m
	16341 Jul 24 22:24	0°♊			16342 Jul 18 20:27	0°♊	
greatest brilliancy	16341 Jul 29 01:17	6°♊19'51	-0.8m	asc. node	16342 Jul 21 21:03	3°♊48'15	
asc. node	16341 Aug 04 00:16	15°♊05'01		evening max el	16342 Jul 24 18:47	6°♊59'30	19°51'05
evening max el	16341 Aug 10 12:59	23°♊05'23	18°58'58	retrograde	16342 Aug 01 06:12	11°♊11'49	
retrograde	16341 Aug 17 07:41	26°♊48'11		evening set	16342 Aug 05 02:46	9°♊46'02	
evening set	16341 Aug 20 18:02	25°♊40'11		inferior conj	16342 Aug 10 10:14	3°♊47'41	2°58'49
inferior conj	16341 Aug 26 06:16	19°♊54'05	2°37'43	minimum elong	16342 Aug 10 11:28	3°♊43'30	2°58'19
minimum elong	16341 Aug 26 08:16	19°♊47'42	2°37'07	min. Earth dist.	16342 Aug 11 11:26	2°♊22'51	0.67977 AU
min. Earth dist.	16341 Aug 27 21:19	17°♊49'32	0.66670 AU		16342 Aug 13 07:56	30°♊	
morning rise	16341 Aug 31 21:40	13°♊27'06		morning rise	16342 Aug 15 19:43	27°♊21'40	
desc. node	16341 Sep 05 13:28	10°♊59'30		direct	16342 Aug 21 12:32	24°♊52'44	
direct	16341 Sep 07 00:57	10°♊50'59		desc. node	16342 Aug 23 10:48	25°♊07'31	
morning max el	16341 Sep 19 20:14	18°♊27'31	26°11'58		16342 Aug 31 07:04	0°♊	
	16341 Sep 29 14:44	0°♊		morning max el	16342 Sep 02 07:17	1°♊55'59	24°50'53
	16341 Oct 19 06:56	0°♊			16342 Sep 23 15:37	0°♊	

morning set	16342 Oct 08 00:25	23° Ω 32'54		desc. node	16343 Aug 10 08:06	11° Ω 00'20	
max. Earth dist.	16342 Oct 11 12:59	29° Ω 52'34	1.37148 AU	morning max el	16343 Aug 15 18:26	15° Ω 33'04	23°22'20
	16342 Oct 11 14:37	0° Π			16343 Aug 27 15:09	0° Π	
asc. node	16342 Oct 17 22:10	11° Π 56'23			16343 Sep 16 14:27	0° Ω	
				morning set	16343 Sep 19 09:56	4° Ω 38'33	
superior conj	16342 Oct 18 09:42	12° Π 52'42	0°04'20	max. Earth dist.	16343 Sep 23 11:48	11° Ω 34'43	1.39565 AU
minimum elong	16342 Oct 18 09:24	12° Π 51'14	0°04'41				
behind sun begin	16342 Oct 18 03:04	12° Π 20'16		superior conj	16343 Oct 01 06:20	25° Ω 30'43	-0°30'47
behind sun end	16342 Oct 18 15:44	13° Π 22'17		minimum elong	16343 Oct 01 08:37	25° Ω 41'21	0°30'10
evening rise	16342 Oct 26 16:46	29° Π 29'44			16343 Oct 03 15:53	0° Π	
	16342 Oct 26 22:47	0° Σ		asc. node	16343 Oct 04 18:54	2° Π 07'59	
evening max el	16342 Nov 12 17:32	27° Σ 33'32	19°31'40	evening rise	16343 Oct 10 14:23	13° Π 19'28	
	16342 Nov 15 13:52	0° Σ			16343 Oct 19 16:13	0° Σ	
desc. node	16342 Nov 19 08:15	1° Σ 55'53		evening max el	16343 Oct 26 16:12	9° Σ 27'57	18°40'32
retrograde	16342 Nov 22 10:18	2° Σ 24'41		retrograde	16343 Nov 03 21:54	13° Σ 38'02	
evening set	16342 Nov 24 09:20	2° Σ 13'43		evening set	16343 Nov 05 20:05	13° Σ 25'10	
	16342 Nov 29 23:58	30° Σ 13'43		desc. node	16343 Nov 06 05:25	13° Σ 19'34	
inferior conj	16342 Dec 03 00:31	28° Σ 08'52	-4°10'16	inferior conj	16343 Nov 13 21:27	8° Σ 59'53	-2°27'40
minimum elong	16342 Dec 02 14:52	28° Σ 24'18	4°06'31	minimum elong	16343 Nov 13 15:29	9° Σ 10'59	2°24'43
min. Earth dist.	16342 Dec 05 10:20	26° Σ 36'26	0.55453 AU	min. Earth dist.	16343 Nov 16 23:58	6° Σ 41'54	0.57152 AU
morning rise	16342 Dec 10 18:28	23° Σ 47'34		morning rise	16343 Nov 21 07:44	4° Σ 02'42	
direct	16342 Dec 16 03:11	22° Σ 43'01		direct	16343 Nov 27 09:52	2° Σ 31'47	
morning max el	16342 Dec 30 01:35	29° Σ 43'50	25°09'38	morning max el	16343 Dec 11 14:46	9° Σ 55'40	26°41'05
	16342 Dec 30 08:19	0° Σ			16343 Dec 26 21:58	0° Σ	
asc. node	16343 Jan 13 21:44	19° Σ 34'30		asc. node	16343 Dec 31 18:53	8° Σ 25'07	
	16343 Jan 19 14:35	0° \approx		morning set	16344 Jan 09 23:18	26° Σ 46'02	
morning set	16343 Jan 25 13:05	12° \approx 15'08			16344 Jan 11 11:03	0° \approx	
superior conj	16343 Feb 01 06:44	27° \approx 04'34	1°35'02	superior conj	16344 Jan 16 17:33	11° \approx 43'00	1°38'12
minimum elong	16343 Feb 01 07:48	27° \approx 10'27	1°35'24	minimum elong	16344 Jan 16 17:34	11° \approx 43'07	1°38'44
	16343 Feb 02 14:36	0° X		max. Earth dist.	16344 Jan 17 08:04	13° \approx 04'11	1.31159 AU
max. Earth dist.	16343 Feb 03 01:47	1° X 01'17	1.31870 AU	evening rise	16344 Jan 23 15:28	26° \approx 52'29	
evening rise	16343 Feb 08 13:32	12° X 42'41			16344 Jan 25 03:16	0° X	
desc. node	16343 Feb 15 08:14	25° X 58'19		desc. node	16344 Feb 02 04:59	15° X 37'12	
	16343 Feb 17 13:32	0° Υ			16344 Feb 11 00:02	0° Υ	
	16343 Mar 10 04:05	0° B		evening max el	16344 Feb 23 21:28	15° Υ 51'17	27°17'58
evening max el	16343 Mar 13 14:37	3° B 33'31	27°36'40	retrograde	16344 Mar 08 22:12	23° Υ 11'46	
retrograde	16343 Mar 27 13:07	11° B 03'27		evening set	16344 Mar 15 14:57	21° Υ 12'16	
evening set	16343 Apr 03 08:25	8° B 45'35		min. Earth dist.	16344 Mar 19 11:41	18° Υ 26'49	0.60385 AU
min. Earth dist.	16343 Apr 07 02:39	5° B 41'04	0.62631 AU	inferior conj	16344 Mar 22 16:44	15° Υ 42'57	-1°55'16
inferior conj	16343 Apr 10 01:42	2° B 48'37	-0°33'02	minimum elong	16344 Mar 22 21:02	15° Υ 33'46	1°53'40
minimum elong	16343 Apr 10 02:48	2° B 45'56	0°32'53	asc. node	16344 Mar 28 16:28	11° Υ 28'38	
asc. node	16343 Apr 11 19:10	1° B 10'09		morning rise	16344 Mar 30 06:35	10° Υ 53'20	
	16343 Apr 13 03:32	30° Σ 10'09		direct	16344 Apr 01 08:12	10° Υ 36'04	
morning rise	16343 Apr 17 00:06	27° Υ 39'59		morning max el	16344 Apr 08 13:01	14° Υ 12'02	17°58'06
direct	16343 Apr 19 07:48	27° Υ 14'51			16344 Apr 19 08:34	0° B	
	16343 Apr 25 06:45	0° B		morning set	16344 Apr 24 02:59	8° B 37'35	
morning max el	16343 Apr 25 21:35	0° B 34'37	17°46'17	desc. node	16344 Apr 30 06:10	19° B 47'40	
morning set	16343 May 11 23:32	25° B 09'15					
desc. node	16343 May 14 09:21	29° B 21'08		superior conj	16344 May 04 12:45	27° B 22'28	-0°34'46
	16343 May 14 18:18	0° Π		minimum elong	16344 May 04 09:45	27° B 09'21	0°34'48
					16344 May 06 01:02	0° Π	
superior conj	16343 May 23 23:32	15° Π 40'52	-1°12'39	max. Earth dist.	16344 May 12 01:13	10° Π 08'53	1.42609 AU
minimum elong	16343 May 23 16:51	15° Π 13'08	1°12'24	evening rise	16344 May 17 19:11	19° Π 27'06	
max. Earth dist.	16343 May 30 11:38	26° Π 17'01	1.44362 AU		16344 May 24 14:21	0° E	
	16343 Jun 01 19:40	0° E			16344 Jun 15 03:55	0° Ω	
evening rise	16343 Jun 07 19:10	9° E 19'52		evening max el	16344 Jun 19 12:55	4° Ω 49'10	22°13'30
	16343 Jun 21 14:52	0° Ω		asc. node	16344 Jun 24 14:48	8° Ω 58'20	
evening max el	16343 Jul 07 18:34	20° Ω 54'31	20°57'12	retrograde	16344 Jun 29 02:58	10° Ω 25'10	
asc. node	16343 Jul 08 17:54	21° Ω 50'36		evening set	16344 Jul 03 21:55	8° Ω 24'44	
retrograde	16343 Jul 16 05:12	25° Ω 46'03		inferior conj	16344 Jul 09 03:59	2° Ω 05'47	3°05'42
evening set	16343 Jul 20 12:39	24° Ω 02'26		minimum elong	16344 Jul 09 03:22	2° Ω 07'59	3°05'04
inferior conj	16343 Jul 25 18:11	17° Ω 53'03	3°07'44	min. Earth dist.	16344 Jul 09 02:23	2° Ω 11'22	0.69163 AU
minimum elong	16343 Jul 25 18:29	17° Ω 51'58	3°07'14		16344 Jul 10 16:32	30° Σ 13'41	
min. Earth dist.	16343 Jul 26 05:50	17° Ω 12'40	0.68814 AU	morning rise	16344 Jul 14 08:39	25° E 51'26	
morning rise	16343 Jul 31 00:02	11° Ω 31'46		direct	16344 Jul 19 01:29	23° E 53'04	
direct	16343 Aug 05 05:07	9° Ω 16'04		desc. node	16344 Jul 27 05:22	28° E 13'41	

morning max el	16344 Jul 28 08:10	29°☿18'22	21°54'54	direct	16345 Jul 03 00:30	8°☿37'30	
	16344 Jul 29 00:29	0°♊		morning max el	16345 Jul 11 03:22	13°☿14'30	20°35'39
	16344 Aug 20 07:26	0°♊		desc. node	16345 Jul 14 02:35	16°☿27'30	
morning set	16344 Aug 29 19:48	14°♊44'02			16345 Jul 24 07:41	0°♊	
max. Earth dist.	16344 Sep 04 15:02	24°♊09'41	1.41891 AU	morning set	16345 Aug 09 08:38	23°♊58'00	
	16344 Sep 08 02:34	0°♊			16345 Aug 13 05:37	0°♊	
				max. Earth dist.	16345 Aug 18 00:40	7°♊36'26	1.43855 AU
superior conj	16344 Sep 12 08:31	7°♊19'35	-1°07'50				
minimum elong	16344 Sep 12 14:05	7°♊43'59	1°06'59	superior conj	16345 Aug 24 12:21	18°♊11'32	-1°42'07
asc. node	16344 Sep 20 15:37	22°♊14'51		minimum elong	16345 Aug 24 20:13	18°♊44'11	1°41'29
evening rise	16344 Sep 23 01:28	26°♊41'06			16345 Aug 31 11:53	0°♊	
	16344 Sep 24 20:41	0°♊		evening rise	16345 Sep 05 21:28	9°♊23'22	
evening max el	16344 Oct 09 00:22	22°♊04'06	18°10'53	asc. node	16345 Sep 07 12:20	12°♊13'26	
retrograde	16344 Oct 16 04:52	25°♊44'52			16345 Sep 18 07:24	0°♊	
evening set	16344 Oct 18 08:10	25°♊25'51		evening max el	16345 Sep 22 13:49	5°♊12'26	18°01'06
desc. node	16344 Oct 23 02:39	22°♊46'34		retrograde	16345 Sep 29 03:35	8°♊36'50	
inferior conj	16344 Oct 25 16:10	20°♊38'58	-0°49'22	evening set	16345 Oct 01 14:27	8°♊07'53	
minimum elong	16344 Oct 25 14:24	20°♊42'49	0°48'10	inferior conj	16345 Oct 08 06:08	3°♊01'34	0°32'23
min. Earth dist.	16344 Oct 28 21:56	17°♊51'00	0.59295 AU	minimum elong	16345 Oct 08 07:07	2°♊59'09	0°32'19
morning rise	16344 Nov 01 17:15	15°♊06'30		desc. node	16345 Oct 09 23:56	1°♊16'44	
direct	16344 Nov 08 05:45	13°♊09'47		min. Earth dist.	16345 Oct 11 05:56	0°♊03'26	0.61590 AU
morning max el	16344 Nov 22 12:26	20°♊52'25	27°39'47		16345 Oct 11 07:23	30°♊	
	16344 Nov 30 10:46	0°♊		morning rise	16345 Oct 14 20:57	27°♊01'56	
asc. node	16344 Dec 17 15:57	27°♊45'14		direct	16345 Oct 21 13:25	24°♊43'39	
	16344 Dec 18 19:54	0°♊			16345 Nov 01 20:14	0°♊	
morning set	16344 Dec 24 06:05	11°♊03'21		morning max el	16345 Nov 04 17:29	2°♊39'13	27°59'13
max. Earth dist.	16344 Dec 30 15:48	25°♊05'56	1.30984 AU		16345 Nov 24 21:59	0°♊	
				asc. node	16345 Dec 04 12:59	17°♊26'48	
superior conj	16344 Dec 31 04:57	26°♊19'32	1°35'19	morning set	16345 Dec 08 07:23	25°♊02'21	
minimum elong	16344 Dec 31 03:57	26°♊13'53	1°35'54		16345 Dec 10 16:01	0°♊	
	16345 Jan 01 20:18	0°♊		max. Earth dist.	16345 Dec 13 21:00	6°♊57'09	1.31365 AU
evening rise	16345 Jan 06 22:16	11°♊12'31					
	16345 Jan 16 08:33	0°♊		superior conj	16345 Dec 15 15:04	10°♊49'22	1°26'22
desc. node	16345 Jan 19 01:47	4°♊46'18		minimum elong	16345 Dec 15 13:13	10°♊39'06	1°26'51
evening max el	16345 Feb 04 21:01	27°♊16'49	26°24'03	evening rise	16345 Dec 22 07:58	25°♊38'19	
	16345 Feb 08 00:38	0°♊			16345 Dec 24 08:55	0°♊	
retrograde	16345 Feb 18 20:48	4°♊25'31		desc. node	16346 Jan 05 22:38	23°♊14'40	
evening set	16345 Feb 25 03:48	2°♊50'03			16346 Jan 10 15:10	0°♊	
min. Earth dist.	16345 Mar 01 10:20	0°♊12'29	0.58159 AU	evening max el	16346 Jan 17 11:59	7°♊50'23	24°59'37
	16345 Mar 01 17:19	30°♊		retrograde	16346 Jan 31 07:16	14°♊45'08	
inferior conj	16345 Mar 04 13:26	27°♊54'15	-3°26'12	evening set	16346 Feb 05 19:30	13°♊37'15	
minimum elong	16345 Mar 04 21:19	27°♊39'41	3°23'21	min. Earth dist.	16346 Feb 11 00:18	10°♊51'48	0.56222 AU
morning rise	16345 Mar 12 18:14	23°♊26'15		inferior conj	16346 Feb 13 13:05	9°♊14'25	-4°52'54
direct	16345 Mar 14 17:10	23°♊13'18		minimum elong	16346 Feb 13 22:30	8°♊59'19	4°50'13
asc. node	16345 Mar 15 13:46	23°♊15'53		morning rise	16346 Feb 22 04:03	5°♊07'31	
morning max el	16345 Mar 22 22:35	27°♊16'49	18°29'50	direct	16346 Feb 24 06:46	4°♊54'59	
	16345 Mar 25 09:18	0°♊		asc. node	16346 Mar 02 11:06	6°♊50'12	
morning set	16345 Apr 07 19:41	22°♊41'01		morning max el	16346 Mar 05 21:59	9°♊36'40	19°23'20
	16345 Apr 11 15:14	0°♊			16346 Mar 19 06:40	0°♊	
				morning set	16346 Mar 22 21:20	7°♊06'14	
superior conj	16345 Apr 16 22:58	10°♊00'36	0°01'25				
minimum elong	16345 Apr 16 23:03	10°♊00'59	0°01'01	superior conj	16346 Mar 31 01:41	23°♊22'09	0°32'54
behind sun begin	16345 Apr 16 15:55	9°♊28'04		minimum elong	16346 Mar 31 03:33	23°♊31'15	0°32'22
behind sun end	16345 Apr 17 06:10	10°♊33'48		desc. node	16346 Apr 03 23:41	0°♊50'48	
desc. node	16345 Apr 17 02:58	10°♊19'06			16346 Apr 03 12:52	0°♊	
max. Earth dist.	16345 Apr 24 10:12	23°♊20'19	1.40459 AU	max. Earth dist.	16346 Apr 06 16:04	5°♊47'52	1.38155 AU
	16345 Apr 28 08:37	0°♊		evening rise	16346 Apr 10 08:57	12°♊23'56	
evening rise	16345 Apr 28 15:36	0°♊28'58			16346 Apr 21 01:01	0°♊	
	16345 May 17 23:44	0°♊			16346 May 13 03:56	0°♊	
evening max el	16345 Jun 02 03:42	18°♊44'20	23°34'49	evening max el	16346 May 15 17:05	2°♊39'09	24°54'47
asc. node	16345 Jun 11 11:47	24°♊54'58		retrograde	16346 May 27 14:01	9°♊34'28	
retrograde	16345 Jun 12 22:20	25°♊03'49		asc. node	16346 May 29 08:50	9°♊21'11	
evening set	16345 Jun 18 04:54	22°♊48'56		evening set	16346 Jun 02 07:55	7°♊08'47	
min. Earth dist.	16345 Jun 22 23:05	17°♊12'56	0.69016 AU	min. Earth dist.	16346 Jun 06 17:50	2°♊09'55	0.68381 AU
inferior conj	16345 Jun 23 13:46	16°♊22'32	2°53'14	inferior conj	16346 Jun 07 21:32	0°♊38'18	2°30'09
minimum elong	16345 Jun 23 12:18	16°♊27'31	2°52'21	minimum elong	16346 Jun 07 19:31	0°♊45'01	2°29'01
morning rise	16345 Jun 28 19:43	10°♊16'33			16346 Jun 08 09:09	30°♊	

morning rise	16346 Jun 13 07:23	24° Π 41'46		direct	16347 Jun 01 00:25	8° Π 01'40	
direct	16346 Jun 17 00:40	23° Π 22'18		morning max el	16347 Jun 07 14:32	11° Π 32'49	18°38'33
morning max el	16346 Jun 24 05:30	27° Π 20'18	19°29'18	desc. node	16347 Jun 17 20:49	24° Π 55'22	
	16346 Jun 26 16:55	0° \mathfrak{C}			16347 Jun 21 05:05	0° \mathfrak{C}	
desc. node	16346 Jun 30 23:44	5° \mathfrak{C} 25'17		morning set	16347 Jun 29 04:26	12° \mathfrak{C} 23'56	
greatest brilliancy	16346 Jul 06 22:24	13° \mathfrak{C} 51'09	-0.6m		16347 Jul 10 11:09	0° Ω	
	16346 Jul 17 15:40	0° Ω		max. Earth dist.	16347 Jul 14 10:47	6° Ω 12'37	1.45955 AU
morning set	16346 Jul 19 12:54	2° Ω 53'18					
max. Earth dist.	16346 Jul 31 15:43	21° Ω 41'47	1.45253 AU	superior conj	16347 Jul 15 05:10	7° Ω 24'16	-2°14'13
				minimum elong	16347 Jul 15 04:15	7° Ω 20'43	2°14'47
superior conj	16346 Aug 04 17:02	28° Ω 06'40	-2°06'40		16347 Jul 29 14:07	0° \mathfrak{N}	
minimum elong	16346 Aug 04 23:06	28° Ω 30'50	2°06'46	evening rise	16347 Jul 30 19:47	1° \mathfrak{N} 57'47	
	16346 Aug 05 21:27	0° \mathfrak{N}		greatest brilliancy	16347 Aug 06 18:21	12° \mathfrak{N} 58'37	-0.9m
evening rise	16346 Aug 18 21:00	21° \mathfrak{N} 12'06		asc. node	16347 Aug 12 05:46	21° \mathfrak{N} 25'48	
	16346 Aug 24 04:07	0° \mathfrak{A}			16347 Aug 18 11:50	0° \mathfrak{A}	
asc. node	16346 Aug 25 09:03	1° \mathfrak{A} 58'54		evening max el	16347 Aug 20 18:04	2° \mathfrak{A} 28'26	18°36'15
evening max el	16346 Sep 06 04:46	18° \mathfrak{A} 43'17	18°09'53	retrograde	16347 Aug 27 06:33	5° \mathfrak{A} 59'16	
retrograde	16346 Sep 12 13:27	22° \mathfrak{A} 04'26		evening set	16347 Aug 30 11:24	5° \mathfrak{A} 01'05	
evening set	16346 Sep 15 08:59	21° \mathfrak{A} 22'09			16347 Sep 04 15:41	30° \mathfrak{R} \mathfrak{N}	
inferior conj	16346 Sep 21 11:19	15° \mathfrak{A} 58'58	1°34'47	inferior conj	16347 Sep 05 03:49	29° \mathfrak{N} 23'00	2°19'15
minimum elong	16346 Sep 21 13:28	15° \mathfrak{A} 52'55	1°34'13	minimum elong	16347 Sep 05 06:04	29° \mathfrak{N} 16'05	2°18'37
min. Earth dist.	16346 Sep 23 23:58	13° \mathfrak{A} 10'02	0.63793 AU	min. Earth dist.	16347 Sep 07 02:58	26° \mathfrak{N} 58'59	0.65730 AU
desc. node	16346 Sep 26 21:15	10° \mathfrak{A} 20'29		morning rise	16347 Sep 10 23:35	22° \mathfrak{N} 58'03	
morning rise	16346 Sep 27 16:01	9° \mathfrak{A} 42'20		desc. node	16347 Sep 13 18:35	21° \mathfrak{N} 09'05	
direct	16346 Oct 04 06:48	7° \mathfrak{A} 10'03		direct	16347 Sep 17 08:09	20° \mathfrak{N} 20'50	
morning max el	16346 Oct 18 02:57	15° \mathfrak{A} 08'35	27°40'56	morning max el	16347 Sep 30 14:09	28° \mathfrak{N} 09'02	26°51'17
	16346 Oct 30 07:12	0° \mathfrak{M}			16347 Oct 02 08:40	0° \mathfrak{A}	
	16346 Nov 17 14:07	0° \mathfrak{J}			16347 Oct 24 01:19	0° \mathfrak{M}	
asc. node	16346 Nov 21 09:57	7° \mathfrak{J} 23'20		morning set	16347 Nov 05 07:27	21° \mathfrak{M} 41'12	
morning set	16346 Nov 22 00:51	8° \mathfrak{J} 37'30		asc. node	16347 Nov 08 06:49	27° \mathfrak{M} 28'59	
max. Earth dist.	16346 Nov 26 19:51	18° \mathfrak{J} 29'59	1.32315 AU	max. Earth dist.	16347 Nov 09 09:32	29° \mathfrak{M} 42'31	1.33831 AU
					16347 Nov 09 13:01	0° \mathfrak{J}	
superior conj	16346 Nov 29 21:54	25° \mathfrak{J} 07'15	1°11'16				
minimum elong	16346 Nov 29 19:34	24° \mathfrak{J} 54'36	1°11'37	superior conj	16347 Nov 13 23:07	9° \mathfrak{J} 06'24	0°49'58
	16346 Dec 02 03:35	0° \mathfrak{Z}		minimum elong	16347 Nov 13 20:53	8° \mathfrak{J} 54'39	0°50'11
evening rise	16346 Dec 06 18:46	10° \mathfrak{Z} 05'44		evening rise	16347 Nov 21 04:45	24° \mathfrak{J} 29'28	
	16346 Dec 16 20:17	0° \mathfrak{A}			16347 Nov 23 20:04	0° \mathfrak{Z}	
desc. node	16346 Dec 23 19:32	10° \mathfrak{A} 47'51		desc. node	16347 Dec 10 16:31	27° \mathfrak{Z} 05'43	
evening max el	16346 Dec 29 21:44	17° \mathfrak{A} 50'50	23°17'57	evening max el	16347 Dec 11 10:36	27° \mathfrak{Z} 51'24	21°36'54
retrograde	16347 Jan 12 04:17	24° \mathfrak{A} 24'40			16347 Dec 13 20:32	0° \mathfrak{A}	
evening set	16347 Jan 16 12:59	23° \mathfrak{A} 43'30		retrograde	16347 Dec 23 14:49	3° \mathfrak{A} 52'23	
min. Earth dist.	16347 Jan 23 08:27	20° \mathfrak{A} 31'41	0.54879 AU	evening set	16347 Dec 26 17:15	3° \mathfrak{A} 30'35	
inferior conj	16347 Jan 24 16:53	19° \mathfrak{A} 44'52	-5°51'42		16348 Jan 03 18:45	30° \mathfrak{R} \mathfrak{Z}	
minimum elong	16347 Jan 24 22:00	19° \mathfrak{A} 37'28	5°50'41	inferior conj	16348 Jan 04 08:30	29° \mathfrak{Z} 40'47	-5°56'51
morning rise	16347 Feb 02 08:22	15° \mathfrak{A} 53'09		minimum elong	16348 Jan 04 04:23	29° \mathfrak{Z} 46'33	5°55'55
direct	16347 Feb 05 01:44	15° \mathfrak{A} 35'23		min. Earth dist.	16348 Jan 04 13:38	29° \mathfrak{Z} 33'36	0.54375 AU
morning max el	16347 Feb 16 07:24	21° \mathfrak{A} 01'42	20°39'59	morning rise	16348 Jan 12 16:03	25° \mathfrak{Z} 52'20	
asc. node	16347 Feb 17 08:25	22° \mathfrak{A} 04'53		direct	16348 Jan 16 10:08	25° \mathfrak{Z} 21'38	
	16347 Feb 23 11:11	0° \mathfrak{H}			16348 Jan 27 09:30	0° \mathfrak{A}	
morning set	16347 Mar 07 04:46	21° \mathfrak{H} 44'23		morning max el	16348 Jan 29 01:48	1° \mathfrak{A} 30'19	22°18'02
	16347 Mar 11 04:11	0° \mathfrak{Y}		asc. node	16348 Feb 04 05:42	8° \mathfrak{A} 41'34	
					16348 Feb 16 12:54	0° \mathfrak{H}	
superior conj	16347 Mar 14 16:45	7° \mathfrak{Y} 15'44	0°58'25	morning set	16348 Feb 19 15:29	6° \mathfrak{H} 27'39	
minimum elong	16347 Mar 14 19:16	7° \mathfrak{Y} 28'31	0°58'01				
max. Earth dist.	16347 Mar 19 23:44	17° \mathfrak{Y} 46'26	1.35950 AU	superior conj	16348 Feb 26 16:39	21° \mathfrak{H} 31'09	1°17'36
desc. node	16347 Mar 21 20:24	21° \mathfrak{Y} 19'36		minimum elong	16348 Feb 26 18:58	21° \mathfrak{H} 43'27	1°17'29
evening rise	16347 Mar 23 20:35	25° \mathfrak{Y} 04'13		max. Earth dist.	16348 Mar 01 13:40	29° \mathfrak{H} 35'48	1.34030 AU
	16347 Mar 26 13:58	0° \mathfrak{B}			16348 Mar 01 18:25	0° \mathfrak{Y}	
	16347 Apr 14 14:00	0° \mathfrak{I}		evening rise	16348 Mar 05 22:54	8° \mathfrak{Y} 19'24	
evening max el	16347 Apr 28 06:43	16° \mathfrak{I} 31'06	26°06'00	desc. node	16348 Mar 07 17:05	11° \mathfrak{Y} 40'56	
retrograde	16347 May 11 00:55	23° \mathfrak{I} 49'56			16348 Mar 18 03:54	0° \mathfrak{B}	
asc. node	16347 May 16 05:57	22° \mathfrak{I} 02'56			16348 Apr 09 15:41	0° \mathfrak{I}	
evening set	16347 May 17 05:14	21° \mathfrak{I} 18'19		evening max el	16348 Apr 09 20:35	0° \mathfrak{I} 11'57	27°00'53
min. Earth dist.	16347 May 21 08:32	16° \mathfrak{I} 55'25	0.67283 AU	retrograde	16348 Apr 23 05:53	7° \mathfrak{I} 42'13	
inferior conj	16347 May 23 01:17	14° \mathfrak{I} 48'29	1°55'44	evening set	16348 Apr 29 18:52	5° \mathfrak{I} 10'24	
minimum elong	16347 May 22 23:06	14° \mathfrak{I} 55'16	1°54'27	asc. node	16348 May 02 03:07	3° \mathfrak{I} 03'07	
morning rise	16347 May 28 17:44	9° \mathfrak{I} 02'46		min. Earth dist.	16348 May 03 17:03	1° \mathfrak{I} 21'25	0.65753 AU

	16348 May 04 21:36	30° 		minimum elong	16349 Apr 19 10:40	12°  28'44"	0°07'47"
inferior conj	16348 May 05 22:40	28°  47'29"	1°08'51"	transit middle	16349 Apr 19 10:40	12°  28'44"	0°07'47"
minimum elong	16348 May 05 20:59	28°  52'18"	1°07'43"	transit begin	16349 Apr 19 07:56	12°  35'52"	
morning rise	16348 May 12 00:35	23°  14'22"		transit end	16349 Apr 19 13:24	12°  21'37"	
direct	16348 May 14 21:33	22°  29'33"		asc. node	16349 Apr 19 00:21	12°  55'43"	
morning max el	16348 May 21 04:57	25°  46'33"	18°04'39"	morning rise	16349 Apr 26 01:08	7°  10'01"	
	16348 May 24 21:15	0°  II		direct	16349 Apr 28 13:22	6°  38'36"	
desc. node	16348 Jun 03 17:49	14°  II49'07"		morning max el	16349 May 04 22:18	9°  53'44"	17°47'58"
morning set	16348 Jun 08 21:05	23°  II07'36"			16349 May 18 16:02	0°  II	
	16348 Jun 13 03:10	0°  ☿		morning set	16349 May 21 16:27	5°  II06'50"	
				desc. node	16349 May 21 14:44	4°  II59'31"	
superior conj	16348 Jun 23 15:48	16°  ☿43'52"	-2°01'44"				
minimum elong	16348 Jun 23 08:23	16°  ☿14'44"	2°01'56"	superior conj	16349 Jun 03 16:56	26°  II46'14"	-1°33'13"
max. Earth dist.	16348 Jun 26 07:37	20°  ☿53'40"	1.45903 AU	minimum elong	16349 Jun 03 08:43	26°  II12'58"	1°32'59"
	16348 Jul 02 04:05	0°  Ω			16349 Jun 05 17:03	0°  ☿	
evening rise	16348 Jul 09 19:11	11°  Ω47'17"		max. Earth dist.	16349 Jun 09 03:07	5°  ☿26'46"	1.45112 AU
	16348 Jul 21 17:49	0°  ♍		evening rise	16349 Jun 19 06:00	21°  ☿10'28"	
greatest brilliancy	16348 Jul 22 04:21	0°  ♍39'10"	-0.7m		16349 Jun 25 01:38	0°  Ω	
asc. node	16348 Jul 29 02:31	10°  ♍27'32"		asc. node	16349 Jul 15 23:20	28°  Ω54'28"	
evening max el	16348 Aug 03 03:09	16°  ♍21'04"	19°19'19"		16349 Jul 17 00:18	0°  ♍	
retrograde	16348 Aug 10 03:52	20°  ♍14'38"		evening max el	16349 Jul 17 06:21	0°  ♍15'12"	20°17'41"
evening set	16348 Aug 13 18:35	18°  ♍58'57"		retrograde	16349 Jul 25 02:53	4°  ♍43'20"	
inferior conj	16348 Aug 19 04:24	13°  ♍07'30"	2°48'14"	evening set	16349 Jul 29 04:04	3°  ♍09'42"	
minimum elong	16348 Aug 19 06:07	13°  ♍01'53"	2°47'41"		16349 Aug 01 05:47	30°  ♍Ω	
min. Earth dist.	16348 Aug 20 13:29	11°  ♍19'19"	0.67282 AU	inferior conj	16349 Aug 03 10:20	27°  Ω06'16"	3°04'01"
morning rise	16348 Aug 24 17:03	6°  ♍40'40"		minimum elong	16349 Aug 03 11:12	27°  Ω03'19"	3°03'31"
direct	16348 Aug 30 16:09	4°  ♍06'54"		min. Earth dist.	16349 Aug 04 05:38	26°  Ω00'16"	0.68386 AU
desc. node	16348 Aug 30 15:54	4°  ♍06'54"		morning rise	16349 Aug 08 18:00	20°  Ω41'58"	
morning max el	16348 Sep 12 01:31	11°  ♍30'16"	25°39'06"	direct	16349 Aug 14 05:48	18°  Ω18'21"	
	16348 Sep 26 21:26	0°  ♌		desc. node	16349 Aug 17 13:13	19°  Ω01'55"	
	16348 Oct 15 16:53	0°  ♌		morning max el	16349 Aug 25 12:35	25°  Ω03'05"	24°13'45"
morning set	16348 Oct 17 23:47	4°  ♌06'22"			16349 Aug 30 00:14	0°  ♍	
max. Earth dist.	16348 Oct 21 14:10	10°  ♌47'20"	1.35840 AU		16349 Sep 20 08:29	0°  ♌	
asc. node	16348 Oct 25 03:37	17°  ♌39'57"		morning set	16349 Sep 29 21:44	15°  ♌43'31"	
				max. Earth dist.	16349 Oct 03 13:25	22°  ♌07'58"	1.38169 AU
superior conj	16348 Oct 27 16:00	22°  ♌40'30"	0°22'37"		16349 Oct 07 20:55	0°  ♌	
minimum elong	16348 Oct 27 14:42	22°  ♌33'56"	0°22'51"				
	16348 Oct 31 06:13	0°  ♌		superior conj	16349 Oct 10 21:08	5°  ♌40'57"	-0°10'08"
evening rise	16348 Nov 04 11:58	8°  ♌45'07"		minimum elong	16349 Oct 10 21:49	5°  ♌44'11"	0°09'41"
	16348 Nov 15 21:14	0°  ♌		behind sun begin	16349 Oct 10 16:14	5°  ♌17'32"	
evening max el	16348 Nov 22 11:12	8°  ♌26'29"	20°11'06"	behind sun end	16349 Oct 11 03:23	6°  ♌10'53"	
desc. node	16348 Nov 26 13:32	11°  ♌45'00"		asc. node	16349 Oct 12 00:24	7°  ♌52'01"	
retrograde	16348 Dec 03 02:25	13°  ♌44'17"		evening rise	16349 Oct 19 13:55	22°  ♌46'10"	
evening set	16348 Dec 05 07:19	13°  ♌31'41"			16349 Oct 23 06:32	0°  ♌	
inferior conj	16348 Dec 14 02:06	9°  ♌35'03"	-5°01'43"	evening max el	16349 Nov 05 02:22	19°  ♌51'41"	19°07'07"
minimum elong	16348 Dec 13 16:18	9°  ♌49'40"	4°58'39"	desc. node	16349 Nov 13 10:38	24°  ♌23'11"	
min. Earth dist.	16348 Dec 15 19:27	8°  ♌33'23"	0.54810 AU	retrograde	16349 Nov 14 03:29	24°  ♌24'46"	
morning rise	16348 Dec 22 00:33	5°  ♌31'02"		evening set	16349 Nov 16 00:53	24°  ♌13'39"	
direct	16348 Dec 26 20:20	4°  ♌40'37"		inferior conj	16349 Nov 24 11:01	20°  ♌00'20"	-3°27'34"
morning max el	16349 Jan 09 11:00	11°  ♌23'57"	24°07'57"	minimum elong	16349 Nov 24 02:37	20°  ♌14'38"	3°23'54"
asc. node	16349 Jan 21 02:56	26°  ♌22'05"		min. Earth dist.	16349 Nov 27 05:36	18°  ♌07'07"	0.56100 AU
	16349 Jan 23 07:34	0°  ♌		morning rise	16349 Dec 02 01:47	15°  ♌24'02"	
morning set	16349 Feb 03 03:27	21°  ♌10'20"		direct	16349 Dec 07 18:25	14°  ♌08'45"	
	16349 Feb 07 04:44	0°  ♌		morning max el	16349 Dec 21 20:51	21°  ♌20'12"	25°51'47"
superior conj	16349 Feb 09 22:35	6°  ♌00'47"	1°30'27"		16349 Dec 29 09:47	0°  ♌	
minimum elong	16349 Feb 10 00:12	6°  ♌09'34"	1°30'39"	asc. node	16350 Jan 08 00:07	14°  ♌50'50"	
max. Earth dist.	16349 Feb 12 11:15	11°  ♌28'56"	1.32523 AU	morning set	16350 Jan 15 21:15	0°  ♌	
evening rise	16349 Feb 17 12:34	22°  ♌01'06"			16350 Jan 18 14:52	5°  ♌47'24"	
	16349 Feb 21 14:20	0°  ♌		superior conj	16350 Jan 25 08:16	20°  ♌38'13"	1°37'07"
desc. node	16349 Feb 22 13:46	1°  ♌50'22"		minimum elong	16350 Jan 25 08:54	20°  ♌41'44"	1°37'34"
	16349 Mar 11 23:13	0°  ♌		max. Earth dist.	16350 Jan 26 15:07	23°  ♌29'19"	1.31501 AU
evening max el	16349 Mar 23 09:18	13°  ♌29'54"	27°31'59"		16350 Jan 29 14:30	0°  ♌	
retrograde	16349 Apr 06 04:07	21° ♌02'03"		evening rise	16350 Feb 01 10:45	6° ♌02'40"	
evening set	16349 Apr 12 22:35	18° ♌36'44"		desc. node	16350 Feb 09 10:29	21° ♌42'36"	
min. Earth dist.	16349 Apr 16 17:23	15° ♌17'56"	0.63853 AU		16350 Feb 14 04:08	0° ♌	
inferior conj	16349 Apr 19 10:54	12° ♌28'07"	0°08'17"	evening max el	16350 Mar 05 18:52	26° ♌13'02"	27°32'54"

	16350 Mar 10 06:44	0°♄			16351 Feb 08 16:14	0°♅	
retrograde	16350 Mar 19 18:42	3°♄40'02		evening max el	16351 Feb 15 22:49	8°♅09'13	26°59'16
evening set	16350 Mar 26 13:49	1°♄28'45		retrograde	16351 Mar 01 23:58	15°♅25'45	
	16350 Mar 28 15:16	30°♄♅		evening set	16351 Mar 08 13:20	13°♅35'53	
min. Earth dist.	16350 Mar 30 08:16	28°♅33'47	0.61687 AU	min. Earth dist.	16351 Mar 12 13:02	10°♅55'12	0.59418 AU
inferior conj	16350 Apr 02 10:47	25°♅42'36	-1°06'24	inferior conj	16351 Mar 15 18:29	8°♅19'57	-2°33'18
minimum elong	16350 Apr 02 13:07	25°♅37'12	1°05'41	minimum elong	16351 Mar 16 00:21	8°♅08'09	2°31'04
asc. node	16350 Apr 05 21:37	22°♅45'31		morning rise	16351 Mar 23 14:59	3°♅39'27	
morning rise	16350 Apr 09 15:40	20°♅42'04		asc. node	16351 Mar 23 18:56	3°♅37'07	
direct	16350 Apr 11 20:28	20°♅20'46		direct	16351 Mar 25 14:43	3°♅24'35	
morning max el	16350 Apr 18 15:34	23°♅45'53	17°49'03	morning max el	16351 Apr 02 05:04	7°♅11'13	18°09'01
	16350 Apr 23 16:05	0°♄			16351 Apr 16 19:28	0°♄	
morning set	16350 May 04 09:57	18°♄07'58		morning set	16351 Apr 17 19:39	1°♄52'48	
desc. node	16350 May 08 11:36	25°♄21'40		desc. node	16351 Apr 25 08:25	15°♄50'32	
	16350 May 11 03:02	0°♂					
				superior conj	16351 Apr 27 15:31	19°♄59'02	-0°19'01
superior conj	16350 May 15 16:52	7°♂52'09	-0°56'40	minimum elong	16351 Apr 27 13:58	19°♄52'04	0°19'13
minimum elong	16350 May 15 11:43	7°♂30'20	0°56'30		16351 May 03 09:07	0°♂	
max. Earth dist.	16350 May 22 18:54	19°♂36'17	1.43671 AU	max. Earth dist.	16351 May 05 05:53	3°♂09'25	1.41730 AU
	16350 May 29 07:53	0°♄		evening rise	16351 May 10 05:29	11°♂21'39	
evening rise	16350 May 29 21:13	0°♄51'57			16351 May 22 07:13	0°♄	
	16350 Jun 18 15:14	0°♂		evening max el	16351 Jun 12 20:06	28°♄03'46	22°47'53
evening max el	16350 Jun 30 03:33	14°♂09'18	21°28'38		16351 Jun 14 21:47	0°♂	
asc. node	16350 Jul 02 20:12	16°♂35'11		asc. node	16351 Jun 19 17:09	3°♂14'32	
retrograde	16350 Jul 09 01:41	19°♂20'04		retrograde	16351 Jun 22 22:37	3°♂59'06	
evening set	16350 Jul 13 13:54	17°♂29'07		evening set	16351 Jun 27 22:23	1°♂52'25	
inferior conj	16350 Jul 18 19:21	11°♂15'12	3°08'12		16351 Jun 29 18:54	30°♄♅	
minimum elong	16350 Jul 18 19:15	11°♂15'32	3°07'38	inferior conj	16351 Jul 03 05:24	25°♄29'58	3°01'42
min. Earth dist.	16350 Jul 19 01:19	10°♂54'23	0.69017 AU	minimum elong	16351 Jul 03 04:24	25°♄33'27	3°00'58
morning rise	16350 Jul 24 00:23	4°♂56'26		min. Earth dist.	16351 Jul 02 22:18	25°♄54'37	0.69159 AU
direct	16350 Jul 29 00:10	2°♂47'49		morning rise	16351 Jul 08 10:16	19°♄18'46	
desc. node	16350 Aug 04 10:31	5°♂31'18		direct	16351 Jul 12 21:56	17°♄28'19	
morning max el	16350 Aug 08 00:37	8°♂43'41	22°44'32	morning max el	16351 Jul 21 16:15	22°♄32'34	21°19'45
	16350 Aug 24 17:00	0°♄		desc. node	16351 Jul 22 07:46	23°♄12'03	
morning set	16350 Sep 10 21:22	26°♄23'47			16351 Jul 28 02:55	0°♂	
	16350 Sep 13 01:48	0°♄			16351 Aug 17 23:33	0°♄	
max. Earth dist.	16350 Sep 15 13:11	4°♄09'23	1.40576 AU	morning set	16351 Aug 21 21:24	6°♄04'31	
				max. Earth dist.	16351 Aug 28 18:31	17°♄04'56	1.42779 AU
superior conj	16350 Sep 23 10:26	17°♄58'38	-0°46'30	superior conj	16351 Sep 05 03:31	29°♄24'01	-1°23'05
minimum elong	16350 Sep 23 14:05	18°♄15'12	0°45'44	minimum elong	16351 Sep 05 10:20	29°♄53'11	1°22'16
asc. node	16350 Sep 28 21:08	28°♄01'42			16351 Sep 05 11:55	0°♄	
	16350 Sep 29 22:17	0°♄		asc. node	16351 Sep 15 17:52	18°♄05'24	
evening rise	16350 Oct 03 07:33	6°♄24'46		evening rise	16351 Sep 16 12:48	19°♄30'46	
	16350 Oct 17 08:31	0°♄			16351 Sep 22 09:50	0°♄	
evening max el	16350 Oct 19 05:37	2°♄04'56	18°25'27				
retrograde	16350 Oct 26 23:27	6°♄01'02		evening max el	16351 Oct 02 16:37	14°♄56'27	18°04'31
evening set	16350 Oct 28 23:14	5°♄46'09		retrograde	16351 Oct 09 13:29	18°♄28'18	
desc. node	16350 Oct 31 07:50	4°♄53'05		evening set	16351 Oct 11 19:55	18°♄05'27	
inferior conj	16350 Nov 05 17:21	1°♄11'56	-1°44'28	desc. node	16351 Oct 18 05:05	13°♄46'00	
minimum elong	16350 Nov 05 13:17	1°♄20'03	1°42'15	inferior conj	16351 Oct 18 20:42	13°♄10'13	-0°12'23
	16350 Nov 07 05:16	30°♄♄		minimum elong	16351 Oct 18 20:18	13°♄11'09	0°11'49
min. Earth dist.	16350 Nov 08 22:50	28°♄38'34	0.58022 AU	transit middle	16351 Oct 18 20:18	13°♄11'09	0°11'49
morning rise	16350 Nov 12 23:52	25°♄58'48		transit begin	16351 Oct 18 18:02	13°♄16'23	
direct	16350 Nov 19 07:15	24°♄16'20		transit end	16351 Oct 18 22:34	13°♄05'54	
	16350 Dec 01 13:47	0°♄		min. Earth dist.	16351 Oct 22 00:56	10°♄15'23	0.60267 AU
morning max el	16350 Dec 03 13:38	1°♄49'47	27°10'37	morning rise	16351 Oct 25 17:30	7°♄25'20	
	16350 Dec 23 17:45	0°♄		direct	16351 Nov 01 08:42	5°♄18'23	
asc. node	16350 Dec 25 21:15	3°♄55'02		morning max el	16351 Nov 15 14:27	13°♄07'16	27°52'54
morning set	16351 Jan 02 23:52	20°♄13'10			16351 Nov 29 01:47	0°♄	
	16351 Jan 07 10:57	0°♄		asc. node	16351 Dec 12 18:18	23°♄25'12	
					16351 Dec 16 01:45	0°♄	
superior conj	16351 Jan 09 19:35	5°♄16'46	1°37'42	morning set	16351 Dec 18 04:35	4°♄23'22	
minimum elong	16351 Jan 09 19:09	5°♄14'22	1°38'18	max. Earth dist.	16351 Dec 24 05:20	17°♄30'05	1.31077 AU
max. Earth dist.	16351 Jan 09 22:17	5°♄31'55	1.31012 AU				
evening rise	16351 Jan 16 15:00	20°♄17'26		superior conj	16351 Dec 25 06:41	19°♄51'27	1°32'16
	16351 Jan 21 08:02	0°♄		minimum elong	16351 Dec 25 05:17	19°♄43'38	1°32'50
desc. node	16351 Jan 27 07:15	11°♄09'54			16351 Dec 29 19:54	0°♄	

evening rise	16351 Dec 31 23:17	4° \approx 40'51		minimum elong	16352 Dec 08 13:30	4° \approx 04'44	1°21'09
desc. node	16352 Jan 14 04:04	0° \approx 03'15		evening rise	16352 Dec 15 09:39	19° \approx 07'40	
	16352 Jan 14 03:17	0° \approx			16352 Dec 20 14:48	0° \approx	
evening max el	16352 Jan 28 18:57	19° \approx 12'47	25°51'22	desc. node	16352 Dec 31 00:56	18° \approx 09'57	
retrograde	16352 Feb 11 17:35	26° \approx 15'23		evening max el	16353 Jan 09 07:04	29° \approx 28'57	24°17'28
evening set	16352 Feb 17 17:33	24° \approx 51'50			16353 Jan 09 20:18	0° \approx	
min. Earth dist.	16352 Feb 22 07:58	22° \approx 12'45	0.57287 AU	retrograde	16353 Jan 22 21:47	6° \approx 15'13	
inferior conj	16352 Feb 25 06:29	20° \approx 10'34	-4°04'39	evening set	16353 Jan 27 23:32	5° \approx 19'02	
minimum elong	16352 Feb 25 15:29	19° \approx 54'55	4°01'36	min. Earth dist.	16353 Feb 02 18:47	2° \approx 25'02	0.55569 AU
morning rise	16352 Mar 04 16:27	15° \approx 51'22		inferior conj	16353 Feb 04 21:11	1° \approx 08'29	-5°22'51
direct	16352 Mar 06 15:55	15° \approx 39'06		minimum elong	16353 Feb 05 05:38	0° \approx 55'36	5°20'49
asc. node	16352 Mar 09 16:14	16° \approx 09'06			16353 Feb 06 19:00	30° \approx	
morning max el	16352 Mar 15 10:46	19° \approx 58'03	18°49'40	morning rise	16353 Feb 13 13:42	27° \approx 09'07	
	16352 Mar 22 22:46	0° \approx		direct	16353 Feb 15 21:25	26° \approx 55'03	
morning set	16352 Mar 31 16:36	16° \approx 06'48			16353 Feb 23 23:42	0° \approx	
	16352 Apr 07 20:03	0° \approx		asc. node	16353 Feb 24 13:32	0° \approx 27'28	
				morning max el	16353 Feb 26 04:29	1° \approx 54'53	19°53'04
superior conj	16352 Apr 09 09:15	2° \approx 56'41	0°15'26	morning set	16353 Mar 15 21:04	0° \approx 38'53	
minimum elong	16352 Apr 09 10:15	3° \approx 01'22	0°14'57		16353 Mar 15 13:23	0° \approx	
behind sun begin	16352 Apr 09 07:54	2° \approx 50'15					
behind sun end	16352 Apr 09 12:36	3° \approx 12'29		superior conj	16353 Mar 23 17:42	16° \approx 33'16	0°44'29
desc. node	16352 Apr 11 05:11	6° \approx 22'19		minimum elong	16353 Mar 23 19:58	16° \approx 44'30	0°43'58
max. Earth dist.	16352 Apr 16 13:16	16° \approx 01'48	1.39493 AU	desc. node	16353 Mar 29 01:55	26° \approx 53'25	
evening rise	16352 Apr 20 11:03	22° \approx 47'02		max. Earth dist.	16353 Mar 29 19:48	28° \approx 17'08	1.37198 AU
	16352 Apr 24 19:27	0° \approx			16353 Mar 30 17:58	0° \approx	
	16352 May 15 04:35	0° \approx		evening rise	16353 Apr 02 12:36	5° \approx 02'29	
evening max el	16352 May 25 10:14	11° \approx 59'27	24°09'28		16353 Apr 17 18:24	0° \approx	
retrograde	16352 Jun 05 16:23	18° \approx 34'43		evening max el	16353 May 07 23:41	25° \approx 54'17	25°26'31
asc. node	16352 Jun 05 14:09	18° \approx 34'41			16353 May 12 17:34	0° \approx	
evening set	16352 Jun 11 03:51	16° \approx 14'55		retrograde	16353 May 20 06:01	3° \approx 00'30	
min. Earth dist.	16352 Jun 15 18:24	10° \approx 54'46	0.68811 AU	asc. node	16353 May 23 11:12	2° \approx 18'13	
inferior conj	16352 Jun 16 14:33	9° \approx 46'33	2°44'45	evening set	16353 May 26 04:41	0° \approx 31'30	
minimum elong	16352 Jun 16 12:49	9° \approx 52'26	2°43'46		16353 May 26 18:49	30° \approx	
morning rise	16352 Jun 21 21:49	3° \approx 44'24		min. Earth dist.	16353 May 30 11:35	25° \approx 48'23	0.67976 AU
direct	16352 Jun 25 21:44	2° \approx 13'31		inferior conj	16353 May 31 20:52	24° \approx 00'53	2°16'59
morning max el	16352 Jul 03 14:09	6° \approx 32'09	20°05'33	minimum elong	16353 May 31 18:43	24° \approx 07'51	2°15'47
desc. node	16352 Jul 08 04:58	11° \approx 54'50		morning rise	16353 Jun 06 09:12	18° \approx 09'00	
	16352 Jul 21 05:13	0° \approx		direct	16353 Jun 09 21:57	16° \approx 57'30	
morning set	16352 Jul 31 04:18	15° \approx 03'51		morning max el	16353 Jun 16 19:26	20° \approx 42'06	19°05'45
	16352 Aug 09 18:09	0° \approx			16353 Jun 24 09:21	0° \approx	
max. Earth dist.	16352 Aug 10 06:57	0° \approx 50'49	1.44531 AU	desc. node	16353 Jun 25 02:05	0° \approx 58'50	
				greatest brilliancy	16353 Jun 29 18:09	7° \approx 48'11	-0.7m
superior conj	16352 Aug 15 21:14	9° \approx 50'35	-1°54'10	morning set	16353 Jul 10 11:09	24° \approx 08'50	
minimum elong	16352 Aug 16 05:01	10° \approx 22'17	1°53'50		16353 Jul 14 06:06	0° \approx	
	16352 Aug 27 22:40	0° \approx		max. Earth dist.	16353 Jul 24 00:38	15° \approx 01'34	1.45647 AU
evening rise	16352 Aug 29 00:41	1° \approx 51'17					
asc. node	16352 Sep 01 14:34	7° \approx 58'38		superior conj	16353 Jul 26 17:31	19° \approx 02'68	-2°12'17
evening max el	16352 Sep 15 07:09	28° \approx 15'08	18°02'40	minimum elong	16353 Jul 26 21:05	19° \approx 40'10	2°12'40
	16352 Sep 17 08:12	0° \approx			16353 Aug 02 09:23	0° \approx	
retrograde	16352 Sep 21 17:26	1° \approx 36'21		evening rise	16353 Aug 10 14:07	13° \approx 14'32	
evening set	16352 Sep 24 08:01	1° \approx 01'55		asc. node	16353 Aug 19 11:17	27° \approx 37'05	
	16352 Sep 26 03:34	30° \approx			16353 Aug 20 23:49	0° \approx	
inferior conj	16352 Sep 30 17:35	25° \approx 47'57	1°01'11	evening max el	16353 Aug 29 21:41	11° \approx 52'38	18°18'53
minimum elong	16352 Sep 30 19:13	25° \approx 43'38	1°00'50	retrograde	16353 Sep 05 06:57	15° \approx 16'29	
min. Earth dist.	16352 Oct 03 12:58	22° \approx 51'51	0.62550 AU	evening set	16353 Sep 08 06:21	14° \approx 27'40	
desc. node	16352 Oct 04 02:23	22° \approx 18'35		inferior conj	16353 Sep 14 04:01	8° \approx 57'35	1°55'42
morning rise	16352 Oct 07 04:02	19° \approx 40'10		minimum elong	16353 Sep 14 06:19	8° \approx 50'51	1°55'04
direct	16352 Oct 13 20:26	17° \approx 15'08		min. Earth dist.	16353 Sep 16 10:57	6° \approx 17'50	0.64658 AU
morning max el	16352 Oct 27 21:35	25° \approx 12'26	27°55'52	morning rise	16353 Sep 20 04:43	2° \approx 36'19	
	16352 Nov 01 07:27	0° \approx		desc. node	16353 Sep 20 23:41	2° \approx 00'36	
	16352 Nov 21 13:29	0° \approx		direct	16353 Sep 26 17:10	0° \approx 01'11	
asc. node	16352 Nov 28 15:18	13° \approx 13'29		morning max el	16353 Oct 10 08:18	7° \approx 56'57	27°23'14
morning set	16352 Dec 01 02:50	18° \approx 12'17			16353 Oct 27 11:25	0° \approx	
max. Earth dist.	16352 Dec 06 08:23	29° \approx 14'28	1.31702 AU		16353 Nov 13 20:42	0° \approx	
	16352 Dec 06 16:46	0° \approx		morning set	16353 Nov 14 16:01	1° \approx 34'21	
				asc. node	16353 Nov 15 12:14	3° \approx 14'10	
superior conj	16352 Dec 08 15:37	4° \approx 16'22	1°20'44	max. Earth dist.	16353 Nov 19 03:44	10° \approx 38'32	1.32894 AU

superior conj	16353 Nov 22 20:19	18° ♄ 26'11	1°03'00	minimum elong	16354 Nov 06 16:24	2° ♄ 05'23	0°39'16
minimum elong	16353 Nov 22 17:56	18° ♄ 13'26	1°03'15	evening rise	16354 Nov 14 05:23	17° ♄ 54'20	
	16353 Nov 28 04:37	0° ♄			16354 Nov 20 05:12	0° ♄	
evening rise	16353 Nov 29 20:18	3° ♄ 33'31		evening max el	16354 Dec 03 09:39	19° ♄ 35'12	20°58'02
	16353 Dec 14 01:17	0° ♄		desc. node	16354 Dec 04 18:50	20° ♄ 52'29	
desc. node	16353 Dec 17 21:51	5° ♄ 13'20		retrograde	16354 Dec 14 23:25	25° ♄ 19'08	
evening max el	16353 Dec 21 16:36	9° ♄ 23'10	22°33'47	evening set	16354 Dec 17 14:41	25° ♄ 02'36	
retrograde	16354 Jan 03 13:40	15° ♄ 45'20		inferior conj	16354 Dec 26 08:54	21° ♄ 11'33	-5°40'11
evening set	16354 Jan 07 09:20	15° ♄ 13'24		minimum elong	16354 Dec 26 01:27	21° ♄ 22'09	5°38'23
min. Earth dist.	16354 Jan 15 00:58	11° ♄ 44'33	0.54546 AU	min. Earth dist.	16354 Dec 27 06:22	20° ♄ 40'58	0.54433 AU
inferior conj	16354 Jan 15 18:15	11° ♄ 20'14	-6°01'31	morning rise	16355 Jan 03 12:17	17° ♄ 18'35	
minimum elong	16354 Jan 15 19:39	11° ♄ 18'16	6°00'57	direct	16355 Jan 07 17:24	16° ♄ 30'19	
morning rise	16354 Jan 24 07:04	7° ♄ 32'16		morning max el	16355 Jan 20 20:55	23° ♄ 05'39	23°04'21
direct	16354 Jan 27 10:00	7° ♄ 10'08			16355 Jan 26 21:41	0° ♄	
morning max el	16354 Feb 08 07:18	12° ♄ 54'47	21°19'34	asc. node	16355 Jan 29 08:06	3° ♄ 25'15	
asc. node	16354 Feb 11 10:50	16° ♄ 19'02		morning set	16355 Feb 12 17:39	0° ♄ 03'56	
	16354 Feb 20 11:32	0° ♄			16355 Feb 12 16:55	0° ♄	
morning set	16354 Feb 28 06:09	15° ♄ 20'02		superior conj	16355 Feb 19 15:44	15° ♄ 00'22	1°23'48
	16354 Mar 07 05:41	0° ♄		minimum elong	16355 Feb 19 17:48	15° ♄ 11'28	1°23'49
superior conj	16354 Mar 07 12:54	0° ♄ 37'25	1°07'20	max. Earth dist.	16355 Feb 22 22:33	21° ♄ 58'17	1.33324 AU
minimum elong	16354 Mar 07 15:25	0° ♄ 50'26	1°07'02		16355 Feb 26 20:57	0° ♄	
max. Earth dist.	16354 Mar 12 05:39	10° ♄ 09'18	1.35082 AU	evening rise	16355 Feb 27 14:24	1° ♄ 26'25	
desc. node	16354 Mar 15 22:35	17° ♄ 19'31		desc. node	16355 Mar 02 19:17	7° ♄ 36'49	
evening rise	16354 Mar 16 06:51	17° ♄ 58'28			16355 Mar 15 22:16	0° ♄	
	16354 Mar 22 23:08	0° ♄		evening max el	16355 Apr 03 02:45	23° ♄ 14'41	27°17'25
	16354 Apr 11 23:44	0° ♄			16355 Apr 12 16:40	0° ♄	
evening max el	16354 Apr 20 13:15	9° ♄ 41'59	26°31'42	retrograde	16355 Apr 16 17:06	0° ♄ 47'38	
retrograde	16354 May 03 14:35	17° ♄ 07'38			16355 Apr 20 11:51	30° ♄	
evening set	16354 May 09 22:59	14° ♄ 34'48		evening set	16355 Apr 23 08:44	28° ♄ 17'37	
asc. node	16354 May 10 08:20	14° ♄ 15'15		min. Earth dist.	16355 Apr 27 05:10	24° ♄ 41'57	0.64984 AU
min. Earth dist.	16354 May 13 23:47	10° ♄ 26'57	0.66683 AU	asc. node	16355 Apr 27 05:31	24° ♄ 41'00	
inferior conj	16354 May 15 22:11	8° ♄ 07'00	1°37'26	inferior conj	16355 Apr 29 16:04	21° ♄ 59'26	0°44'56
minimum elong	16354 May 15 20:08	8° ♄ 13'13	1°36'12	minimum elong	16355 Apr 29 14:53	22° ♄ 02'45	0°44'00
morning rise	16354 May 21 18:22	2° ♄ 26'41		morning rise	16355 May 05 22:55	16° ♄ 32'24	
direct	16354 May 24 20:44	1° ♄ 32'58		direct	16355 May 08 15:54	15° ♄ 53'48	
morning max el	16354 May 31 07:06	4° ♄ 56'34	18°22'05	morning max el	16355 May 14 23:07	19° ♄ 08'53	17°55'20
desc. node	16354 Jun 11 23:07	20° ♄ 39'55			16355 May 23 04:54	0° ♄	
	16354 Jun 17 21:47	0° ♄		desc. node	16355 May 29 20:06	10° ♄ 41'37	
morning set	16354 Jun 20 12:23	4° ♄ 08'00		morning set	16355 Jun 01 16:41	15° ♄ 24'41	
					16355 Jun 10 14:46	0° ♄	
superior conj	16354 Jul 06 02:53	28° ♄ 39'10	-2°11'17	superior conj	16355 Jun 15 18:06	8° ♄ 13'16	-1°51'09
minimum elong	16354 Jul 05 22:41	28° ♄ 22'50	2°11'46	minimum elong	16355 Jun 15 09:37	7° ♄ 39'39	1°51'07
	16354 Jul 06 23:38	0° ♄		max. Earth dist.	16355 Jun 19 16:31	14° ♄ 25'32	1.45656 AU
max. Earth dist.	16354 Jul 06 20:34	29° ♄ 48'04	1.46026 AU		16355 Jun 29 17:35	0° ♄	
evening rise	16354 Jul 22 02:17	23° ♄ 34'16		evening rise	16355 Jul 01 18:21	3° ♄ 06'55	
	16354 Jul 26 04:55	0° ♄		greatest brilliancy	16355 Jul 15 21:45	24° ♄ 23'55	-0.6m
greatest brilliancy	16354 Jul 31 15:26	8° ♄ 26'13	-0.8m		16355 Jul 19 20:15	0° ♄	
asc. node	16354 Aug 06 08:01	16° ♄ 54'21		asc. node	16355 Jul 24 04:47	5° ♄ 42'38	
evening max el	16354 Aug 13 09:22	25° ♄ 41'19	18°52'31	evening max el	16355 Jul 27 16:05	9° ♄ 35'12	19°42'27
retrograde	16354 Aug 20 02:15	29° ♄ 20'41		retrograde	16355 Aug 04 00:31	13° ♄ 42'13	
evening set	16354 Aug 23 11:08	28° ♄ 15'20		evening set	16355 Aug 07 19:32	12° ♄ 19'06	
inferior conj	16354 Aug 29 00:21	22° ♄ 31'21	2°33'16	inferior conj	16355 Aug 13 03:32	6° ♄ 22'36	2°56'25
minimum elong	16354 Aug 29 02:26	22° ♄ 24'45	2°32'41	minimum elong	16355 Aug 13 04:55	6° ♄ 18'00	2°55'54
min. Earth dist.	16354 Aug 30 17:33	20° ♄ 21'18	0.66441 AU	min. Earth dist.	16355 Aug 14 06:48	4° ♄ 51'28	0.67812 AU
morning rise	16354 Sep 03 16:49	16° ♄ 04'35		morning rise	16355 Aug 18 13:46	29° ♄ 56'17	
desc. node	16354 Sep 07 21:00	13° ♄ 43'44			16355 Aug 18 12:06	30° ♄	
direct	16354 Sep 09 21:32	13° ♄ 27'51		direct	16355 Aug 24 08:19	27° ♄ 25'49	
morning max el	16354 Sep 22 19:54	21° ♄ 08'10	26°22'43	desc. node	16355 Aug 25 18:20	27° ♄ 33'48	
	16354 Sep 30 12:50	0° ♄			16355 Aug 31 00:31	0° ♄	
	16354 Oct 20 15:31	0° ♄		morning max el	16355 Sep 05 06:56	4° ♄ 34'41	25°03'39
morning set	16354 Oct 28 17:03	14° ♄ 23'00			16355 Sep 24 21:00	0° ♄	
max. Earth dist.	16354 Nov 01 13:15	21° ♄ 45'01	1.34626 AU	morning set	16355 Oct 11 02:03	26° ♄ 28'57	
asc. node	16354 Nov 02 09:06	23° ♄ 22'46			16355 Oct 13 01:03	0° ♄	
	16354 Nov 05 16:00	0° ♄		max. Earth dist.	16355 Oct 14 14:27	2° ♄ 51'11	1.36802 AU
superior conj	16354 Nov 06 18:21	2° ♄ 15'29	0°39'04	asc. node	16355 Oct 20 05:54	13° ♄ 34'48	

superior conj	16355 Oct 21 06:42	15° \mathbb{M} 36'32	0°09'18	max. Earth dist.	16356 Sep 25 13:21	14° \mathbb{A} 27'49	1.39208 AU
minimum elong	16355 Oct 21 06:06	15° \mathbb{M} 33'33	0°09'38				
behind sun begin	16355 Oct 21 00:52	15° \mathbb{M} 07'43		superior conj	16356 Oct 03 05:42	28° \mathbb{A} 20'50	-0°25'16
behind sun end	16355 Oct 21 11:21	15° \mathbb{M} 59'26		minimum elong	16356 Oct 03 07:32	28° \mathbb{A} 29'26	0°24'40
	16355 Oct 28 10:10	0° \mathbb{A}			16356 Oct 04 02:51	0° \mathbb{M}	
evening rise	16355 Oct 29 10:41	2° \mathbb{A} 04'25		asc. node	16356 Oct 06 02:40	3° \mathbb{M} 46'49	
	16355 Nov 15 04:21	0° \mathbb{B}		evening rise	16356 Oct 12 09:33	15° \mathbb{M} 57'30	
evening max el	16355 Nov 15 16:40	0° \mathbb{B} 31'35	19°41'10		16356 Oct 19 21:04	0° \mathbb{A}	
desc. node	16355 Nov 21 15:54	4° \mathbb{B} 42'44		evening max el	16356 Oct 28 13:30	12° \mathbb{A} 18'33	18°46'41
retrograde	16355 Nov 25 15:03	5° \mathbb{B} 29'19		retrograde	16356 Nov 05 23:52	16° \mathbb{A} 34'17	
evening set	16355 Nov 27 15:14	5° \mathbb{B} 18'06		evening set	16356 Nov 07 21:40	16° \mathbb{A} 21'59	
inferior conj	16355 Dec 06 07:43	1° \mathbb{B} 15'42	-4°24'40	desc. node	16356 Nov 07 13:02	16° \mathbb{A} 26'08	
minimum elong	16355 Dec 05 21:49	1° \mathbb{B} 31'14	4°21'00	inferior conj	16356 Nov 16 01:26	11° \mathbb{A} 59'43	-2°43'20
	16355 Dec 08 07:58	30° \mathbb{R} \mathbb{A}		minimum elong	16356 Nov 15 18:48	12° \mathbb{A} 11'47	2°40'10
min. Earth dist.	16355 Dec 08 13:45	29° \mathbb{A} 51'04	0.55265 AU	min. Earth dist.	16356 Nov 19 02:18	9° \mathbb{A} 47'47	0.56868 AU
morning rise	16355 Dec 14 02:48	26° \mathbb{A} 59'24		morning rise	16356 Nov 23 12:56	7° \mathbb{A} 08'01	
direct	16355 Dec 19 08:29	25° \mathbb{A} 58'32		direct	16356 Nov 29 12:50	5° \mathbb{A} 41'15	
	16355 Dec 29 18:50	0° \mathbb{B}		morning max el	16356 Dec 13 17:13	13° \mathbb{A} 01'43	26°29'16
morning max el	16356 Jan 02 05:03	2° \mathbb{B} 54'56	24°54'03		16356 Dec 27 01:00	0° \mathbb{B}	
asc. node	16356 Jan 16 05:20	21° \mathbb{B} 27'55		asc. node	16357 Jan 02 02:32	10° \mathbb{B} 13'14	
	16356 Jan 21 00:00	0° \mathbb{A}		morning set	16357 Jan 11 16:11	29° \mathbb{B} 16'47	
morning set	16356 Jan 28 05:35	14° \mathbb{A} 44'18			16357 Jan 12 00:12	0° \mathbb{A}	
superior conj	16356 Feb 03 23:30	29° \mathbb{A} 33'41	1°34'01	superior conj	16357 Jan 18 10:05	14° \mathbb{A} 11'46	1°38'06
minimum elong	16356 Feb 04 00:43	29° \mathbb{A} 40'23	1°34'20	minimum elong	16357 Jan 18 10:16	14° \mathbb{A} 12'47	1°38'38
	16356 Feb 04 04:17	0° \mathbb{H}		max. Earth dist.	16357 Jan 19 04:49	15° \mathbb{A} 56'21	1.31233 AU
max. Earth dist.	16356 Feb 05 22:59	3° \mathbb{H} 53'48	1.32025 AU	evening rise	16357 Jan 25 09:04	29° \mathbb{A} 24'53	
evening rise	16356 Feb 11 08:02	15° \mathbb{H} 17'17			16357 Jan 25 15:44	0° \mathbb{H}	
desc. node	16356 Feb 17 16:00	27° \mathbb{H} 39'36		desc. node	16357 Feb 03 12:45	17° \mathbb{H} 22'03	
	16356 Feb 18 22:36	0° \mathbb{Y}			16357 Feb 11 02:13	0° \mathbb{Y}	
	16356 Mar 09 18:23	0° \mathbb{B}		evening max el	16357 Feb 25 22:15	18° \mathbb{Y} 44'20	27°22'58
evening max el	16356 Mar 15 14:36	6° \mathbb{B} 19'53	27°36'31	retrograde	16357 Mar 11 22:44	26° \mathbb{Y} 06'27	
retrograde	16356 Mar 29 12:15	13° \mathbb{B} 50'22		evening set	16357 Mar 18 16:21	24° \mathbb{Y} 03'41	
evening set	16356 Apr 05 07:29	11° \mathbb{B} 30'29		min. Earth dist.	16357 Mar 22 12:17	21° \mathbb{Y} 16'11	0.60721 AU
min. Earth dist.	16356 Apr 09 01:49	8° \mathbb{B} 22'26	0.62953 AU	inferior conj	16357 Mar 25 16:56	18° \mathbb{Y} 29'55	-1°42'03
inferior conj	16356 Apr 11 23:30	5° \mathbb{B} 30'16	-0°21'38	minimum elong	16357 Mar 25 20:41	18° \mathbb{Y} 21'44	1°40'42
minimum elong	16356 Apr 12 00:12	5° \mathbb{B} 28'30	0°21'42	asc. node	16357 Mar 31 00:03	14° \mathbb{Y} 32'11	
asc. node	16356 Apr 13 02:45	4° \mathbb{B} 23'35		morning rise	16357 Apr 02 04:26	13° \mathbb{Y} 37'27	
morning rise	16356 Apr 18 19:42	0° \mathbb{B} 18'58		direct	16357 Apr 04 06:51	13° \mathbb{Y} 19'12	
	16356 Apr 19 22:08	30° \mathbb{R} \mathbb{Y}		morning max el	16357 Apr 11 08:48	16° \mathbb{Y} 51'54	17°55'13
direct	16356 Apr 21 04:33	29° \mathbb{Y} 52'17			16357 Apr 20 16:01	0° \mathbb{B}	
	16356 Apr 22 10:48	0° \mathbb{B}		morning set	16357 Apr 26 23:21	11° \mathbb{B} 14'50	
morning max el	16356 Apr 27 16:46	3° \mathbb{B} 10'28	17°46'10	desc. node	16357 May 02 13:53	21° \mathbb{B} 23'32	
morning set	16356 May 13 22:17	27° \mathbb{B} 52'59			16357 May 07 11:02	0° \mathbb{H}	
	16356 May 15 03:38	0° \mathbb{H}					
desc. node	16356 May 15 17:02	0° \mathbb{H} 57'54		superior conj	16357 May 07 14:21	0° \mathbb{H} 14'22	-0°40'31
				minimum elong	16357 May 07 10:48	29° \mathbb{B} 58'59	0°40'30
superior conj	16356 May 26 04:29	18° \mathbb{H} 41'44	-1°18'15	max. Earth dist.	16357 May 15 01:08	12° \mathbb{H} 48'31	1.42895 AU
minimum elong	16356 May 25 21:19	18° \mathbb{H} 12'11	1°17'58	evening rise	16357 May 21 02:32	22° \mathbb{H} 33'32	
max. Earth dist.	16356 Jun 01 10:44	28° \mathbb{H} 50'48	1.44576 AU		16357 May 25 21:25	0° \mathbb{B}	
	16356 Jun 02 04:06	0° \mathbb{B}			16357 Jun 16 00:14	0° \mathbb{B}	
evening rise	16356 Jun 10 05:05	12° \mathbb{B} 33'37		evening max el	16357 Jun 22 11:51	7° \mathbb{B} 25'06	22°01'37
	16356 Jun 21 19:47	0° \mathbb{B}		asc. node	16357 Jun 26 22:29	11° \mathbb{B} 09'13	
evening max el	16356 Jul 09 16:49	23° \mathbb{B} 30'31	20°46'35	retrograde	16357 Jul 01 21:41	12° \mathbb{B} 54'32	
asc. node	16356 Jul 10 01:36	23° \mathbb{B} 52'06		evening set	16357 Jul 06 14:53	10° \mathbb{B} 56'23	
retrograde	16356 Jul 17 23:33	28° \mathbb{B} 15'34		inferior conj	16357 Jul 11 20:43	4° \mathbb{B} 38'37	3°06'42
evening set	16356 Jul 22 05:25	26° \mathbb{B} 34'26		minimum elong	16357 Jul 11 20:14	4° \mathbb{B} 40'20	3°06'05
inferior conj	16356 Jul 27 11:03	20° \mathbb{B} 26'38	3°07'07	min. Earth dist.	16357 Jul 11 21:02	4° \mathbb{B} 37'30	0.69142 AU
minimum elong	16356 Jul 27 11:30	20° \mathbb{B} 25'02	3°06'36		16357 Jul 15 10:22	30° \mathbb{R} \mathbb{B}	
min. Earth dist.	16356 Jul 28 00:40	19° \mathbb{B} 39'33	0.68721 AU	morning rise	16357 Jul 17 01:25	28° \mathbb{B} 23'09	
morning rise	16356 Aug 01 17:19	14° \mathbb{B} 04'33		direct	16357 Jul 21 20:02	26° \mathbb{B} 22'08	
direct	16356 Aug 07 00:10	11° \mathbb{B} 46'41			16357 Jul 29 06:04	0° \mathbb{B}	
desc. node	16356 Aug 11 15:39	13° \mathbb{B} 12'27		desc. node	16357 Jul 29 12:57	0° \mathbb{B} 15'05	
morning max el	16356 Aug 17 18:00	18° \mathbb{B} 10'49	23°35'41	morning max el	16357 Jul 31 07:17	1° \mathbb{B} 55'18	22°07'34
	16356 Aug 27 16:05	0° \mathbb{H}			16357 Aug 21 13:24	0° \mathbb{H}	
	16356 Sep 16 22:38	0° \mathbb{B}		morning set	16357 Sep 02 04:21	17° \mathbb{H} 57'42	
morning set	16356 Sep 21 14:54	7° \mathbb{B} 43'04		max. Earth dist.	16357 Sep 07 15:44	26° \mathbb{H} 54'33	1.41562 AU

	16357 Sep 09 11:56	0°♄			16358 Aug 14 13:27	0°♄	
				max. Earth dist.	16358 Aug 20 24:00	10°♄12'37	1.43594 AU
superior conj	16357 Sep 15 10:53	10°♄17'24	-1°02'16				
minimum elong	16357 Sep 15 15:58	10°♄39'51	1°01'26	superior conj	16358 Aug 27 18:11	21°♄17'55	-1°37'21
asc. node	16357 Sep 22 23:23	23°♄54'35		minimum elong	16358 Aug 28 01:52	21°♄50'06	1°36'41
evening rise	16357 Sep 25 22:27	29°♄24'00			16358 Sep 01 21:15	0°♄	
	16357 Sep 26 06:12	0°♄		evening rise	16358 Sep 08 21:00	12°♄12'44	
evening max el	16357 Oct 11 20:29	24°♄48'58	18°14'00	asc. node	16358 Sep 09 20:04	13°♄54'31	
retrograde	16357 Oct 19 04:10	28°♄33'28			16358 Sep 19 07:45	0°♄	
evening set	16357 Oct 21 06:26	28°♄15'41		evening max el	16358 Sep 25 09:22	7°♄53'07	18°01'23
desc. node	16357 Oct 25 10:15	26°♄08'23		retrograde	16358 Oct 02 00:43	11°♄19'05	
inferior conj	16357 Oct 28 17:02	23°♄31'58	-1°03'22	evening set	16358 Oct 04 10:22	10°♄51'51	
minimum elong	16357 Oct 28 14:42	23°♄36'55	1°01'55	inferior conj	16358 Oct 11 04:20	5°♄48'27	0°21'12
min. Earth dist.	16357 Oct 31 23:01	20°♄47'09	0.58957 AU	minimum elong	16358 Oct 11 05:00	5°♄46'50	0°21'17
morning rise	16357 Nov 04 19:33	18°♄04'11		desc. node	16358 Oct 12 07:31	4°♄41'31	
direct	16357 Nov 11 06:51	16°♄11'05		min. Earth dist.	16358 Oct 14 05:31	2°♄50'24	0.61247 AU
morning max el	16357 Nov 25 13:44	23°♄51'41	27°33'31	morning rise	16358 Oct 17 20:41	29°♄52'15	
	16357 Dec 01 03:29	0°♄			16358 Oct 17 16:09	30°♄	
asc. node	16357 Dec 19 23:40	29°♄29'50		direct	16358 Oct 24 13:01	27°♄36'33	
	16357 Dec 20 06:00	0°♄			16358 Oct 31 22:20	0°♄	
morning set	16357 Dec 26 23:37	13°♄36'56		morning max el	16358 Nov 07 17:44	5°♄30'59	27°58'50
					16358 Nov 26 03:40	0°♄	
superior conj	16358 Jan 02 21:32	28°♄49'22	1°36'09	asc. node	16358 Dec 06 20:41	19°♄08'43	
minimum elong	16358 Jan 02 20:40	28°♄44'33	1°36'44	morning set	16358 Dec 11 01:51	27°♄39'02	
max. Earth dist.	16358 Jan 02 12:35	27°♄59'12	1.30971 AU		16358 Dec 12 04:46	0°♄	
	16358 Jan 03 10:08	0°♄		max. Earth dist.	16358 Dec 16 18:16	9°♄52'08	1.31267 AU
evening rise	16358 Jan 09 15:16	13°♄44'01					
	16358 Jan 17 16:57	0°♄		superior conj	16358 Dec 18 07:55	13°♄20'41	1°28'08
desc. node	16358 Jan 21 09:31	6°♄36'32		minimum elong	16358 Dec 18 06:11	13°♄11'00	1°28'38
	16358 Feb 07 15:23	0°♄		evening rise	16358 Dec 25 00:37	28°♄09'15	
evening max el	16358 Feb 07 22:56	0°♄18'06	26°34'13		16358 Dec 25 21:10	0°♄	
retrograde	16358 Feb 21 23:11	7°♄29'10		desc. node	16359 Jan 08 06:19	25°♄11'57	
evening set	16358 Feb 28 08:08	5°♄49'43			16359 Jan 11 10:48	0°♄	
min. Earth dist.	16358 Mar 04 12:29	3°♄11'52	0.58476 AU	evening max el	16359 Jan 20 15:10	10°♄59'07	25°13'47
inferior conj	16358 Mar 07 16:37	0°♄48'37	-3°12'19	retrograde	16359 Feb 03 11:41	17°♄56'17	
minimum elong	16358 Mar 08 00:01	0°♄34'39	3°09'34	evening set	16359 Feb 09 03:10	16°♄44'24	
	16358 Mar 08 18:37	30°♄		min. Earth dist.	16359 Feb 14 03:43	14°♄01'07	0.56479 AU
morning rise	16358 Mar 15 19:24	26°♄17'29		inferior conj	16359 Feb 16 19:29	12°♄16'53	-4°40'56
direct	16358 Mar 17 18:19	26°♄04'12		minimum elong	16359 Feb 17 04:57	12°♄01'23	4°38'05
asc. node	16358 Mar 17 21:23	26°♄04'15		morning rise	16359 Feb 25 09:27	8°♄06'55	
	16358 Mar 25 18:22	0°♄		direct	16359 Feb 27 10:55	7°♄54'39	
morning max el	16358 Mar 25 19:33	0°♄02'54	18°23'47	asc. node	16359 Mar 04 18:43	9°♄22'14	
morning set	16358 Apr 10 14:21	25°♄13'54		morning max el	16359 Mar 08 20:44	12°♄30'22	19°13'50
	16358 Apr 13 02:21	0°♄			16359 Mar 20 15:58	0°♄	
desc. node	16358 Apr 19 10:41	11°♄54'32		morning set	16359 Mar 25 14:51	9°♄36'27	
superior conj	16358 Apr 19 21:42	12°♄45'04	-0°03'52	superior conj	16359 Apr 02 22:11	26°♄00'41	0°28'29
minimum elong	16358 Apr 19 21:24	12°♄43'38	0°04'13	minimum elong	16359 Apr 02 23:52	26°♄08'47	0°27'57
behind sun begin	16358 Apr 19 14:21	12°♄11'21			16359 Apr 05 00:16	0°♄	
behind sun end	16358 Apr 20 04:26	13°♄15'51		desc. node	16359 Apr 06 07:24	2°♄26'29	
max. Earth dist.	16358 Apr 27 10:29	26°♄05'23	1.40793 AU	max. Earth dist.	16359 Apr 09 16:23	8°♄38'13	1.38502 AU
	16358 Apr 29 17:52	0°♄		evening rise	16359 Apr 13 10:04	15°♄14'36	
evening rise	16358 May 01 19:43	3°♄27'03			16359 Apr 22 08:14	0°♄	
	16358 May 19 03:24	0°♄			16359 May 13 20:17	0°♄	
evening max el	16358 Jun 05 02:56	21°♄19'47	23°22'35	evening max el	16359 May 18 16:27	5°♄14'57	24°43'16
asc. node	16358 Jun 13 19:27	27°♄17'44		retrograde	16359 May 30 09:48	12°♄05'31	
retrograde	16358 Jun 15 17:31	27°♄33'29		asc. node	16359 May 31 16:29	11°♄58'40	
evening set	16358 Jun 20 22:18	25°♄20'35		evening set	16359 Jun 05 02:00	9°♄41'19	
min. Earth dist.	16358 Jun 25 17:53	19°♄38'54	0.69070 AU	min. Earth dist.	16359 Jun 09 13:05	4°♄36'50	0.68507 AU
inferior conj	16358 Jun 26 06:37	18°♄55'01	2°55'48	inferior conj	16359 Jun 10 14:47	3°♄11'12	2°34'21
minimum elong	16358 Jun 26 05:16	18°♄59'39	2°54'58	minimum elong	16359 Jun 10 12:50	3°♄17'45	2°33'16
morning rise	16358 Jul 01 12:12	12°♄47'35			16359 Jun 13 02:48	30°♄	
direct	16358 Jul 05 18:42	11°♄05'38		morning rise	16359 Jun 15 23:52	27°♄13'05	
morning max el	16358 Jul 14 01:29	15°♄49'35	20°46'39	direct	16359 Jun 19 18:51	25°♄50'38	
desc. node	16358 Jul 16 10:11	18°♄20'45		morning max el	16359 Jun 27 02:28	29°♄53'45	19°38'11
	16358 Jul 25 10:48	0°♄			16359 Jun 27 05:01	0°♄	
morning set	16358 Aug 12 19:45	27°♄17'43		desc. node	16359 Jul 03 07:20	7°♄12'40	

greatest brilliancy	16359 Jul 10 00:12	16°☿38'00	-0.6m	morning set	16360 Jul 01 12:49	15°☿35'10	
	16359 Jul 18 22:30	0°♊			16360 Jul 10 19:04	0°♊	
morning set	16359 Jul 23 00:04	6°♊12'35		max. Earth dist.	16360 Jul 16 09:15	8°♊42'41	1.45899 AU
max. Earth dist.	16359 Aug 03 14:20	24°♊13'21	1.45086 AU				
	16359 Aug 07 05:46	0°♋		superior conj	16360 Jul 17 15:57	10°♊42'30	-2°14'22
				minimum elong	16360 Jul 17 16:16	10°♊43'45	2°14'55
superior conj	16359 Aug 08 02:10	1°♋21'25	-2°03'54		16360 Jul 29 21:47	0°♋	
minimum elong	16359 Aug 08 08:52	1°♋48'17	2°03'53	evening rise	16360 Aug 02 02:31	5°♋06'02	
evening rise	16359 Aug 21 23:55	24°♋10'30		asc. node	16360 Aug 13 13:29	23°♋12'46	
	16359 Aug 25 11:20	0°♌			16360 Aug 18 06:32	0°♌	
asc. node	16359 Aug 27 16:46	3°♌42'30		evening max el	16360 Aug 22 14:06	5°♌05'28	18°31'12
evening max el	16359 Sep 09 00:22	21°♌21'44	18°07'26	retrograde	16360 Aug 29 01:25	8°♌33'58	
retrograde	16359 Sep 15 09:08	24°♌42'21		evening set	16360 Sep 01 04:52	7°♌38'11	
evening set	16359 Sep 18 03:22	24°♌02'11		inferior conj	16360 Sep 06 22:32	2°♌02'06	2°13'33
inferior conj	16359 Sep 24 07:29	18°♌41'24	1°26'30	minimum elong	16360 Sep 07 00:49	1°♌55'09	2°12'54
minimum elong	16359 Sep 24 09:32	18°♌35'43	1°25'58		16360 Sep 08 14:51	30°♌	
min. Earth dist.	16359 Sep 26 22:00	15°♌50'03	0.63480 AU	min. Earth dist.	16360 Sep 08 23:41	29°♌33'45	0.65465 AU
desc. node	16359 Sep 29 04:48	13°♌34'59		morning rise	16360 Sep 12 19:32	25°♌37'58	
morning rise	16359 Sep 30 13:39	12°♌26'52		desc. node	16360 Sep 15 02:07	24°♌05'13	
direct	16359 Oct 07 05:05	9°♌56'05		direct	16360 Sep 19 05:13	23°♌01'08	
morning max el	16359 Oct 21 02:36	17°♌54'33	27°45'49		16360 Oct 01 16:53	0°♍	
	16359 Oct 31 06:37	0°♍		morning max el	16360 Oct 02 13:43	0°♍51'24	27°00'22
	16359 Nov 19 00:09	0°♎			16360 Oct 24 07:49	0°♍	
asc. node	16359 Nov 23 17:37	9°♎03'23		morning set	16360 Nov 07 05:01	24°♍26'49	
morning set	16359 Nov 24 20:36	11°♎18'02		asc. node	16360 Nov 09 14:31	29°♍08'03	
max. Earth dist.	16359 Nov 29 18:14	21°♎27'58	1.32138 AU		16360 Nov 10 00:57	0°♏	
				max. Earth dist.	16360 Nov 11 09:29	2°♎43'40	1.33576 AU
superior conj	16359 Dec 02 15:21	27°♏40'46	1°13'59				
minimum elong	16359 Dec 02 13:04	27°♏28'17	1°14'20	superior conj	16360 Nov 15 17:34	11°♎43'06	0°53'37
	16359 Dec 03 16:51	0°♐		minimum elong	16360 Nov 15 15:16	11°♎30'58	0°53'50
evening rise	16359 Dec 09 11:20	12°♐36'47		evening rise	16360 Nov 22 21:34	27°♎01'29	
	16359 Dec 18 02:41	0°♑			16360 Nov 24 07:26	0°♐	
desc. node	16359 Dec 26 03:12	12°♑54'29		desc. node	16360 Dec 12 00:08	29°♐25'01	
evening max el	16360 Jan 02 01:19	21°♑02'47	23°33'30		16360 Dec 12 13:11	0°♑	
retrograde	16360 Jan 15 10:23	27°♑39'55		evening max el	16360 Dec 13 12:59	1°♑00'29	21°51'09
evening set	16360 Jan 19 23:39	26°♑55'06		retrograde	16360 Dec 25 21:49	7°♑07'13	
min. Earth dist.	16360 Jan 26 12:28	23°♑48'30	0.55034 AU	evening set	16360 Dec 29 04:38	6°♑43'03	
inferior conj	16360 Jan 28 01:51	22°♑53'58	-5°45'42	inferior conj	16361 Jan 06 18:25	2°♑52'56	-6°00'07
minimum elong	16360 Jan 28 08:04	22°♑44'53	5°44'27	minimum elong	16361 Jan 06 15:40	2°♑56'45	5°59'23
morning rise	16360 Feb 05 17:56	19°♑00'28		min. Earth dist.	16361 Jan 06 17:42	2°♑53'55	0.54391 AU
direct	16360 Feb 08 08:27	18°♑43'51			16361 Jan 12 10:29	30°♒	
morning max el	16360 Feb 19 08:17	24°♑03'24	20°27'04	morning rise	16361 Jan 15 03:25	29°♒05'16	
asc. node	16360 Feb 19 16:01	24°♑22'25		direct	16361 Jan 18 17:31	28°♒37'02	
	16360 Feb 24 09:20	0°♓			16361 Jan 24 16:22	0°♑	
morning set	16360 Mar 08 21:34	24°♓13'08		morning max el	16361 Jan 31 04:42	4°♑39'31	22°02'27
	16360 Mar 11 16:43	0°♒		asc. node	16361 Feb 05 13:18	10°♑47'54	
					16361 Feb 16 23:30	0°♓	
superior conj	16360 Mar 16 11:37	9°♒49'55	0°54'57	morning set	16361 Feb 21 07:58	8°♓56'29	
minimum elong	16360 Mar 16 14:05	10°♒02'26	0°54'31				
max. Earth dist.	16360 Mar 21 23:38	20°♒40'34	1.36268 AU	superior conj	16361 Feb 28 10:25	24°♓02'59	1°15'05
desc. node	16360 Mar 23 04:06	22°♒55'52		minimum elong	16361 Feb 28 12:48	24°♓15'35	1°14'55
evening rise	16360 Mar 25 19:11	27°♒48'39			16361 Mar 03 06:59	0°♒	
	16360 Mar 27 00:09	0°♈		max. Earth dist.	16361 Mar 04 12:35	2°♒31'05	1.34289 AU
	16360 Apr 14 16:34	0°♉		evening rise	16361 Mar 08 19:32	10°♒59'28	
evening max el	16360 Apr 30 06:05	19°♉08'02	25°56'17	desc. node	16361 Mar 10 00:48	13°♒18'54	
retrograde	16360 May 12 21:21	26°♉23'46			16361 Mar 19 11:07	0°♈	
asc. node	16360 May 17 13:34	24°♉56'41			16361 Apr 10 01:20	0°♉	
evening set	16360 May 19 00:15	23°♉52'45		evening max el	16361 Apr 12 19:56	2°♉51'32	26°54'02
min. Earth dist.	16360 May 23 04:29	19°♉24'38	0.67476 AU	retrograde	16361 Apr 26 03:15	10°♉20'46	
inferior conj	16360 May 24 19:16	17°♉22'36	2°01'44	evening set	16361 May 02 15:11	7°♉48'27	
minimum elong	16360 May 24 17:04	17°♉29'31	2°00'29	asc. node	16361 May 04 10:44	6°♉11'34	
morning rise	16360 May 30 10:33	11°♉35'11		min. Earth dist.	16361 May 06 13:59	3°♉54'47	0.66007 AU
direct	16360 Jun 02 18:48	10°♉31'23		inferior conj	16361 May 08 17:47	1°♉24'08	1°16'52
morning max el	16360 Jun 09 10:31	14°♉05'33	18°45'05	minimum elong	16361 May 08 15:59	1°♉29'24	1°15'41
desc. node	16360 Jun 19 04:26	26°♉38'34			16361 May 09 23:04	30°♒	
	16360 Jun 21 10:22	0°♊		morning rise	16361 May 14 18:07	25°♒49'10	
greatest brilliancy	16360 Jun 23 11:37	3°♊07'19	-0.8m	direct	16361 May 17 16:30	25°♒02'04	

morning max el	16361 May 24 00:21	28° ♄ 20'15	18°08'39			16362 May 19 23:32	0° ♄	
	16361 May 25 14:20	0° ♄		desc. node		16362 May 23 22:25	6° ♄ 38'00	
desc. node	16361 Jun 06 01:28	16° ♄ 29'32		morning set		16362 May 24 17:00	7° ♄ 56'16	
morning set	16361 Jun 12 01:23	26° ♄ 07'30						
	16361 Jun 14 11:12	0° ♄		superior conj		16362 Jun 06 23:59	29° ♄ 53'45	-1°38'17
				minimum elong		16362 Jun 06 15:33	29° ♄ 19'47	1°38'03
superior conj	16361 Jun 27 01:43	19° ♄ 59'11	-2°04'49			16362 Jun 07 01:32	0° ♄	
minimum elong	16361 Jun 26 18:57	19° ♄ 32'43	2°05'06	max. Earth dist.		16362 Jun 12 01:48	7° ♄ 58'47	1.45274 AU
max. Earth dist.	16361 Jun 29 06:07	23° ♄ 23'58	1.45960 AU	evening rise		16362 Jun 22 16:37	24° ♄ 27'12	
	16361 Jul 03 11:52	0° ♄				16362 Jun 26 08:06	0° ♄	
evening rise	16361 Jul 13 04:59	15° ♄ 02'57				16362 Jul 17 12:51	0° ♄	
	16361 Jul 22 22:33	0° ♄		asc. node		16362 Jul 18 07:03	0° ♄ 52'05	
greatest brilliancy	16361 Jul 24 21:19	2° ♄ 56'08	-0.7m	evening max el		16362 Jul 20 04:03	2° ♄ 51'28	20°08'06
asc. node	16361 Jul 31 10:14	12° ♄ 19'02		retrograde		16362 Jul 27 21:18	7° ♄ 13'58	
evening max el	16361 Aug 05 23:56	18° ♄ 57'19	19°11'50	evening set		16362 Jul 31 20:50	5° ♄ 43'07	
retrograde	16361 Aug 12 22:21	22° ♄ 46'53				16362 Aug 05 21:59	30° ♄ 00	
evening set	16361 Aug 16 11:32	21° ♄ 33'51		inferior conj		16362 Aug 06 03:28	29° ♄ 41'23	3°02'22
inferior conj	16361 Aug 21 22:08	15° ♄ 44'11	2°44'43	minimum elong		16362 Aug 06 04:28	29° ♄ 37'58	3°01'53
minimum elong	16361 Aug 21 23:58	15° ♄ 38'15	2°44'09	min. Earth dist.		16362 Aug 07 00:49	28° ♄ 28'43	0.68251 AU
min. Earth dist.	16361 Aug 23 09:17	13° ♄ 50'11	0.67078 AU	morning rise		16362 Aug 11 11:43	23° ♄ 16'20	
morning rise	16361 Aug 27 11:43	9° ♄ 17'12		direct		16362 Aug 17 01:15	20° ♄ 50'49	
desc. node	16361 Sep 01 23:28	6° ♄ 43'41		desc. node		16362 Aug 19 20:48	21° ♄ 22'22	
direct	16361 Sep 02 12:17	6° ♄ 42'33		morning max el		16362 Aug 28 12:24	27° ♄ 42'29	24°26'51
morning max el	16361 Sep 15 01:16	14° ♄ 10'44	25°50'53			16362 Aug 30 16:22	0° ♄	
	16361 Sep 27 23:31	0° ♄				16362 Sep 21 15:09	0° ♄	
	16361 Oct 17 02:20	0° ♄		morning set		16362 Oct 03 00:45	18° ♄ 43'56	
morning set	16361 Oct 20 23:45	6° ♄ 58'28		max. Earth dist.		16362 Oct 06 14:57	25° ♄ 05'00	1.37807 AU
max. Earth dist.	16361 Oct 24 15:26	13° ♄ 48'53	1.35516 AU			16362 Oct 09 07:36	0° ♄	
asc. node	16361 Oct 27 11:21	19° ♄ 18'35						
				superior conj		16362 Oct 13 19:05	8° ♄ 27'54	-0°04'53
superior conj	16361 Oct 30 11:55	25° ♄ 21'24	0°27'08	minimum elong		16362 Oct 13 19:23	8° ♄ 29'22	0°04'28
minimum elong	16361 Oct 30 10:24	25° ♄ 13'45	0°27'22	behind sun begin		16362 Oct 13 12:49	7° ♄ 57'45	
	16361 Nov 01 18:25	0° ♄		behind sun end		16362 Oct 14 01:56	9° ♄ 01'02	
evening rise	16361 Nov 07 05:22	11° ♄ 18'51		asc. node		16362 Oct 14 08:10	9° ♄ 31'09	
	16361 Nov 16 23:20	0° ♄		evening rise		16362 Oct 22 08:19	25° ♄ 22'55	
evening max el	16361 Nov 25 11:27	11° ♄ 28'51	20°22'31			16362 Oct 24 16:15	0° ♄	
desc. node	16361 Nov 28 21:10	14° ♄ 20'55		evening max el		16362 Nov 08 00:39	22° ♄ 47'24	19°15'16
retrograde	16361 Dec 06 08:40	16° ♄ 53'45		desc. node		16362 Nov 15 18:16	27° ♄ 19'14	
evening set	16361 Dec 08 15:46	16° ♄ 40'24		retrograde		16362 Nov 17 07:11	27° ♄ 26'41	
inferior conj	16361 Dec 17 10:47	12° ♄ 34'28	-5°13'18	evening set		16362 Nov 19 04:53	27° ♄ 15'45	
minimum elong	16361 Dec 17 01:21	12° ♄ 59'21	5°10'31	inferior conj		16362 Nov 27 16:58	23° ♄ 05'32	-3°43'02
min. Earth dist.	16361 Dec 18 23:15	11° ♄ 51'49	0.54682 AU	minimum elong		16362 Nov 27 08:03	23° ♄ 20'24	3°39'18
morning rise	16361 Dec 25 10:27	8° ♄ 44'53		min. Earth dist.		16362 Nov 30 08:47	21° ♄ 19'22	0.55860 AU
direct	16361 Dec 30 02:30	7° ♄ 57'54		morning rise		16362 Dec 05 08:49	18° ♄ 34'35	
morning max el	16362 Jan 12 14:48	14° ♄ 36'51	23°51'35	direct		16362 Dec 10 22:50	17° ♄ 23'02	
asc. node	16362 Jan 23 10:34	28° ♄ 20'06		morning max el		16362 Dec 25 00:03	24° ♄ 31'04	25°37'26
	16362 Jan 24 11:34	0° ♄				16362 Dec 30 00:56	0° ♄	
morning set	16362 Feb 05 19:53	23° ♄ 39'53		asc. node		16363 Jan 10 07:47	16° ♄ 42'52	
	16362 Feb 08 18:01	0° ♄				16363 Jan 17 08:32	0° ♄	
				morning set		16363 Jan 21 07:31	8° ♄ 18'18	
superior conj	16362 Feb 12 15:38	8° ♄ 31'21	1°28'53					
minimum elong	16362 Feb 12 17:23	8° ♄ 40'49	1°29'03	superior conj		16363 Jan 28 00:55	23° ♄ 08'21	1°36'30
max. Earth dist.	16362 Feb 15 08:58	14° ♄ 23'05	1.32710 AU	minimum elong		16363 Jan 28 01:42	23° ♄ 12'44	1°36'55
evening rise	16362 Feb 20 07:42	24° ♄ 37'56		max. Earth dist.		16363 Jan 29 11:59	26° ♄ 22'15	1.31620 AU
	16362 Feb 23 01:11	0° ♄				16363 Jan 31 03:43	0° ♄	
desc. node	16362 Feb 24 21:30	3° ♄ 30'40		evening rise		16363 Feb 04 04:50	8° ♄ 37'16	
	16362 Mar 12 23:36	0° ♄		desc. node		16363 Feb 11 18:13	23° ♄ 26'00	
evening max el	16362 Mar 26 08:52	16° ♄ 13'41	27°29'08			16363 Feb 15 10:54	0° ♄	
retrograde	16362 Apr 09 02:40	23° ♄ 46'32		evening max el		16363 Mar 08 19:03	29° ♄ 02'44	27°34'54
evening set	16362 Apr 15 20:35	21° ♄ 19'38				16363 Mar 09 19:36	0° ♄	
min. Earth dist.	16362 Apr 19 15:40	17° ♄ 56'47	0.64155 AU	retrograde		16363 Mar 22 18:34	6° ♄ 31'07	
asc. node	16362 Apr 21 07:58	16° ♄ 11'09		evening set		16363 Mar 29 13:50	4° ♄ 17'22	
inferior conj	16362 Apr 22 07:36	15° ♄ 08'16	0°18'27	min. Earth dist.		16363 Apr 02 08:06	1° ♄ 19'12	0.62019 AU
minimum elong	16362 Apr 22 07:05	15° ♄ 09'40	0°17'49			16363 Apr 03 18:20	30° ♄ 00	
morning rise	16362 Apr 28 19:51	9° ♄ 47'54		inferior conj		16363 Apr 05 09:32	28° ♄ 27'09	-0°54'11
direct	16362 May 01 09:16	9° ♄ 14'46		minimum elong		16363 Apr 05 11:24	28° ♄ 22'45	0°53'41
morning max el	16362 May 07 17:31	12° ♄ 29'28	17°49'21	asc. node		16363 Apr 08 05:14	25° ♄ 56'26	

morning rise	16363 Apr 12 12:07	23° Υ 23'47		morning rise	16364 Mar 25 14:02	6° Υ 26'49	
direct	16363 Apr 14 17:51	23° Υ 01'15		direct	16364 Mar 27 14:20	6° Υ 11'12	
morning max el	16363 Apr 21 10:57	26° Υ 24'19	17°47'42	morning max el	16364 Apr 04 01:11	9° Υ 53'59	18°04'47
	16363 Apr 24 14:00	0° \mathcal{B}			16364 Apr 17 05:01	0° \mathcal{B}	
morning set	16363 May 07 07:34	20° \mathcal{B} 49'10		morning set	16364 Apr 19 15:10	4° \mathcal{B} 28'36	
desc. node	16363 May 10 19:20	26° \mathcal{B} 58'45		desc. node	16364 Apr 26 16:09	17° \mathcal{B} 26'58	
	16363 May 12 12:44	0° Π					
superior conj	16363 May 18 20:20	10° Π 49'42	-1°02'26	superior conj	16364 Apr 29 15:45	22° \mathcal{B} 47'56	-0°24'34
minimum elong	16363 May 18 14:38	10° Π 25'41	1°02'12	minimum elong	16364 Apr 29 13:42	22° \mathcal{B} 38'50	0°24'44
max. Earth dist.	16363 May 25 17:58	22° Π 11'38	1.43924 AU		16364 May 03 18:46	0° Π	
	16363 May 30 15:44	0° \mathcal{E}		max. Earth dist.	16364 May 07 05:51	5° Π 51'38	1.42043 AU
evening rise	16363 Jun 02 06:09	4° \mathcal{E} 03'22		evening rise	16364 May 12 11:26	14° Π 25'15	
	16363 Jun 19 17:46	0° Ω			16364 May 22 13:00	0° \mathcal{E}	
evening max el	16363 Jul 03 02:06	16° Ω 45'43	21°17'28	evening max el	16364 Jun 14 03:13	0° Ω	
asc. node	16363 Jul 05 03:54	18° Ω 40'45			16364 Jun 14 19:17	0° Ω 40'42	22°35'47
retrograde	16363 Jul 11 20:11	21° Ω 49'46		asc. node	16364 Jun 21 00:47	5° Ω 30'54	
evening set	16363 Jul 16 06:43	20° Ω 01'23		retrograde	16364 Jun 24 17:24	6° Ω 29'11	
inferior conj	16363 Jul 21 12:08	13° Ω 49'04	3°08'13	evening set	16364 Jun 29 15:29	4° Ω 24'40	
minimum elong	16363 Jul 21 12:11	13° Ω 48'52	3°07'42		16364 Jul 03 12:20	30° \mathcal{R} \mathcal{E}	
min. Earth dist.	16363 Jul 21 20:07	13° Ω 21'16	0.68955 AU	inferior conj	16364 Jul 04 22:07	28° \mathcal{E} 03'28	3°03'20
morning rise	16363 Jul 26 17:24	7° Ω 29'17		minimum elong	16364 Jul 04 21:15	28° \mathcal{E} 06'30	3°02'39
direct	16363 Jul 31 19:02	5° Ω 18'05		min. Earth dist.	16364 Jul 04 16:58	28° \mathcal{E} 21'24	0.69171 AU
desc. node	16363 Aug 06 18:07	7° Ω 38'57		morning rise	16364 Jul 10 02:52	21° \mathcal{E} 51'08	
morning max el	16363 Aug 11 00:01	11° Ω 21'32	22°57'40	direct	16364 Jul 14 16:23	19° \mathcal{E} 57'49	
	16363 Aug 25 20:32	0° \mathcal{M}		morning max el	16364 Jul 23 14:53	25° \mathcal{E} 09'14	21°31'52
morning set	16363 Sep 14 03:51	29° \mathcal{M} 32'57		desc. node	16364 Jul 23 15:24	25° \mathcal{E} 10'34	
	16363 Sep 14 10:25	0° \mathcal{L}			16364 Jul 27 23:22	0° Ω	
max. Earth dist.	16363 Sep 18 14:04	6° \mathcal{L} 58'23	1.40223 AU		16364 Aug 18 06:17	0° \mathcal{M}	
				morning set	16364 Aug 24 07:14	9° \mathcal{M} 22'12	
superior conj	16363 Sep 26 11:00	20° \mathcal{L} 52'41	-0°40'52	max. Earth dist.	16364 Aug 30 18:43	19° \mathcal{M} 47'16	1.42479 AU
minimum elong	16363 Sep 26 14:10	21° \mathcal{L} 07'08	0°40'09		16364 Sep 05 21:11	0° \mathcal{L}	
asc. node	16363 Oct 01 04:54	29° \mathcal{L} 41'29					
	16363 Oct 01 08:49	0° \mathcal{M}		superior conj	16364 Sep 07 07:21	2° \mathcal{L} 26'37	-1°17'43
evening rise	16363 Oct 06 03:24	9° \mathcal{M} 05'22		minimum elong	16364 Sep 07 13:46	2° \mathcal{L} 54'14	1°16'53
	16363 Oct 18 01:52	0° \mathcal{X}		asc. node	16364 Sep 17 01:35	19° \mathcal{L} 46'23	
evening max el	16363 Oct 22 02:23	4° \mathcal{X} 54'11	18°30'20	evening rise	16364 Sep 18 10:46	22° \mathcal{L} 17'04	
retrograde	16363 Oct 30 00:08	8° \mathcal{X} 54'52			16364 Sep 22 17:14	0° \mathcal{M}	
evening set	16363 Oct 31 23:17	8° \mathcal{X} 40'47		evening max el	16364 Oct 04 12:27	17° \mathcal{M} 40'25	18°06'20
desc. node	16363 Nov 02 15:26	8° \mathcal{X} 07'58		retrograde	16364 Oct 11 11:43	21° \mathcal{M} 15'02	
inferior conj	16363 Nov 08 19:59	4° \mathcal{X} 09'46	-1°59'41	evening set	16364 Oct 13 17:03	20° \mathcal{M} 53'34	
minimum elong	16363 Nov 08 15:14	4° \mathcal{X} 18'59	1°57'12	desc. node	16364 Oct 19 12:40	17° \mathcal{M} 11'30	
min. Earth dist.	16363 Nov 12 00:43	1° \mathcal{X} 41'25	0.57710 AU	inferior conj	16364 Oct 20 20:19	16° \mathcal{M} 01'10	-0°25'14
	16363 Nov 14 11:28	30° \mathcal{R} \mathcal{M}		minimum elong	16364 Oct 20 19:28	16° \mathcal{M} 03'07	0°24'27
morning rise	16363 Nov 16 03:49	29° \mathcal{M} 02'13		min. Earth dist.	16364 Oct 24 01:15	13° \mathcal{M} 08'24	0.59926 AU
direct	16363 Nov 22 09:34	27° \mathcal{M} 23'40		morning rise	16364 Oct 27 18:38	10° \mathcal{M} 20'32	
	16363 Nov 30 12:14	0° \mathcal{X}		direct	16364 Nov 03 09:04	8° \mathcal{M} 17'05	
morning max el	16363 Dec 06 15:28	4° \mathcal{X} 53'52	27°00'59	morning max el	16364 Nov 17 15:09	16° \mathcal{M} 03'42	27°49'09
	16363 Dec 25 00:26	0° \mathcal{Z}			16364 Nov 29 01:52	0° \mathcal{X}	
asc. node	16363 Dec 28 04:56	5° \mathcal{Z} 42'32		asc. node	16364 Dec 14 02:01	25° \mathcal{X} 09'21	
morning set	16364 Jan 05 16:58	22° \mathcal{Z} 45'58			16364 Dec 16 13:08	0° \mathcal{Z}	
	16364 Jan 09 00:27	0° \approx		morning set	16364 Dec 19 22:25	6° \mathcal{Z} 58'35	
				max. Earth dist.	16364 Dec 26 02:16	20° \mathcal{Z} 24'46	1.31034 AU
superior conj	16364 Jan 12 12:06	7° \approx 47'02	1°38'01				
minimum elong	16364 Jan 12 11:50	7° \approx 45'33	1°38'35	superior conj	16364 Dec 26 23:18	22° \mathcal{Z} 22'19	1°33'30
max. Earth dist.	16364 Jan 12 18:53	8° \approx 25'03	1.31055 AU	minimum elong	16364 Dec 26 22:03	22° \mathcal{Z} 15'16	1°34'03
evening rise	16364 Jan 19 08:19	22° \approx 50'30			16364 Dec 30 09:13	0° \approx	
	16364 Jan 22 19:02	0° \mathcal{H}		evening rise	16365 Jan 02 16:05	7° \approx 12'46	
desc. node	16364 Jan 29 14:57	12° \mathcal{H} 57'29			16365 Jan 14 08:09	0° \mathcal{H}	
	16364 Feb 09 11:32	0° Υ		desc. node	16365 Jan 15 11:43	1° \mathcal{H} 56'33	
evening max el	16364 Feb 19 00:05	11° Υ 06'45	27°06'30	evening max el	16365 Jan 30 21:28	22° \mathcal{H} 18'10	26°03'23
retrograde	16364 Mar 04 01:14	18° Υ 24'38		retrograde	16365 Feb 13 20:31	29° \mathcal{H} 22'43	
evening set	16364 Mar 10 15:51	16° Υ 31'25		evening set	16365 Feb 19 23:09	27° \mathcal{H} 54'59	
min. Earth dist.	16364 Mar 14 14:24	13° Υ 49'12	0.59754 AU	min. Earth dist.	16365 Feb 24 10:35	25° \mathcal{H} 16'46	0.57586 AU
inferior conj	16364 Mar 17 19:51	11° Υ 10'38	-2°19'37	inferior conj	16365 Feb 27 10:56	23° \mathcal{H} 08'45	-3°51'08
minimum elong	16364 Mar 18 01:09	10° Υ 59'44	2°17'36	minimum elong	16365 Feb 27 19:36	22° \mathcal{H} 53'23	3°48'07
asc. node	16364 Mar 25 02:32	6° Υ 34'58		morning rise	16365 Mar 07 19:14	18° \mathcal{H} 46'25	
				direct	16365 Mar 09 18:23	18° \mathcal{H} 34'00	

asc. node	16365 Mar 11 23:51	18° H 50'45		morning rise	16366 Feb 16 21:01	0° H 13'02	
morning max el	16365 Mar 18 08:17	22° H 47'16	18°42'15		16366 Feb 18 18:13	30° R \approx	
	16365 Mar 24 01:11	0° Y		direct	16366 Feb 19 02:43	29° \approx 59'39	
morning set	16365 Apr 03 10:40	18° Y 39'04			16366 Feb 19 11:11	0° H	
	16365 Apr 09 07:21	0° B		asc. node	16366 Feb 26 21:11	2° H 54'06	
				morning max el	16366 Mar 01 04:07	4° H 52'54	19°42'08
superior conj	16365 Apr 12 06:53	5° B 38'50	0°10'32		16366 Mar 17 00:28	0° Y	
minimum elong	16365 Apr 12 07:35	5° B 42'04	0°10'05	morning set	16366 Mar 18 14:14	3° Y 09'22	
behind sun begin	16365 Apr 12 02:10	5° B 16'44					
behind sun end	16365 Apr 12 12:59	6° B 07'22		superior conj	16366 Mar 26 13:26	19° Y 10'51	0°40'27
desc. node	16365 Apr 13 12:53	7° B 58'31		minimum elong	16366 Mar 26 15:35	19° Y 21'25	0°39'56
max. Earth dist.	16365 Apr 19 13:49	18° B 50'59	1.39833 AU	desc. node	16366 Mar 31 09:35	28° Y 30'03	
evening rise	16365 Apr 23 13:45	25° B 42'17			16366 Apr 01 04:50	0° B	
	16365 Apr 26 03:48	0° II		max. Earth dist.	16366 Apr 01 20:06	1° B 10'49	1.37533 AU
	16365 May 16 05:07	0° E		evening rise	16366 Apr 05 12:32	7° B 51'06	
evening max el	16365 May 28 09:34	14° E 36'05	23°57'25		16366 Apr 18 23:53	0° II	
asc. node	16365 Jun 07 21:46	21° E 04'29		evening max el	16366 May 10 22:55	28° II 30'48	25°15'34
retrograde	16365 Jun 08 11:41	21° E 05'55			16366 May 12 12:31	0° E	
evening set	16365 Jun 13 21:29	18° E 47'41		retrograde	16366 May 23 02:03	5° E 33'29	
min. Earth dist.	16365 Jun 18 13:15	13° E 22'05	0.68894 AU	asc. node	16366 May 25 18:50	5° E 03'28	
inferior conj	16365 Jun 19 07:29	12° E 20'01	2°48'00	evening set	16366 May 28 23:06	3° E 05'28	
minimum elong	16365 Jun 19 05:51	12° E 25'36	2°47'04		16366 May 31 22:05	30° R II	
morning rise	16365 Jun 24 14:15	6° E 16'34		min. Earth dist.	16366 Jun 02 07:00	28° II 16'54	0.68132 AU
direct	16365 Jun 28 15:52	4° E 42'48		inferior conj	16366 Jun 03 14:21	26° II 34'44	2°21'57
morning max el	16365 Jul 06 11:47	9° E 07'33	20°15'49	minimum elong	16366 Jun 03 12:14	26° II 41'39	2°20'46
desc. node	16365 Jul 10 12:36	13° E 37'26		morning rise	16366 Jun 09 01:46	20° II 41'16	
	16365 Jul 22 10:08	0° O		direct	16366 Jun 12 16:05	19° II 27'03	
morning set	16365 Aug 03 15:53	18° O 25'49		morning max el	16366 Jun 19 15:58	23° II 16'02	19°13'37
	16365 Aug 11 02:05	0° P			16366 Jun 25 09:15	0° E	
max. Earth dist.	16365 Aug 13 06:20	3° P 27'17	1.44310 AU	desc. node	16366 Jun 27 09:43	2° E 45'04	
				greatest brilliancy	16366 Jul 02 10:22	10° E 00'58	-0.7m
superior conj	16365 Aug 19 04:34	13° P 01'52	-1°50'08	morning set	16366 Jul 13 21:20	27° E 25'51	
minimum elong	16365 Aug 19 12:29	13° P 34'20	1°49'40		16366 Jul 15 13:22	0° O	
	16365 Aug 29 07:14	0° A		max. Earth dist.	16366 Jul 26 23:03	17° O 42'30	1.45524 AU
evening rise	16365 Sep 01 01:35	4° A 45'26					
asc. node	16365 Sep 03 22:15	9° A 41'30		superior conj	16366 Jul 30 03:32	22° O 43'17	-2°10'41
	16365 Sep 17 05:22	0° M		minimum elong	16366 Jul 30 08:06	23° O 01'20	2°10'58
evening max el	16365 Sep 18 02:37	0° M 55'23	18°01'42		16366 Aug 03 17:29	0° P	
retrograde	16365 Sep 24 13:56	4° M 17'30		evening rise	16366 Aug 13 18:36	16° P 17'33	
evening set	16365 Sep 27 03:12	3° M 45'03		asc. node	16366 Aug 21 18:57	29° P 22'26	
	16365 Oct 02 04:39	30° R A			16366 Aug 22 04:21	0° A	
inferior conj	16365 Oct 03 14:50	28° A 33'35	0°51'17	evening max el	16366 Sep 01 17:21	14° A 30'29	18°15'22
minimum elong	16365 Oct 03 16:16	28° A 29'53	0°51'01	retrograde	16366 Sep 08 02:16	17° A 53'13	
desc. node	16365 Oct 06 09:57	25° A 41'05		evening set	16366 Sep 11 00:17	17° A 06'46	
min. Earth dist.	16365 Oct 06 11:49	25° A 36'27	0.62218 AU	inferior conj	16366 Sep 16 23:30	11° A 39'02	1°48'35
morning rise	16365 Oct 10 02:48	22° A 28'26		minimum elong	16366 Sep 17 01:46	11° A 32'29	1°47'57
direct	16365 Oct 16 19:18	20° A 05'39		min. Earth dist.	16366 Sep 19 08:28	8° A 55'43	0.64361 AU
morning max el	16365 Oct 30 21:37	28° A 02'28	27°57'51	morning rise	16366 Sep 23 01:34	5° A 19'07	
	16365 Nov 01 19:05	0° M		desc. node	16366 Sep 23 07:16	5° A 08'03	
	16365 Nov 22 21:16	0° J		direct	16366 Sep 29 14:52	2° A 44'47	
asc. node	16365 Nov 30 23:01	14° J 55'18		morning max el	16366 Oct 13 07:58	10° A 41'59	27°30'01
morning set	16365 Dec 03 21:47	20° J 51'05			16366 Oct 28 14:38	0° M	
	16365 Dec 08 05:52	0° Z			16366 Nov 15 07:37	0° J	
max. Earth dist.	16365 Dec 09 06:09	2° Z 11'42	1.31568 AU	morning set	16366 Nov 17 12:31	4° J 17'38	
				asc. node	16366 Nov 17 19:56	4° J 54'21	
superior conj	16365 Dec 11 08:41	6° Z 48'57	1°22'54	max. Earth dist.	16366 Nov 22 02:45	13° J 38'32	1.32677 AU
minimum elong	16365 Dec 11 06:39	6° Z 37'46	1°23'20				
evening rise	16365 Dec 18 02:13	21° Z 39'15		superior conj	16366 Nov 25 14:09	21° J 01'26	1°06'05
	16365 Dec 22 01:14	0° \approx		minimum elong	16366 Nov 25 11:47	20° J 48'39	1°06'23
desc. node	16366 Jan 02 08:33	20° \approx 11'26			16366 Nov 29 17:24	0° Z	
	16366 Jan 09 20:20	0° H		evening rise	16366 Dec 02 12:57	6° Z 05'25	
evening max el	16366 Jan 12 10:30	2° H 40'12	24°32'35		16366 Dec 15 01:12	0° \approx	
retrograde	16366 Jan 26 02:56	9° H 29'42		desc. node	16366 Dec 20 05:28	7° \approx 25'38	
evening set	16366 Jan 31 08:37	8° H 29'24		evening max el	16366 Dec 24 19:50	12° \approx 35'15	22°49'10
min. Earth dist.	16366 Feb 05 22:24	5° H 38'53	0.55782 AU	retrograde	16367 Jan 06 20:37	19° \approx 01'58	
inferior conj	16366 Feb 08 04:47	4° H 14'48	-5°12'54	evening set	16367 Jan 10 20:49	18° \approx 27'00	
minimum elong	16366 Feb 08 13:44	4° H 00'57	5°10'37	min. Earth dist.	16367 Jan 18 05:11	15° \approx 04'30	0.54639 AU

inferior conj	16367 Jan 19 03:56	14° \approx 32'13	-5°59'20	minimum elong	16367 Dec 29 12:12	24° \approx 33'17	5°45'53
minimum elong	16367 Jan 19 06:45	14° \approx 28'14	5°58'39	min. Earth dist.	16367 Dec 30 10:32	24° \approx 01'44	0.54394 AU
morning rise	16367 Jan 27 17:52	10° \approx 43'16		morning rise	16368 Jan 06 23:24	20° \approx 33'11	
direct	16367 Jan 30 17:10	10° \approx 22'53		direct	16368 Jan 11 00:43	19° \approx 57'38	
morning max el	16367 Feb 11 09:16	16° \approx 01'22	21°05'20	morning max el	16368 Jan 24 00:23	26° \approx 17'30	22°48'00
asc. node	16367 Feb 13 18:30	18° \approx 32'37			16368 Jan 27 11:41	0° \approx	
	16367 Feb 21 17:24	0° \approx		asc. node	16368 Jan 31 15:48	5° \approx 28'24	
morning set	16367 Mar 02 22:49	17° \approx 49'31			16368 Feb 14 05:09	0° \approx	
	16367 Mar 08 18:20	0° \approx		morning set	16368 Feb 15 10:06	2° \approx 33'01	
superior conj	16367 Mar 10 07:18	3° \approx 11'34	1°04'15	superior conj	16368 Feb 22 09:10	17° \approx 31'42	1°21'42
minimum elong	16367 Mar 10 09:50	3° \approx 24'34	1°03'55	minimum elong	16368 Feb 22 11:20	17° \approx 43'17	1°21'40
max. Earth dist.	16367 Mar 15 05:03	13° \approx 04'31	1.35378 AU	max. Earth dist.	16368 Feb 25 20:51	24° \approx 52'43	1.33561 AU
desc. node	16367 Mar 18 06:17	18° \approx 57'06			16368 Feb 28 08:59	0° \approx	
evening rise	16367 Mar 19 04:35	20° \approx 41'51		evening rise	16368 Mar 01 10:23	4° \approx 05'17	
	16367 Mar 24 08:12	0° \approx		desc. node	16368 Mar 04 02:59	9° \approx 15'38	
	16367 Apr 12 22:02	0° \approx			16368 Mar 16 03:26	0° \approx	
evening max el	16367 Apr 23 12:30	12° \approx 20'11	26°23'01	evening max el	16368 Apr 05 02:13	25° \approx 56'01	27°12'11
retrograde	16367 May 06 11:32	19° \approx 43'50			16368 Apr 09 20:43	0° \approx	
evening set	16367 May 12 18:32	17° \approx 11'16		retrograde	16368 Apr 18 14:59	3° \approx 28'15	
asc. node	16367 May 12 15:59	17° \approx 16'28		evening set	16368 Apr 25 05:43	0° \approx 57'34	
min. Earth dist.	16367 May 16 20:10	12° \approx 58'10	0.66905 AU		16368 Apr 26 09:34	30° \approx 8	
inferior conj	16367 May 18 16:37	10° \approx 42'31	1°44'18	asc. node	16368 Apr 28 13:11	27° \approx 53'39	
minimum elong	16367 May 18 14:30	10° \approx 49'00	1°43'01	min. Earth dist.	16368 Apr 29 02:44	27° \approx 17'15	0.65260 AU
morning rise	16367 May 24 11:26	5° \approx 00'16		inferior conj	16368 May 01 11:48	24° \approx 37'31	0°53'49
direct	16367 May 27 15:15	4° \approx 04'03		minimum elong	16368 May 01 10:25	24° \approx 41'24	0°52'49
morning max el	16367 Jun 03 02:48	7° \approx 30'07	18°27'26	morning rise	16368 May 07 16:52	19° \approx 08'14	
desc. node	16367 Jun 14 06:47	22° \approx 22'24		direct	16368 May 10 11:13	18° \approx 27'31	
	16367 Jun 19 04:37	0° \approx		morning max el	16368 May 16 18:21	21° \approx 43'03	17°58'13
morning set	16367 Jun 23 18:59	7° \approx 14'27			16368 May 23 07:55	0° \approx	
	16367 Jul 08 07:29	0° \approx		desc. node	16368 May 31 03:48	12° \approx 21'23	
				morning set	16368 Jun 03 19:18	18° \approx 19'54	
superior conj	16367 Jul 09 13:34	1° \approx 57'12	-2°12'45		16368 Jun 10 23:11	0° \approx	
minimum elong	16367 Jul 09 10:29	1° \approx 45'11	2°13'17	superior conj	16368 Jun 18 02:55	11° \approx 25'33	-1°55'13
max. Earth dist.	16367 Jul 09 18:37	2° \approx 16'52	1.46016 AU	minimum elong	16368 Jun 17 18:41	10° \approx 53'02	1°55'15
evening rise	16367 Jul 25 10:26	26° \approx 46'11		max. Earth dist.	16368 Jun 21 14:56	16° \approx 55'55	1.45760 AU
	16367 Jul 27 11:43	0° \approx			16368 Jun 30 00:56	0° \approx	
greatest brilliancy	16367 Aug 03 04:09	10° \approx 27'43	-0.8m	evening rise	16368 Jul 04 04:48	6° \approx 23'55	
asc. node	16367 Aug 08 15:42	18° \approx 43'29		greatest brilliancy	16368 Jul 17 18:49	26° \approx 55'16	-0.7m
evening max el	16367 Aug 16 05:41	28° \approx 18'21	18°46'32		16368 Jul 19 21:49	0° \approx	
	16367 Aug 18 03:55	0° \approx		asc. node	16368 Jul 25 12:28	7° \approx 36'43	
retrograde	16367 Aug 22 20:54	1° \approx 54'30		evening max el	16368 Jul 29 13:18	12° \approx 11'51	19°34'04
evening set	16367 Aug 26 04:20	0° \approx 51'44		retrograde	16368 Aug 05 18:51	16° \approx 13'50	
	16367 Aug 27 08:37	30° \approx 8		evening set	16368 Aug 09 12:22	14° \approx 53'18	
inferior conj	16367 Aug 31 18:37	25° \approx 09'50	2°28'33	inferior conj	16368 Aug 14 20:57	8° \approx 58'37	2°53'42
minimum elong	16367 Aug 31 20:46	25° \approx 03'05	2°27'55	minimum elong	16368 Aug 14 22:27	8° \approx 53'38	2°53'11
min. Earth dist.	16367 Sep 02 13:55	22° \approx 54'39	0.66198 AU	min. Earth dist.	16368 Aug 16 02:16	7° \approx 21'23	0.67638 AU
morning rise	16367 Sep 06 12:11	18° \approx 43'34		morning rise	16368 Aug 20 08:00	2° \approx 32'05	
desc. node	16367 Sep 10 04:37	16° \approx 31'56		direct	16368 Aug 26 04:11	0° \approx 00'19	
direct	16367 Sep 12 18:20	16° \approx 06'25		desc. node	16368 Aug 27 01:58	0° \approx 03'35	
morning max el	16367 Sep 25 19:30	23° \approx 49'59	26°33'08	morning max el	16368 Sep 07 06:36	7° \approx 14'22	25°16'14
	16367 Oct 01 08:16	0° \approx			16368 Sep 25 01:26	0° \approx	
	16367 Oct 21 23:26	0° \approx		morning set	16368 Oct 13 03:14	29° \approx 24'36	
morning set	16367 Oct 31 15:37	17° \approx 12'03			16368 Oct 13 11:07	0° \approx	
max. Earth dist.	16367 Nov 04 13:42	24° \approx 46'47	1.34339 AU	max. Earth dist.	16368 Oct 16 15:58	5° \approx 51'36	1.36461 AU
asc. node	16367 Nov 04 16:47	25° \approx 02'06		asc. node	16368 Oct 21 13:35	15° \approx 13'39	
	16367 Nov 07 04:07	0° \approx					
superior conj	16367 Nov 09 13:25	4° \approx 54'38	0°43'06	superior conj	16368 Oct 23 03:26	18° \approx 20'16	0°14'11
minimum elong	16367 Nov 09 11:20	4° \approx 43'51	0°43'19	minimum elong	16368 Oct 23 02:33	18° \approx 15'55	0°14'28
evening rise	16367 Nov 16 22:26	20° \approx 27'33		behind sun begin	16368 Oct 22 23:42	18° \approx 01'46	
	16367 Nov 21 14:16	0° \approx		behind sun end	16368 Oct 23 05:24	18° \approx 30'04	
evening max el	16367 Dec 06 11:18	22° \approx 42'42	21°11'14		16368 Oct 28 21:45	0° \approx	
desc. node	16367 Dec 07 02:28	23° \approx 19'07		evening rise	16368 Oct 31 04:27	4° \approx 39'31	
retrograde	16367 Dec 18 06:19	28° \approx 32'37			16368 Nov 14 14:07	0° \approx	
evening set	16367 Dec 21 01:13	28° \approx 14'30		evening max el	16368 Nov 17 16:04	3° \approx 31'22	19°51'10
inferior conj	16367 Dec 29 18:36	24° \approx 24'15	-5°47'20	desc. node	16368 Nov 22 23:33	7° \approx 27'19	

retrograde	16368 Nov 27 20:13	8° ♄ 35'57		evening rise	16369 Oct 15 04:26	18° ♄ 35'18	
evening set	16368 Nov 29 21:50	8° ♄ 24'21			16369 Oct 21 03:45	0° ♄	
inferior conj	16368 Dec 08 15:21	4° ♄ 24'09	-4°38'26	evening max el	16369 Oct 31 10:57	15° ♄ 10'29	18°53'22
minimum elong	16368 Dec 08 05:21	4° ♄ 39'33	4°34'56	retrograde	16369 Nov 09 02:17	19° ♄ 32'09	
min. Earth dist.	16368 Dec 10 17:16	3° ♄ 07'26	0.55091 AU	desc. node	16369 Nov 09 20:40	19° ♄ 30'11	
morning rise	16368 Dec 16 11:35	0° ♄ 12'30		evening set	16369 Nov 10 23:49	19° ♄ 20'20	
	16368 Dec 17 02:09	30° ♄		inferior conj	16369 Nov 19 05:54	15° ♄ 01'09	-2°59'06
direct	16368 Dec 21 14:01	29° ♄ 15'19		minimum elong	16369 Nov 18 22:36	15° ♄ 14'07	2°55'43
	16368 Dec 26 00:25	0° ♄		min. Earth dist.	16369 Nov 22 04:49	12° ♄ 55'33	0.56587 AU
morning max el	16369 Jan 04 08:37	6° ♄ 07'08	24°38'12	morning rise	16369 Nov 26 18:32	10° ♄ 14'54	
asc. node	16369 Jan 17 13:01	23° ♄ 23'20		direct	16369 Dec 02 16:02	8° ♄ 52'14	
	16369 Jan 21 08:10	0° ♄		morning max el	16369 Dec 16 19:53	16° ♄ 09'33	26°16'50
morning set	16369 Jan 29 22:06	17° ♄ 14'09			16369 Dec 28 01:41	0° ♄	
	16369 Feb 04 17:52	0° ♄		asc. node	16370 Jan 04 10:11	12° ♄ 02'50	
					16370 Jan 13 12:47	0° ♄	
superior conj	16369 Feb 05 16:21	2° ♄ 03'42	1°32'52	morning set	16370 Jan 14 08:59	1° ♄ 48'12	
minimum elong	16369 Feb 05 17:43	2° ♄ 11'11	1°33'08				
max. Earth dist.	16369 Feb 07 20:22	6° ♄ 47'31	1.32186 AU	superior conj	16370 Jan 21 02:37	16° ♄ 41'23	1°37'53
evening rise	16369 Feb 13 02:41	17° ♄ 53'00		minimum elong	16370 Jan 21 02:57	16° ♄ 43'19	1°38'23
desc. node	16369 Feb 18 23:42	29° ♄ 20'54		max. Earth dist.	16370 Jan 22 01:37	18° ♄ 49'33	1.31313 AU
	16369 Feb 19 08:08	0° ♄			16370 Jan 27 04:22	0° ♄	
	16369 Mar 10 12:25	0° ♄		evening rise	16370 Jan 28 02:45	1° ♄ 58'21	
evening max el	16369 Mar 18 14:32	9° ♄ 06'21	27°35'40	desc. node	16370 Feb 05 20:25	19° ♄ 06'49	
retrograde	16369 Apr 01 11:14	16° ♄ 37'24			16370 Feb 12 05:47	0° ♄	
evening set	16369 Apr 08 06:18	14° ♄ 15'32		evening max el	16370 Feb 28 22:51	21° ♄ 37'09	27°27'13
min. Earth dist.	16369 Apr 12 00:44	11° ♄ 03'53	0.63270 AU	retrograde	16370 Mar 14 23:05	29° ♄ 01'04	
inferior conj	16369 Apr 14 21:02	8° ♄ 12'16	-0°10'36	evening set	16370 Mar 21 17:25	26° ♄ 55'08	
minimum elong	16369 Apr 14 21:22	8° ♄ 11'23	0°10'50	min. Earth dist.	16370 Mar 25 12:41	24° ♄ 05'19	0.61058 AU
transit middle	16369 Apr 14 21:22	8° ♄ 11'23	0°10'50	inferior conj	16370 Mar 28 16:46	21° ♄ 16'56	-1°29'06
transit begin	16369 Apr 14 19:02	8° ♄ 17'19		minimum elong	16370 Mar 28 20:00	21° ♄ 09'44	1°27'57
transit end	16369 Apr 14 23:43	8° ♄ 05'29		asc. node	16370 Apr 02 07:44	17° ♄ 38'35	
asc. node	16369 Apr 15 10:26	7° ♄ 38'35		morning rise	16370 Apr 05 01:56	16° ♄ 21'40	
morning rise	16369 Apr 21 15:04	2° ♄ 58'29		direct	16370 Apr 07 05:09	16° ♄ 02'24	
direct	16369 Apr 24 01:06	2° ♄ 30'09		morning max el	16370 Apr 14 04:28	19° ♄ 32'06	17°52'42
morning max el	16369 Apr 30 11:58	5° ♄ 47'01	17°46'27		16370 Apr 21 21:48	0° ♄	
morning set	16369 May 16 21:30	0° ♄ 38'54		morning set	16370 Apr 29 19:59	13° ♄ 53'30	
	16369 May 16 12:27	0° ♄		desc. node	16370 May 04 21:33	23° ♄ 00'02	
desc. node	16369 May 18 00:43	2° ♄ 35'49			16370 May 08 20:53	0° ♄	
superior conj	16369 May 29 10:01	21° ♄ 45'05	-1°23'44	superior conj	16370 May 10 16:25	3° ♄ 08'16	-0°46'17
minimum elong	16369 May 29 02:26	21° ♄ 13'58	1°23'27	minimum elong	16370 May 10 12:18	2° ♄ 50'34	0°46'13
	16369 Jun 03 12:28	0° ♄		max. Earth dist.	16370 May 18 00:50	15° ♄ 27'27	1.43176 AU
max. Earth dist.	16369 Jun 04 09:54	1° ♄ 25'24	1.44780 AU	evening rise	16370 May 24 10:19	25° ♄ 41'47	
evening rise	16369 Jun 13 15:19	15° ♄ 49'05			16370 May 27 04:40	0° ♄	
	16369 Jun 23 01:03	0° ♄			16370 Jun 16 22:51	0° ♄	
asc. node	16369 Jul 12 09:18	25° ♄ 52'56		evening max el	16370 Jun 25 10:39	10° ♄ 01'16	21°49'51
evening max el	16369 Jul 12 14:56	26° ♄ 07'04	20°36'10	asc. node	16370 Jun 29 06:12	13° ♄ 18'50	
	16369 Jul 17 16:45	0° ♄		retrograde	16370 Jul 04 16:20	15° ♄ 24'12	
retrograde	16369 Jul 20 17:55	0° ♄ 45'53		evening set	16370 Jul 09 07:47	13° ♄ 28'28	
	16369 Jul 23 14:38	30° ♄		inferior conj	16370 Jul 14 13:26	7° ♄ 11'57	3°07'24
evening set	16369 Jul 24 22:09	29° ♄ 07'18		minimum elong	16370 Jul 14 13:05	7° ♄ 13'10	3°06'50
inferior conj	16369 Jul 30 03:58	23° ♄ 00'58	3°06'10	min. Earth dist.	16370 Jul 14 15:42	7° ♄ 04'00	0.69112 AU
minimum elong	16369 Jul 30 04:35	22° ♄ 58'53	3°05'42	morning rise	16370 Jul 19 18:12	0° ♄ 55'16	
min. Earth dist.	16369 Jul 30 19:33	22° ♄ 07'18	0.68619 AU		16370 Jul 20 23:33	30° ♄	
morning rise	16369 Aug 04 10:42	16° ♄ 38'07		direct	16370 Jul 24 14:36	28° ♄ 51'38	
direct	16369 Aug 09 19:18	14° ♄ 18'13			16370 Jul 28 13:45	0° ♄	
desc. node	16369 Aug 13 23:17	15° ♄ 27'16		desc. node	16370 Jul 31 20:34	2° ♄ 18'24	
morning max el	16369 Aug 20 17:40	20° ♄ 49'29	23°48'58	morning max el	16370 Aug 03 06:30	4° ♄ 32'46	22°20'21
	16369 Aug 28 15:17	0° ♄			16370 Aug 22 18:46	0° ♄	
	16369 Sep 18 06:21	0° ♄		morning set	16370 Sep 05 12:21	21° ♄ 10'23	
morning set	16369 Sep 24 19:18	10° ♄ 46'33		max. Earth dist.	16370 Sep 10 16:19	29° ♄ 40'07	1.41224 AU
max. Earth dist.	16369 Sep 28 14:56	17° ♄ 22'18	1.38848 AU		16370 Sep 10 21:04	0° ♄	
	16369 Oct 05 13:42	0° ♄					
				superior conj	16370 Sep 18 12:44	13° ♄ 14'17	-0°56'39
superior conj	16369 Oct 06 04:37	1° ♄ 10'07	-0°19'47	minimum elong	16370 Sep 18 17:19	13° ♄ 34'41	0°55'50
minimum elong	16369 Oct 06 06:01	1° ♄ 16'44	0°19'15	asc. node	16370 Sep 25 07:04	25° ♄ 34'10	
asc. node	16369 Oct 08 10:21	5° ♄ 25'34			16370 Sep 27 16:04	0° ♄	

evening rise	16370 Sep 28 19:06	2°♌06'25		superior conj	16371 Aug 30 23:31	24°♎23'36	-1°32'26
evening max el	16370 Oct 14 16:42	27°♌35'05	18°17'34	minimum elong	16371 Aug 31 06:58	24°♎54'58	1°31'40
	16370 Oct 17 15:58	0°♌			16371 Sep 03 06:36	0°♌	
retrograde	16370 Oct 22 03:47	1°♌23'28		evening rise	16371 Sep 11 20:06	15°♏01'24	
evening set	16370 Oct 24 05:03	1°♌06'49		asc. node	16371 Sep 12 03:46	15°♏35'27	
	16370 Oct 26 20:57	30°♌			16371 Sep 20 11:02	0°♌	
desc. node	16370 Oct 27 17:51	29°♌28'47		evening max el	16371 Sep 28 05:00	10°♌34'55	18°02'04
inferior conj	16370 Oct 31 18:18	26°♌26'25	-1°17'45	retrograde	16371 Oct 04 22:04	14°♌02'38	
minimum elong	16370 Oct 31 15:22	26°♌32'30	1°16'01	evening set	16371 Oct 07 06:33	13°♌37'02	
min. Earth dist.	16370 Nov 04 00:19	23°♌45'09	0.58623 AU	inferior conj	16371 Oct 14 02:52	8°♌36'31	0°09'37
morning rise	16370 Nov 07 22:12	21°♌03'34		minimum elong	16371 Oct 14 03:11	8°♌35'46	0°09'51
direct	16370 Nov 14 08:15	19°♌14'05		transit middle	16371 Oct 14 03:11	8°♌35'46	0°09'51
morning max el	16370 Nov 28 15:08	26°♌52'29	27°26'21	transit begin	16371 Oct 14 00:36	8°♌41'59	
	16370 Dec 01 15:00	0°♌		transit end	16371 Oct 14 05:47	8°♌29'32	
	16370 Dec 21 15:14	0°♌		desc. node	16371 Oct 14 15:07	8°♌07'03	
asc. node	16370 Dec 22 07:17	1°♌15'15		min. Earth dist.	16371 Oct 17 05:18	5°♌39'06	0.60906 AU
morning set	16370 Dec 29 16:59	16°♌10'33		morning rise	16371 Oct 20 20:47	2°♌44'06	
	16371 Jan 04 23:50	0°♌		direct	16371 Oct 27 12:52	0°♌31'11	
				morning max el	16371 Nov 10 18:03	8°♌24'00	27°57'33
superior conj	16371 Jan 05 14:02	1°♌19'32	1°36'51		16371 Nov 27 08:06	0°♌	
minimum elong	16371 Jan 05 13:20	1°♌15'35	1°37'25	asc. node	16371 Dec 09 04:19	20°♌50'54	
max. Earth dist.	16371 Jan 05 09:12	0°♌52'29	1.30972 AU	morning set	16371 Dec 13 20:07	0°♌15'20	
evening rise	16371 Jan 12 08:17	16°♌16'01			16371 Dec 13 17:11	0°♌	
	16371 Jan 19 02:10	0°♌		max. Earth dist.	16371 Dec 19 15:23	12°♌46'52	1.31187 AU
desc. node	16371 Jan 23 17:10	8°♌26'02					
	16371 Feb 07 19:33	0°♌		superior conj	16371 Dec 21 00:42	15°♌51'55	1°29'45
evening max el	16371 Feb 11 00:36	3°♌18'23	26°43'40	minimum elong	16371 Dec 20 23:05	15°♌42'53	1°30'16
retrograde	16371 Feb 25 01:17	10°♌31'38			16371 Dec 27 09:48	0°♌	
evening set	16371 Mar 03 11:56	8°♌48'24		evening rise	16371 Dec 27 17:16	0°♌40'27	
min. Earth dist.	16371 Mar 07 14:24	6°♌09'50	0.58801 AU	desc. node	16372 Jan 10 13:57	27°♌07'51	
inferior conj	16371 Mar 10 19:16	3°♌41'57	-2°58'22		16372 Jan 12 09:58	0°♌	
minimum elong	16371 Mar 11 02:08	3°♌28'41	2°55'48	evening max el	16372 Jan 23 18:11	14°♌07'00	25°27'27
	16371 Mar 16 09:22	30°♌		retrograde	16372 Feb 06 15:40	21°♌06'10	
morning rise	16371 Mar 18 19:55	29°♌07'35		evening set	16372 Feb 12 10:14	19°♌50'15	
asc. node	16371 Mar 20 05:01	28°♌55'05		min. Earth dist.	16372 Feb 17 06:57	17°♌08'43	0.56751 AU
direct	16371 Mar 20 19:00	28°♌53'51		inferior conj	16372 Feb 20 01:19	15°♌17'59	-4°28'24
	16371 Mar 24 23:34	0°♌		minimum elong	16372 Feb 20 10:43	15°♌02'16	4°25'27
morning max el	16371 Mar 28 16:15	2°♌48'06	18°18'12	morning rise	16372 Feb 28 14:04	11°♌04'46	
morning set	16371 Apr 13 09:10	27°♌47'18		direct	16372 Mar 01 14:35	10°♌52'38	
	16371 Apr 14 13:11	0°♌		asc. node	16372 Mar 06 02:20	11°♌56'22	
desc. node	16371 Apr 21 18:21	13°♌30'02		morning max el	16372 Mar 10 19:06	15°♌22'26	19°04'54
					16372 Mar 21 00:04	0°♌	
superior conj	16371 Apr 22 20:46	15°♌30'25	-0°09'12	morning set	16372 Mar 27 08:29	12°♌06'53	
minimum elong	16371 Apr 22 20:02	15°♌27'05	0°09'30				
behind sun begin	16371 Apr 22 14:02	14°♌59'51		superior conj	16372 Apr 04 18:57	28°♌39'46	0°23'55
behind sun end	16371 Apr 23 02:01	15°♌54'16		minimum elong	16372 Apr 04 20:24	28°♌46'45	0°23'24
max. Earth dist.	16371 Apr 30 10:29	28°♌48'54	1.41124 AU		16372 Apr 05 11:45	0°♌	
	16371 May 01 03:16	0°♌		desc. node	16372 Apr 07 15:05	4°♌01'49	
evening rise	16371 May 05 00:15	6°♌26'17		max. Earth dist.	16372 Apr 11 16:45	11°♌28'02	1.38847 AU
	16371 May 20 07:49	0°♌		evening rise	16372 Apr 15 11:34	18°♌06'10	
evening max el	16371 Jun 08 02:08	23°♌55'26	23°10'25		16372 Apr 22 15:52	0°♌	
asc. node	16371 Jun 16 03:08	29°♌38'29			16372 May 13 15:53	0°♌	
	16371 Jun 17 16:55	0°♌		evening max el	16372 May 20 15:52	7°♌51'00	24°31'38
retrograde	16371 Jun 18 12:35	0°♌03'00		retrograde	16372 Jun 01 05:26	14°♌36'27	
	16371 Jun 19 07:51	30°♌		asc. node	16372 Jun 02 00:09	14°♌33'54	
evening set	16371 Jun 23 15:35	27°♌52'13		evening set	16372 Jun 06 19:57	12°♌13'46	
inferior conj	16371 Jun 28 23:23	21°♌27'38	2°58'08	min. Earth dist.	16372 Jun 11 08:14	7°♌03'45	0.68620 AU
minimum elong	16371 Jun 28 22:10	21°♌31'52	2°57'20	inferior conj	16372 Jun 12 07:58	5°♌44'11	2°38'22
min. Earth dist.	16371 Jun 28 12:39	22°♌04'49	0.69110 AU	minimum elong	16372 Jun 12 06:05	5°♌50'32	2°37'18
morning rise	16371 Jul 04 04:40	15°♌18'47			16372 Jun 17 08:20	30°♌	
direct	16371 Jul 08 12:57	13°♌33'51		morning rise	16372 Jun 17 16:21	29°♌44'35	
morning max el	16371 Jul 16 23:43	18°♌24'54	20°57'59	direct	16372 Jun 21 13:04	28°♌19'08	
desc. node	16371 Jul 18 17:48	20°♌15'18			16372 Jun 26 01:56	0°♌	
	16371 Jul 26 12:39	0°♌		morning max el	16372 Jun 28 23:37	2°♌27'30	19°47'29
	16371 Aug 15 21:02	0°♌		desc. node	16372 Jul 04 14:59	9°♌01'03	
morning set	16371 Aug 16 06:37	0°♌37'13			16372 Jul 19 04:56	0°♌	
max. Earth dist.	16371 Aug 23 23:28	12°♌50'08	1.43320 AU	morning set	16372 Jul 25 11:30	9°♌32'52	

































































































































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	16372 Aug 07 14:04	0°0		max. Earth dist.	16373 Jul 19 07:51	11°013'05	1.45826 AU
superior conj	16372 Aug 10 10:54	4°035'23	-2°00'45	superior conj	16373 Jul 21 02:39	14°000'26	-2°14'03
minimum elong	16372 Aug 10 18:08	5°004'28	2°00'36	minimum elong	16373 Jul 21 04:11	14°006'24	2°14'34
evening rise	16372 Aug 24 02:19	27°007'41			16373 Jul 31 05:42	0°0	
	16372 Aug 25 19:07	0°0		evening rise	16373 Aug 05 08:43	8°012'46	
asc. node	16372 Aug 29 00:28	5°025'36		asc. node	16373 Aug 15 21:12	24°058'53	
evening max el	16372 Sep 10 19:58	24°000'39	18°05'23		16373 Aug 19 05:46	0°0	
retrograde	16372 Sep 17 05:02	27°021'04		evening max el	16373 Aug 25 10:04	7°042'19	18°26'32
evening set	16372 Sep 19 22:00	26°042'58		retrograde	16373 Aug 31 20:28	11°008'55	
inferior conj	16372 Sep 26 03:57	21°024'31	1°17'48	evening set	16373 Sep 03 22:30	10°015'34	
minimum elong	16372 Sep 26 05:53	21°019'16	1°17'19	inferior conj	16373 Sep 09 17:30	4°041'28	2°07'27
min. Earth dist.	16372 Sep 28 20:14	18°031'13	0.63164 AU	minimum elong	16373 Sep 09 19:48	4°034'33	2°06'48
desc. node	16372 Sep 30 12:25	16°051'42		min. Earth dist.	16373 Sep 11 20:39	2°009'00	0.65191 AU
morning rise	16372 Oct 02 11:38	15°012'13			16373 Sep 13 19:38	30°0	
direct	16372 Oct 09 03:34	12°043'16		morning rise	16373 Sep 15 15:47	28°018'14	
morning max el	16372 Oct 23 02:21	20°041'20	27°49'58	desc. node	16373 Sep 17 09:46	27°003'57	
	16372 Oct 31 03:57	0°0		direct	16373 Sep 22 02:28	25°041'54	
	16372 Nov 19 09:44	0°0			16373 Oct 01 15:23	0°0	
asc. node	16372 Nov 25 01:17	10°043'18		morning max el	16373 Oct 05 13:24	3°034'08	27°08'52
morning set	16372 Nov 26 16:09	13°045'740			16373 Oct 25 13:41	0°0	
max. Earth dist.	16372 Dec 01 16:27	24°0425'23	1.31977 AU	morning set	16373 Nov 10 02:21	27°011'27	
				asc. node	16373 Nov 11 22:12	0°046'41	
superior conj	16372 Dec 04 08:44	0°0313'41	1°16'32		16373 Nov 11 12:47	0°0	
minimum elong	16372 Dec 04 06:29	0°0301'27	1°16'55	max. Earth dist.	16373 Nov 14 09:18	5°044'32	1.33329 AU
	16372 Dec 04 06:13	0°0					
evening rise	16372 Dec 11 03:55	15°0307'41		superior conj	16373 Nov 18 11:54	14°0419'00	0°57'06
	16372 Dec 18 10:38	0°0		minimum elong	16373 Nov 18 09:34	14°006'34	0°57'21
desc. node	16372 Dec 27 10:50	14°0559'05		evening rise	16373 Nov 25 14:24	29°0433'13	
evening max el	16373 Jan 04 04:56	24°0514'19	23°49'00		16373 Nov 25 19:26	0°0	
	16373 Jan 12 18:23	0°0			16373 Dec 12 21:37	0°0	
retrograde	16373 Jan 17 16:09	0°0454'39		desc. node	16373 Dec 14 07:48	1°042'01	
evening set	16373 Jan 22 09:57	0°0406'00		evening max el	16373 Dec 16 15:42	4°010'15	22°05'49
	16373 Jan 22 16:59	30°0		retrograde	16373 Dec 29 05:01	10°022'41	
min. Earth dist.	16373 Jan 28 16:23	27°0404'13	0.55204 AU	evening set	16374 Jan 01 16:18	9°055'57	
inferior conj	16373 Jan 30 10:30	26°0501'59	-5°38'36	inferior conj	16374 Jan 10 04:26	6°005'06	-6°01'58
minimum elong	16373 Jan 30 17:40	25°0551'23	5°37'05	minimum elong	16374 Jan 10 03:09	6°006'53	6°01'22
morning rise	16373 Feb 08 02:58	22°0006'35		min. Earth dist.	16374 Jan 09 21:50	6°014'19	0.54425 AU
direct	16373 Feb 10 14:54	21°0551'00		morning rise	16374 Jan 18 14:52	2°017'49	
asc. node	16373 Feb 20 23:39	26°0441'47		direct	16374 Jan 22 00:58	1°051'54	
morning max el	16373 Feb 21 08:50	27°0503'40	20°14'42	morning max el	16374 Feb 03 07:29	7°048'11	21°47'08
	16373 Feb 24 01:42	0°0		asc. node	16374 Feb 07 20:57	12°055'48	
morning set	16373 Mar 11 14:29	26°0442'06			16374 Feb 18 09:15	0°0	
	16373 Mar 13 05:03	0°0		morning set	16374 Feb 24 00:32	11°0425'18	
superior conj	16373 Mar 19 06:42	12°0423'39	0°51'19	superior conj	16374 Mar 03 04:23	26°0435'14	1°12'26
minimum elong	16373 Mar 19 09:07	12°0436'48	0°50'52	minimum elong	16374 Mar 03 06:49	26°0448'02	1°12'12
max. Earth dist.	16373 Mar 24 23:45	23°0434'49	1.36588 AU		16374 Mar 04 19:43	0°0	
desc. node	16373 Mar 25 11:46	24°0431'40		max. Earth dist.	16374 Mar 07 11:43	5°0426'23	1.34558 AU
	16373 Mar 28 10:39	0°0		evening rise	16374 Mar 11 16:29	13°0440'05	
evening rise	16373 Mar 28 18:07	0°0333'53		desc. node	16374 Mar 12 08:28	14°0456'00	
	16373 Apr 15 20:12	0°0			16374 Mar 20 19:05	0°0	
evening max el	16373 May 03 05:28	21°0444'49	25°46'12		16374 Apr 10 16:24	0°0	
retrograde	16373 May 15 17:40	28°0457'19		evening max el	16374 Apr 15 19:16	5°030'08	26°46'36
asc. node	16373 May 19 21:15	27°0448'06		retrograde	16374 Apr 29 00:32	12°0458'14	
evening set	16373 May 21 19:09	26°0426'54		evening set	16374 May 05 11:19	10°0425'31	
min. Earth dist.	16373 May 26 00:18	21°0453'36	0.67660 AU	asc. node	16374 May 06 18:25	9°0417'40	
inferior conj	16373 May 27 13:09	19°0456'34	2°07'30	min. Earth dist.	16374 May 09 10:46	6°0427'02	0.66256 AU
minimum elong	16373 May 27 10:58	20°0403'32	2°06'15	inferior conj	16374 May 11 12:43	3°0459'52	1°24'33
morning rise	16373 Jun 02 03:20	14°0407'32		minimum elong	16374 May 11 10:48	4°0405'31	1°23'20
direct	16373 Jun 05 13:10	13°0401'01			16374 May 15 06:08	30°0	
morning max el	16373 Jun 12 06:42	16°0438'29	18°51'59	morning rise	16374 May 17 11:33	28°0423'03	
desc. node	16373 Jun 21 12:05	28°0422'16		direct	16374 May 20 11:19	27°0433'40	
	16373 Jun 22 14:45	0°0			16374 May 25 20:25	0°0	
greatest brilliancy	16373 Jun 25 18:47	4°0444'55	-0.8m	morning max el	16374 May 26 19:52	0°0453'23	18°12'59
morning set	16373 Jul 04 21:47	18°0448'01		desc. node	16374 Jun 08 09:08	18°0409'43	

morning set	16374 Jun 15 06:16	29° Π 08'17		16375 Jun 08 10:16	0° \mathfrak{G}	
	16374 Jun 15 19:11	0° \mathfrak{G}				
superior conj	16374 Jun 30 11:53	23° \mathfrak{G} 14'32	-2°07'30	superior conj	16375 Jun 10 07:29	3° \mathfrak{G} 01'33 -1°43'05
minimum elong	16374 Jun 30 05:55	22° \mathfrak{G} 51'15	2°07'52	minimum elong	16375 Jun 09 22:55	2° \mathfrak{G} 27'18 1°42'55
max. Earth dist.	16374 Jul 02 04:30	25° \mathfrak{G} 53'02	1.46000 AU	max. Earth dist.	16375 Jun 15 00:11	10° \mathfrak{G} 28'36 1.45422 AU
	16374 Jul 04 19:55	0° \mathcal{Q}		evening rise	16375 Jun 26 03:14	27° \mathfrak{G} 43'06
evening rise	16374 Jul 16 14:25	18° \mathcal{Q} 16'52			16375 Jun 27 15:06	0° \mathcal{Q}
	16374 Jul 24 04:15	0° \mathfrak{P}		greatest brilliancy	16375 Jul 10 22:31	19° \mathcal{Q} 52'35 -0.6m
greatest brilliancy	16374 Jul 27 13:26	5° \mathfrak{P} 09'18	-0.7m		16375 Jul 18 07:35	0° \mathfrak{P}
asc. node	16374 Aug 02 17:58	14° \mathfrak{P} 09'01		asc. node	16375 Jul 20 14:45	2° \mathfrak{P} 47'50
evening max el	16374 Aug 08 20:34	21° \mathfrak{P} 32'46	19°04'46	evening max el	16375 Jul 23 01:34	5° \mathfrak{P} 26'47 19°58'52
retrograde	16374 Aug 15 16:55	25° \mathfrak{P} 18'34		retrograde	16375 Jul 30 15:39	9° \mathfrak{P} 43'48
evening set	16374 Aug 19 04:34	24° \mathfrak{P} 08'15		evening set	16375 Aug 03 13:34	8° \mathfrak{P} 15'41
inferior conj	16374 Aug 24 16:01	18° \mathfrak{P} 20'28	2°40'51	inferior conj	16375 Aug 08 20:37	2° \mathfrak{P} 15'46 3°00'27
minimum elong	16374 Aug 24 17:56	18° \mathfrak{P} 14'16	2°40'18	minimum elong	16375 Aug 08 21:45	2° \mathfrak{P} 11'55 2°59'58
min. Earth dist.	16374 Aug 26 05:15	16° \mathfrak{P} 20'44	0.66862 AU	min. Earth dist.	16375 Aug 09 20:03	0° \mathfrak{P} 56'29 0.68104 AU
morning rise	16374 Aug 30 06:33	11° \mathfrak{P} 53'24			16375 Aug 10 13:01	30° \mathcal{R} \mathcal{Q}
desc. node	16374 Sep 04 07:07	9° \mathfrak{P} 22'22		morning rise	16375 Aug 14 05:31	25° \mathcal{Q} 50'08
direct	16374 Sep 05 08:34	9° \mathfrak{P} 17'58		direct	16375 Aug 19 20:48	23° \mathcal{Q} 22'43
morning max el	16374 Sep 18 01:02	16° \mathfrak{P} 50'49	26°02'22	desc. node	16375 Aug 22 04:27	23° \mathcal{Q} 44'09
	16374 Sep 29 00:30	0° \mathfrak{L}			16375 Aug 31 03:48	0° \mathfrak{P}
	16374 Oct 18 11:34	0° \mathfrak{M}		morning max el	16375 Aug 31 12:08	0° \mathfrak{P} 20'54 24°39'53
morning set	16374 Oct 23 23:23	9° \mathfrak{M} 49'13			16375 Sep 22 21:33	0° \mathfrak{L}
max. Earth dist.	16374 Oct 27 16:32	16° \mathfrak{M} 50'01	1.35195 AU	morning set	16375 Oct 06 03:16	21° \mathfrak{L} 42'11
asc. node	16374 Oct 29 19:03	20° \mathfrak{M} 56'32		max. Earth dist.	16375 Oct 09 16:23	28° \mathfrak{L} 01'34 1.37448 AU
					16375 Oct 10 18:19	0° \mathfrak{M}
superior conj	16374 Nov 02 07:37	28° \mathfrak{M} 01'15	0°31'32	superior conj	16375 Oct 16 16:40	11° \mathfrak{M} 13'03 0°00'19
minimum elong	16374 Nov 02 05:55	27° \mathfrak{M} 52'36	0°31'45	minimum elong	16375 Oct 16 16:37	11° \mathfrak{M} 12'49 0°00'41
	16374 Nov 03 06:48	0° \mathcal{X}		behind sun begin	16375 Oct 16 09:57	10° \mathfrak{M} 40'28
evening rise	16374 Nov 09 22:42	13° \mathcal{X} 51'54		behind sun end	16375 Oct 16 23:17	11° \mathfrak{M} 45'15
	16374 Nov 18 04:17	0° \mathfrak{Z}		asc. node	16375 Oct 16 15:50	11° \mathfrak{M} 08'59
evening max el	16374 Nov 28 12:08	14° \mathfrak{Z} 32'19	20°34'30	evening rise	16375 Oct 25 02:30	27° \mathfrak{M} 58'11
desc. node	16374 Dec 01 04:50	16° \mathfrak{Z} 53'56			16375 Oct 26 02:51	0° \mathcal{X}
retrograde	16374 Dec 09 15:18	20° \mathfrak{Z} 04'06		evening max el	16375 Nov 10 23:11	25° \mathcal{X} 43'15 19°23'54
evening set	16374 Dec 12 00:55	19° \mathfrak{Z} 49'50			16375 Nov 17 09:57	0° \mathfrak{Z}
inferior conj	16374 Dec 20 19:53	15° \mathfrak{Z} 56'27	-5°23'52	desc. node	16375 Nov 18 01:56	0° \mathfrak{Z} 11'18
minimum elong	16374 Dec 20 10:59	16° \mathfrak{Z} 09'22	5°21'27	retrograde	16375 Nov 20 11:12	0° \mathfrak{Z} 28'51
min. Earth dist.	16374 Dec 22 03:15	15° \mathfrak{Z} 10'52	0.54576 AU	evening set	16375 Nov 22 09:31	0° \mathfrak{Z} 17'56
morning rise	16374 Dec 28 20:48	11° \mathfrak{Z} 58'54			16375 Nov 23 15:18	30° \mathcal{R} \mathcal{X}
direct	16375 Jan 02 09:03	11° \mathfrak{Z} 15'07		inferior conj	16375 Nov 30 23:20	26° \mathcal{X} 10'41 -3°58'14
morning max el	16375 Jan 15 18:39	17° \mathfrak{Z} 49'35	23°35'04	minimum elong	16375 Nov 30 13:58	26° \mathcal{X} 25'56 3°54'28
asc. node	16375 Jan 25 18:13	0° \approx 18'55		min. Earth dist.	16375 Dec 03 12:05	24° \mathcal{X} 31'49 0.55637 AU
	16375 Jan 25 13:17	0° \approx		morning rise	16375 Dec 08 16:17	21° \mathcal{X} 44'59
morning set	16375 Feb 08 12:21	26° \approx 08'52		direct	16375 Dec 14 03:33	20° \mathcal{X} 37'10
	16375 Feb 10 07:14	0° \mathfrak{H}		morning max el	16375 Dec 28 03:19	27° \mathcal{X} 41'23 25°22'36
					16375 Dec 30 09:51	0° \mathfrak{Z}
superior conj	16375 Feb 15 08:49	11° \mathfrak{H} 01'45	1°27'12	asc. node	16376 Jan 12 15:25	18° \mathfrak{Z} 34'44
minimum elong	16375 Feb 15 10:41	11° \mathfrak{H} 11'51	1°27'18		16376 Jan 18 19:19	0° \approx
max. Earth dist.	16375 Feb 18 06:50	17° \mathfrak{H} 16'46	1.32914 AU	morning set	16376 Jan 24 00:05	10° \approx 47'53
evening rise	16375 Feb 23 03:06	27° \mathfrak{H} 14'50				
	16375 Feb 24 12:33	0° \mathfrak{Y}		superior conj	16376 Jan 30 17:35	25° \approx 37'29 1°35'44
desc. node	16375 Feb 27 05:10	5° \mathfrak{Y} 09'39		minimum elong	16376 Jan 30 18:32	25° \approx 42'43 1°36'07
	16375 Mar 14 01:49	0° \mathfrak{B}		max. Earth dist.	16376 Feb 01 08:53	29° \approx 14'10 1.31752 AU
evening max el	16375 Mar 29 08:20	18° \mathfrak{B} 55'51	27°25'35		16376 Feb 01 17:14	0° \mathfrak{H}
retrograde	16375 Apr 12 01:04	26° \mathfrak{B} 29'08		evening rise	16376 Feb 06 23:00	11° \mathfrak{H} 11'12
evening set	16375 Apr 18 18:17	24° \mathfrak{B} 00'56		desc. node	16376 Feb 14 01:52	25° \mathfrak{H} 07'40
min. Earth dist.	16375 Apr 22 13:45	20° \mathfrak{B} 33'44	0.64453 AU		16376 Feb 16 18:47	0° \mathfrak{Y}
asc. node	16375 Apr 23 15:38	19° \mathfrak{B} 25'13			16376 Mar 08 22:53	0° \mathfrak{B}
inferior conj	16375 Apr 25 04:00	17° \mathfrak{B} 46'57	0°28'13	evening max el	16376 Mar 10 19:08	1° \mathfrak{B} 50'37 27°36'09
minimum elong	16375 Apr 25 03:13	17° \mathfrak{B} 49'04	0°27'29	retrograde	16376 Mar 24 18:12	9° \mathfrak{B} 19'59
morning rise	16375 May 01 14:19	12° \mathfrak{B} 24'15		evening set	16376 Mar 31 13:29	7° \mathfrak{B} 04'02
direct	16375 May 04 04:56	11° \mathfrak{B} 49'19		min. Earth dist.	16376 Apr 04 07:42	4° \mathfrak{B} 02'30 0.62347 AU
morning max el	16375 May 10 12:41	15° \mathfrak{B} 03'55	17°51'05	inferior conj	16376 Apr 07 07:54	1° \mathfrak{B} 10'02 -0°42'18
	16375 May 21 06:25	0° \mathfrak{I}		minimum elong	16376 Apr 07 09:20	1° \mathfrak{B} 06'36 0°42'00
desc. node	16375 May 26 06:04	8° \mathfrak{I} 15'45			16376 Apr 08 13:34	30° \mathcal{R} \mathfrak{Y}
morning set	16375 May 27 18:00	10° \mathfrak{I} 46'01		asc. node	16376 Apr 09 12:54	29° \mathfrak{Y} 07'40

morning rise	16376 Apr 14 08:13	26° Υ 03'50		morning max el	16377 Apr 06 21:10	12° Υ 35'27	18°01'00
direct	16376 Apr 16 14:59	25° Υ 39'56			16377 Apr 18 13:58	0° \mathcal{B}	
morning max el	16376 Apr 23 06:13	29° Υ 01'10	17°46'46	morning set	16377 Apr 22 10:57	7° \mathcal{B} 04'36	
	16376 Apr 24 05:04	0° \mathcal{B}		desc. node	16377 Apr 28 23:45	19° \mathcal{B} 02'22	
morning set	16376 May 09 05:31	23° \mathcal{B} 30'36					
desc. node	16376 May 12 02:56	28° \mathcal{B} 34'49		superior conj	16377 May 02 16:26	25° \mathcal{B} 37'33	-0°30'14
	16376 May 12 22:28	0° Π		minimum elong	16377 May 02 13:51	25° \mathcal{B} 26'15	0°30'19
					16377 May 05 04:40	0° Π	
superior conj	16376 May 21 00:16	13° Π 47'45	-1°08'07	max. Earth dist.	16377 May 10 05:55	8° Π 33'00	1.42351 AU
minimum elong	16376 May 20 18:01	13° Π 21'38	1°07'53	evening rise	16377 May 15 17:53	17° Π 29'37	
max. Earth dist.	16376 May 27 17:00	24° Π 45'48	1.44163 AU		16377 May 23 19:23	0° \mathcal{E}	
	16376 May 30 23:55	0° \mathcal{E}			16377 Jun 14 16:55	0° Ω	
evening rise	16376 Jun 04 15:26	7° \mathcal{E} 15'10		evening max el	16377 Jun 17 18:22	3° Ω 16'50	22°23'41
	16376 Jun 19 21:28	0° Ω		asc. node	16377 Jun 23 08:30	7° Ω 44'55	
evening max el	16376 Jul 05 00:31	19° Ω 21'31	21°06'27	retrograde	16377 Jun 27 12:06	8° Ω 58'29	
asc. node	16376 Jul 06 11:35	20° Ω 44'20		evening set	16377 Jul 02 08:29	6° Ω 56'08	
retrograde	16376 Jul 13 14:34	24° Ω 18'43		inferior conj	16377 Jul 07 14:48	0° Ω 36'10	3°04'45
evening set	16376 Jul 17 23:26	22° Ω 32'55		minimum elong	16377 Jul 07 14:04	0° Ω 38'43	3°04'05
inferior conj	16376 Jul 23 04:53	16° Ω 22'12	3°08'02	min. Earth dist.	16377 Jul 07 11:34	0° Ω 47'26	0.69177 AU
minimum elong	16376 Jul 23 05:05	16° Ω 21'30	3°07'31		16377 Jul 08 01:11	30° \mathcal{R} \mathcal{E}	
min. Earth dist.	16376 Jul 23 14:52	15° Ω 47'33	0.68885 AU	morning rise	16377 Jul 12 19:30	24° \mathcal{E} 22'44	
morning rise	16376 Jul 28 10:28	10° Ω 01'33		direct	16377 Jul 17 10:48	22° \mathcal{E} 26'39	
direct	16376 Aug 02 13:57	7° Ω 47'53		desc. node	16377 Jul 25 22:58	27° \mathcal{E} 09'28	
desc. node	16376 Aug 08 01:45	9° Ω 47'36		morning max el	16377 Jul 26 13:39	27° \mathcal{E} 45'26	21°44'08
morning max el	16376 Aug 12 23:24	13° Ω 58'38	23°10'53		16377 Jul 28 16:28	0° Ω	
	16376 Aug 25 23:21	0° \mathcal{N}			16377 Aug 19 12:53	0° \mathcal{N}	
	16376 Sep 14 19:01	0° \mathcal{A}		morning set	16377 Aug 27 16:34	12° \mathcal{N} 37'39	
morning set	16376 Sep 16 09:45	2° \mathcal{A} 39'38		max. Earth dist.	16377 Sep 02 19:05	22° \mathcal{N} 29'52	1.42173 AU
max. Earth dist.	16376 Sep 20 15:10	9° \mathcal{A} 48'07	1.39871 AU		16377 Sep 07 06:37	0° \mathcal{A}	
superior conj	16376 Sep 28 11:05	23° \mathcal{A} 44'31	-0°35'15	superior conj	16377 Sep 10 10:36	5° \mathcal{A} 26'38	-1°12'17
minimum elong	16376 Sep 28 13:46	23° \mathcal{A} 56'51	0°34'35	minimum elong	16377 Sep 10 16:33	5° \mathcal{A} 52'32	1°11'26
	16376 Oct 01 19:39	0° \mathcal{M}		asc. node	16377 Sep 19 09:16	21° \mathcal{A} 26'03	
asc. node	16376 Oct 02 12:33	1° \mathcal{M} 19'51		evening rise	16377 Sep 21 08:19	25° \mathcal{A} 01'15	
evening rise	16376 Oct 07 22:54	11° \mathcal{M} 44'05			16377 Sep 24 01:45	0° \mathcal{M}	
	16376 Oct 18 01:30	0° \mathcal{J}		evening max el	16377 Oct 07 08:18	20° \mathcal{M} 23'40	18°08'34
evening max el	16376 Oct 23 23:16	7° \mathcal{J} 43'00	18°35'39	retrograde	16377 Oct 14 10:15	24° \mathcal{M} 01'26	
retrograde	16376 Nov 01 01:11	11° \mathcal{J} 48'37		evening set	16377 Oct 16 14:30	23° \mathcal{M} 41'19	
evening set	16376 Nov 02 23:46	11° \mathcal{J} 35'13		desc. node	16377 Oct 21 20:19	20° \mathcal{M} 34'40	
desc. node	16376 Nov 03 23:06	11° \mathcal{J} 18'56		inferior conj	16377 Oct 23 20:18	18° \mathcal{M} 51'48	-0°38'24
inferior conj	16376 Nov 10 23:00	7° \mathcal{J} 07'19	-2°15'04	minimum elong	16377 Oct 23 18:57	18° \mathcal{M} 54'48	0°37'25
minimum elong	16376 Nov 10 17:35	7° \mathcal{J} 17'35	2°12'20	min. Earth dist.	16377 Oct 27 01:44	16° \mathcal{M} 01'28	0.59587 AU
min. Earth dist.	16376 Nov 14 02:42	4° \mathcal{J} 44'23	0.57406 AU	morning rise	16377 Oct 30 20:05	13° \mathcal{M} 15'31	
morning rise	16376 Nov 18 08:09	2° \mathcal{J} 05'22		direct	16377 Nov 06 09:35	11° \mathcal{M} 15'39	
direct	16376 Nov 24 12:04	0° \mathcal{J} 30'51		morning max el	16377 Nov 20 16:00	19° \mathcal{M} 00'06	27°44'35
morning max el	16376 Dec 08 17:26	7° \mathcal{J} 57'39	26°50'37		16377 Nov 29 23:59	0° \mathcal{J}	
	16376 Dec 25 06:03	0° \mathcal{Z}		asc. node	16377 Dec 16 09:37	26° \mathcal{J} 52'28	
asc. node	16376 Dec 29 12:33	7° \mathcal{Z} 29'21			16377 Dec 18 00:12	0° \mathcal{Z}	
morning set	16377 Jan 07 09:57	25° \mathcal{Z} 17'18		morning set	16377 Dec 22 16:08	9° \mathcal{Z} 32'27	
	16377 Jan 09 13:56	0° \approx		max. Earth dist.	16377 Dec 28 23:06	23° \mathcal{Z} 18'12	1.30997 AU
superior conj	16377 Jan 14 04:34	10° \approx 16'04	1°38'11	superior conj	16377 Dec 29 15:53	24° \mathcal{Z} 52'03	1°34'35
minimum elong	16377 Jan 14 04:27	10° \approx 15'28	1°38'43	minimum elong	16377 Dec 29 14:45	24° \mathcal{Z} 45'46	1°35'09
max. Earth dist.	16377 Jan 14 15:30	11° \approx 17'17	1.31104 AU		16377 Dec 31 22:53	0° \approx	
evening rise	16377 Jan 21 01:40	25° \approx 22'41		evening rise	16378 Jan 05 08:54	9° \approx 43'48	
	16377 Jan 23 06:43	0° \mathcal{H}			16378 Jan 15 14:39	0° \mathcal{H}	
desc. node	16377 Jan 30 22:38	14° \mathcal{H} 43'33		desc. node	16378 Jan 17 19:25	3° \mathcal{H} 48'27	
	16377 Feb 09 10:06	0° Υ		evening max el	16378 Feb 02 23:47	25° \mathcal{H} 21'48	26°14'53
evening max el	16377 Feb 21 01:14	14° Υ 02'37	27°13'04		16378 Feb 08 22:38	0° Υ	
retrograde	16377 Mar 07 02:12	21° Υ 21'54		retrograde	16378 Feb 16 23:14	2° Υ 28'37	
evening set	16377 Mar 13 18:00	19° Υ 25'18		evening set	16378 Feb 23 04:20	0° Υ 56'44	
min. Earth dist.	16377 Mar 17 15:31	16° Υ 41'26	0.60091 AU		16378 Feb 24 22:43	30° \mathcal{R} \mathcal{H}	
inferior conj	16377 Mar 20 20:50	13° Υ 59'53	-2°06'00	min. Earth dist.	16378 Feb 27 13:00	28° \mathcal{H} 19'02	0.57889 AU
minimum elong	16377 Mar 21 01:34	13° Υ 49'55	2°04'14	inferior conj	16378 Mar 02 14:59	26° \mathcal{H} 05'22	-3°37'24
asc. node	16377 Mar 27 10:10	9° Υ 34'50		minimum elong	16378 Mar 02 23:15	25° \mathcal{H} 50'24	3°34'28
morning rise	16377 Mar 28 12:40	9° Υ 12'53		morning rise	16378 Mar 10 21:27	21° \mathcal{H} 40'01	
direct	16377 Mar 30 13:38	8° Υ 56'25		direct	16378 Mar 12 20:26	21° \mathcal{H} 27'21	

asc. node	16378 Mar 14 07:29	21° K 34'42		morning rise	16379 Feb 20 03:37	3° K 14'40	
morning max el	16378 Mar 21 05:38	25° K 35'12	18°35'20	direct	16379 Feb 22 07:33	3° K 01'49	
	16378 Mar 24 23:42	0° Y		asc. node	16379 Mar 01 04:48	5° K 21'57	
morning set	16378 Apr 06 04:59	21° Y 11'29		morning max el	16379 Mar 04 03:28	7° K 48'48	19°31'47
	16378 Apr 10 18:40	0° B			16379 Mar 18 11:10	0° Y	
				morning set	16379 Mar 21 07:34	5° Y 39'16	
superior conj	16378 Apr 15 04:57	8° B 21'44	0°05'29				
minimum elong	16378 Apr 15 05:18	8° B 23'23	0°05'04	superior conj	16379 Mar 29 09:29	21° Y 48'23	0°36'16
behind sun begin	16378 Apr 14 22:35	7° B 52'10		minimum elong	16379 Mar 29 11:29	21° Y 58'09	0°35'44
behind sun end	16378 Apr 15 12:01	8° B 54'32		desc. node	16379 Apr 02 17:17	0° B 05'47	
desc. node	16378 Apr 15 20:31	9° B 33'51			16379 Apr 02 16:03	0° B	
max. Earth dist.	16378 Apr 22 14:24	21° B 38'50	1.40174 AU	max. Earth dist.	16379 Apr 04 20:25	4° B 02'48	1.37869 AU
evening rise	16378 Apr 26 17:01	28° B 38'26		evening rise	16379 Apr 08 12:55	10° B 39'58	
	16378 Apr 27 12:38	0° II			16379 Apr 20 06:14	0° II	
	16378 May 17 07:07	0° E			16379 May 12 19:49	0° E	
evening max el	16378 May 31 08:52	17° E 11'55	23°45'13	evening max el	16379 May 13 22:13	1° E 06'43	25°04'26
asc. node	16378 Jun 10 05:30	23° E 31'26		retrograde	16379 May 25 22:05	8° E 05'35	
retrograde	16378 Jun 11 06:58	23° E 36'14		asc. node	16379 May 28 02:33	7° E 45'45	
evening set	16378 Jun 16 15:03	21° E 19'43		evening set	16379 May 31 17:27	5° E 38'43	
min. Earth dist.	16378 Jun 21 08:06	15° E 48'33	0.68969 AU	min. Earth dist.	16379 Jun 05 02:24	0° E 44'39	0.68274 AU
inferior conj	16378 Jun 22 00:25	14° E 52'43	2°51'01		16379 Jun 05 16:02	30° R II	
minimum elong	16378 Jun 21 22:53	14° E 57'59	2°50'07	inferior conj	16379 Jun 06 07:49	29° II 08'02	2°26'39
morning rise	16378 Jun 27 06:43	8° E 47'55		minimum elong	16379 Jun 06 05:44	29° II 14'51	2°25'30
direct	16378 Jul 01 10:02	7° E 11'20		morning rise	16379 Jun 11 18:21	23° II 12'56	
morning max el	16378 Jul 09 09:37	11° E 42'31	20°26'19	direct	16379 Jun 15 10:15	21° II 55'55	
desc. node	16378 Jul 12 20:10	15° E 29'02		morning max el	16379 Jun 22 12:44	25° II 49'40	19°21'51
	16378 Jul 23 14:39	0° O			16379 Jun 26 06:21	0° E	
morning set	16378 Aug 07 03:22	21° O 46'42		desc. node	16379 Jun 29 17:19	4° E 31'15	
	16378 Aug 12 10:07	0° P		greatest brilliancy	16379 Jul 05 05:05	12° E 22'19	-0.7m
max. Earth dist.	16378 Aug 16 05:40	6° P 03'03	1.44074 AU		16379 Jul 16 20:36	0° O	
				morning set	16379 Jul 17 07:58	0° O 43'41	
superior conj	16378 Aug 22 11:24	16° P 11'02	-1°45'48	max. Earth dist.	16379 Jul 29 21:32	20° O 13'21	1.45385 AU
minimum elong	16378 Aug 22 19:20	16° P 43'47	1°45'14				
	16378 Aug 30 16:13	0° A		superior conj	16379 Aug 02 13:21	25° O 59'40	-2°08'39
evening rise	16378 Sep 04 02:00	7° A 37'33		minimum elong	16379 Aug 02 18:48	26° O 21'16	2°08'50
asc. node	16378 Sep 06 06:00	11° A 23'31			16379 Aug 05 01:45	0° P	
	16378 Sep 17 20:00	0° M		evening rise	16379 Aug 16 22:35	19° P 18'53	
evening max el	16378 Sep 20 22:07	3° M 35'22	18°01'10		16379 Aug 23 10:10	0° A	
retrograde	16378 Sep 27 10:42	6° M 58'40		asc. node	16379 Aug 24 02:43	1° A 07'18	
evening set	16378 Sep 29 22:38	6° M 28'10		evening max el	16379 Sep 04 13:02	17° A 08'35	18°12'15
inferior conj	16378 Oct 06 12:25	1° M 19'24	0°40'56	retrograde	16379 Sep 10 21:46	20° A 30'22	
minimum elong	16378 Oct 06 13:36	1° M 16'23	0°40'46	evening set	16379 Sep 13 18:25	19° A 46'13	
	16378 Oct 07 19:32	30° R 1		inferior conj	16379 Sep 19 19:17	14° A 20'56	1°40'59
desc. node	16378 Oct 08 17:34	29° A 04'21		minimum elong	16379 Sep 19 21:30	14° A 14'39	1°40'23
min. Earth dist.	16378 Oct 09 10:57	28° A 21'33	0.61880 AU	min. Earth dist.	16379 Sep 22 06:15	11° A 34'26	0.64058 AU
morning rise	16378 Oct 13 01:54	25° A 17'07		morning rise	16379 Sep 25 22:45	8° A 02'40	
direct	16378 Oct 19 18:25	22° A 56'40		desc. node	16379 Sep 25 14:53	8° A 18'22	
	16378 Nov 01 23:55	0° M		direct	16379 Oct 02 12:53	5° A 29'21	
morning max el	16378 Nov 02 21:46	0° M 52'56	27°59'01	morning max el	16379 Oct 16 07:43	13° A 27'29	27°36'10
	16378 Nov 24 04:24	0° X			16379 Oct 29 16:38	0° M	
asc. node	16378 Dec 03 06:38	16° X 36'21			16379 Nov 16 18:14	0° X	
morning set	16378 Dec 06 16:35	23° X 28'49		morning set	16379 Nov 20 08:47	7° X 00'00	
	16378 Dec 09 18:57	0° Z		asc. node	16379 Nov 20 03:35	6° X 34'11	
max. Earth dist.	16378 Dec 12 03:46	5° Z 07'50	1.31449 AU	max. Earth dist.	16379 Nov 25 01:34	16° X 37'43	1.32477 AU
superior conj	16378 Dec 14 01:41	9° Z 20'41	1°24'55	superior conj	16379 Nov 28 07:54	23° X 36'04	1°09'04
minimum elong	16378 Dec 13 23:45	9° Z 09'59	1°25'22	minimum elong	16379 Nov 28 05:33	23° X 23'20	1°09'22
evening rise	16378 Dec 20 18:51	24° Z 10'13			16379 Dec 01 06:28	0° Z	
	16378 Dec 23 12:36	0° A		evening rise	16379 Dec 05 05:37	8° Z 36'56	
desc. node	16379 Jan 04 16:16	22° A 11'09			16379 Dec 16 04:13	0° A	
	16379 Jan 10 06:55	0° K		desc. node	16379 Dec 22 13:11	9° A 35'51	
evening max el	16379 Jan 15 13:49	5° K 49'55	24°47'20	evening max el	16379 Dec 27 23:15	15° A 47'08	23°04'36
retrograde	16379 Jan 29 07:54	12° K 42'24		retrograde	16380 Jan 10 03:18	22° A 17'49	
evening set	16379 Feb 03 17:11	11° K 38'02		evening set	16380 Jan 14 08:04	21° A 39'35	
min. Earth dist.	16379 Feb 09 01:55	8° K 50'27	0.56010 AU	min. Earth dist.	16380 Jan 21 09:25	18° A 22'58	0.54758 AU
inferior conj	16379 Feb 11 11:56	7° K 19'05	-5°02'12	inferior conj	16380 Jan 22 13:25	17° A 42'54	-5°55'41
minimum elong	16379 Feb 11 21:12	7° K 04'27	4°59'40	minimum elong	16380 Jan 22 17:32	17° A 37'00	5°54'52

morning rise	16380 Jan 31 04:17	13° \approx 52'33		minimum elong	16380 Dec 31 23:12	27° \approx 43'54	5°51'59
direct	16380 Feb 03 00:13	13° \approx 33'41		min. Earth dist.	16381 Jan 01 14:40	27° \approx 22'11	0.54375 AU
morning max el	16380 Feb 14 10:52	19° \approx 05'47	20°51'33	morning rise	16381 Jan 09 10:40	23° \approx 47'04	
asc. node	16380 Feb 16 02:06	20° \approx 46'58		direct	16381 Jan 13 08:08	23° \approx 14'09	
	16380 Feb 22 21:11	0° \approx		morning max el	16381 Jan 26 03:38	29° \approx 28'12	22°31'52
morning set	16380 Mar 04 15:33	20° \approx 18'15			16381 Jan 26 16:42	0° \approx	
	16380 Mar 09 07:05	0° \approx		asc. node	16381 Feb 01 23:23	7° \approx 32'14	
					16381 Feb 14 16:54	0° \approx	
superior conj	16380 Mar 12 01:52	5° \approx 45'13	1°01'03	morning set	16381 Feb 17 02:32	5° \approx 01'38	
minimum elong	16380 Mar 12 04:24	5° \approx 58'08	1°00'39				
max. Earth dist.	16380 Mar 17 04:34	15° \approx 58'35	1.35680 AU	superior conj	16381 Feb 24 02:41	20° \approx 02'51	1°19'28
desc. node	16380 Mar 19 14:01	20° \approx 33'53		minimum elong	16381 Feb 24 04:56	20° \approx 14'51	1°19'22
evening rise	16380 Mar 21 02:37	23° \approx 25'08		max. Earth dist.	16381 Feb 27 19:19	27° \approx 47'10	1.33805 AU
	16380 Mar 24 17:50	0° \approx			16381 Feb 28 21:17	0° \approx	
	16380 Apr 12 22:18	0° \approx		evening rise	16381 Mar 04 06:34	6° \approx 44'16	
evening max el	16380 Apr 25 11:51	14° \approx 57'53	26°14'05	desc. node	16381 Mar 06 10:42	10° \approx 54'07	
retrograde	16380 May 08 08:23	22° \approx 19'14			16381 Mar 17 09:32	0° \approx	
asc. node	16380 May 13 23:40	20° \approx 15'15		evening max el	16381 Apr 08 01:41	28° \approx 36'46	27°06'25
evening set	16380 May 14 13:57	19° \approx 47'06			16381 Apr 09 13:13	0° \approx	
min. Earth dist.	16380 May 18 16:28	15° \approx 28'45	0.67111 AU	retrograde	16381 Apr 21 12:40	6° \approx 08'04	
inferior conj	16380 May 20 10:55	13° \approx 17'41	1°50'50	evening set	16381 Apr 28 02:28	3° \approx 36'46	
minimum elong	16380 May 20 08:46	13° \approx 24'22	1°49'35	asc. node	16381 Apr 30 20:50	1° \approx 04'58	
morning rise	16380 May 26 04:26	7° \approx 33'32			16381 May 01 21:07	30° \approx 18'18	
direct	16380 May 29 09:47	6° \approx 34'43		min. Earth dist.	16381 May 02 00:05	29° \approx 51'50	0.65526 AU
morning max el	16380 Jun 04 22:39	10° \approx 03'27	18°33'15	inferior conj	16381 May 04 07:19	27° \approx 15'04	1°02'23
desc. node	16380 Jun 15 14:25	24° \approx 05'01		minimum elong	16381 May 04 05:45	27° \approx 19'30	1°01'18
	16380 Jun 19 10:59	0° \approx		morning rise	16381 May 10 10:39	21° \approx 43'42	
morning set	16380 Jun 26 02:18	10° \approx 22'59		direct	16381 May 13 06:25	21° \approx 00'46	
	16380 Jul 08 15:22	0° \approx		morning max el	16381 May 19 13:36	24° \approx 16'58	18°01'31
max. Earth dist.	16380 Jul 11 16:51	4° \approx 46'16	1.45992 AU		16381 May 24 08:26	0° \approx	
				desc. node	16381 Jun 02 11:25	14° \approx 01'16	
superior conj	16380 Jul 12 00:25	5° \approx 15'47	-2°13'46	morning set	16381 Jun 06 22:30	21° \approx 16'56	
minimum elong	16380 Jul 11 22:31	5° \approx 08'23	2°14'19		16381 Jun 12 07:28	0° \approx	
evening rise	16380 Jul 27 18:11	29° \approx 05'08					
	16380 Jul 27 18:55	0° \approx		superior conj	16381 Jun 21 12:10	14° \approx 39'12	-1°58'57
greatest brilliancy	16380 Aug 04 14:21	12° \approx 19'09	-0.8m	minimum elong	16381 Jun 21 04:20	14° \approx 08'20	1°59'05
asc. node	16380 Aug 09 23:28	20° \approx 32'04		max. Earth dist.	16381 Jun 24 13:30	19° \approx 26'49	1.45846 AU
	16380 Aug 17 04:26	0° \approx			16381 Jul 01 08:25	0° \approx	
evening max el	16380 Aug 18 01:57	0° \approx 55'28	18°40'50	evening rise	16381 Jul 07 15:07	9° \approx 40'55	
retrograde	16380 Aug 24 15:38	4° \approx 28'38		greatest brilliancy	16381 Jul 20 14:01	29° \approx 20'12	-0.7m
evening set	16380 Aug 27 21:39	3° \approx 28'22			16381 Jul 21 00:50	0° \approx	
	16380 Aug 31 17:17	30° \approx 18'18		asc. node	16381 Jul 27 20:14	9° \approx 30'11	
inferior conj	16380 Sep 02 13:03	27° \approx 48'32	2°23'24	evening max el	16381 Aug 01 10:22	14° \approx 48'34	19°25'57
minimum elong	16380 Sep 02 15:16	27° \approx 41'40	2°22'47	retrograde	16381 Aug 08 13:12	18° \approx 45'48	
min. Earth dist.	16380 Sep 04 10:26	25° \approx 28'30	0.65953 AU	evening set	16381 Aug 12 05:14	17° \approx 27'53	
morning rise	16380 Sep 08 07:49	21° \approx 22'55		inferior conj	16381 Aug 17 14:28	11° \approx 34'57	2°50'42
desc. node	16380 Sep 11 12:13	19° \approx 23'07		minimum elong	16381 Aug 17 16:05	11° \approx 29'35	2°50'11
direct	16380 Sep 14 15:17	18° \approx 45'39		min. Earth dist.	16381 Aug 18 21:48	9° \approx 51'45	0.67455 AU
morning max el	16380 Sep 27 19:05	26° \approx 31'47	26°43'01	morning rise	16381 Aug 23 02:22	5° \approx 08'13	
	16380 Oct 01 00:41	0° \approx		direct	16381 Aug 29 00:07	2° \approx 35'21	
	16380 Oct 22 06:53	0° \approx		desc. node	16381 Aug 29 09:33	2° \approx 35'58	
morning set	16380 Nov 02 13:48	19° \approx 59'36		morning max el	16381 Sep 10 06:17	9° \approx 54'24	25°28'33
asc. node	16380 Nov 06 00:29	26° \approx 41'11			16381 Sep 26 05:03	0° \approx	
max. Earth dist.	16380 Nov 06 13:56	27° \approx 48'02	1.34064 AU		16381 Oct 14 20:58	0° \approx	
	16380 Nov 07 16:13	0° \approx		morning set	16381 Oct 16 03:58	2° \approx 18'56	
				max. Earth dist.	16381 Oct 19 17:25	8° \approx 52'38	1.36125 AU
superior conj	16380 Nov 11 08:15	7° \approx 32'42	0°47'00	asc. node	16381 Oct 23 21:18	16° \approx 52'36	
minimum elong	16380 Nov 11 06:04	7° \approx 21'20	0°47'12				
evening rise	16380 Nov 18 15:24	23° \approx 00'05		superior conj	16381 Oct 25 23:50	21° \approx 03'02	0°18'56
	16380 Nov 22 00:25	0° \approx		minimum elong	16381 Oct 25 22:42	20° \approx 57'23	0°19'11
desc. node	16380 Dec 08 10:09	25° \approx 43'00			16381 Oct 30 09:34	0° \approx	
evening max el	16380 Dec 08 13:13	25° \approx 50'35	21°24'49	evening rise	16381 Nov 02 22:03	7° \approx 14'10	
	16380 Dec 13 23:30	0° \approx			16381 Nov 15 08:44	0° \approx	
retrograde	16380 Dec 20 13:13	1° \approx 46'24		evening max el	16381 Nov 20 15:45	6° \approx 32'10	20°01'40
evening set	16380 Dec 23 12:07	1° \approx 26'23		desc. node	16381 Nov 25 07:11	10° \approx 08'58	
	16380 Dec 27 15:17	30° \approx 18'18		retrograde	16381 Dec 01 01:48	11° \approx 43'51	
inferior conj	16381 Jan 01 04:25	27° \approx 36'35	-5°53'07	evening set	16381 Dec 03 05:06	11° \approx 31'45	

inferior conj	16381 Dec 11 23:23	7°  33'35	-4°51'37	evening max el	16382 Nov 03 08:39	18°  03'53	19°00'33
minimum elong	16381 Dec 11 13:25	7°  48'39	4°48'19	retrograde	16382 Nov 12 05:11	22°  31'40	
min. Earth dist.	16381 Dec 13 20:49	6°  24'55	0.54929 AU	desc. node	16382 Nov 12 04:18	22°  31'40	
morning rise	16381 Dec 19 20:46	3°  26'15		evening set	16382 Nov 14 02:33	22°  20'17	
direct	16381 Dec 24 19:43	2°  32'45		inferior conj	16382 Nov 22 10:51	18°  04'16	-3°14'50
morning max el	16382 Jan 07 12:18	9°  20'05	24°22'05	minimum elong	16382 Nov 22 02:56	18°  18'01	3°11'17
asc. node	16382 Jan 19 20:37	25°  19'47		min. Earth dist.	16382 Nov 25 07:33	16°  05'14	0.56318 AU
	16382 Jan 22 14:53	0° 		morning rise	16382 Nov 30 00:37	13°  23'27	
morning set	16382 Feb 01 14:32	19°  44'12		direct	16382 Dec 05 19:34	12°  04'45	
	16382 Feb 06 07:18	0° 		morning max el	16382 Dec 19 22:44	19°  18'59	26°03'40
					16382 Dec 28 23:29	0° 	
superior conj	16382 Feb 08 09:13	4°  34'06	1°31'34	asc. node	16383 Jan 06 17:48	13°  53'33	
minimum elong	16382 Feb 08 10:43	4°  42'20	1°31'48		16383 Jan 15 00:50	0° 	
max. Earth dist.	16382 Feb 10 17:54	9°  42'01	1.32360 AU	morning set	16383 Jan 17 01:42	4°  19'53	
evening rise	16382 Feb 15 21:29	20°  29'21					
	16382 Feb 20 18:08	0° 		superior conj	16383 Jan 23 19:09	19°  11'36	1°37'30
desc. node	16382 Feb 21 07:24	1°  02'08		minimum elong	16383 Jan 23 19:39	19°  14'25	1°37'59
	16382 Mar 11 09:22	0° 		max. Earth dist.	16383 Jan 24 22:23	21°  43'03	1.31408 AU
evening max el	16382 Mar 21 14:15	11°  05'14	27°34'00		16383 Jan 28 17:11	0° 	
retrograde	16382 Apr 04 09:57	19°  23'25		evening rise	16383 Jan 30 20:31	4°  32'32	
evening set	16382 Apr 11 04:44	16°  59'38		desc. node	16383 Feb 08 04:06	20°  51'31	
min. Earth dist.	16382 Apr 14 23:21	13°  44'13	0.63587 AU		16383 Feb 13 10:37	0° 	
inferior conj	16382 Apr 17 18:11	10°  53'25	0°00'07	evening max el	16383 Mar 03 23:11	24°  28'50	27°30'36
minimum elong	16382 Apr 17 18:12	10°  53'24	0°00'16		16383 Mar 11 05:23	0° 	
transit middle	16382 Apr 17 18:12	10°  53'24	0°00'16	retrograde	16383 Mar 17 23:13	1°  54'33	
transit begin	16382 Apr 17 15:02	11°  01'31			16383 Mar 24 08:38	30°  00'00	
transit end	16382 Apr 17 21:21	10°  45'19		evening set	16383 Mar 24 18:03	29°  45'40	
asc. node	16382 Apr 17 18:03	10°  53'47		min. Earth dist.	16383 Mar 28 12:48	26°  53'12	0.61397 AU
morning rise	16382 Apr 24 10:08	5°  37'16		inferior conj	16383 Mar 31 16:08	24°  03'05	-1°16'21
direct	16382 Apr 26 21:22	5°  07'18		minimum elong	16383 Mar 31 18:51	23°  56'53	1°15'28
morning max el	16382 May 03 07:05	8°  23'03	17°47'07	asc. node	16383 Apr 04 15:19	20°  46'49	
	16382 May 17 20:52	0° 		morning rise	16383 Apr 07 22:59	19°  05'01	
morning set	16382 May 19 21:06	3°  25'45		direct	16383 Apr 10 03:03	18°  44'41	
desc. node	16382 May 20 08:21	4°  21'34		morning max el	16383 Apr 16 23:59	22°  11'45	17°50'34
					16383 Apr 23 01:25	0° 	
superior conj	16382 Jun 01 16:02	24°  21'15	-1°29'03	morning set	16383 May 02 16:53	16°  32'53	
minimum elong	16382 Jun 01 08:04	24°  21'15	1°28'48	desc. node	16383 May 07 05:12	24°  36'43	
	16382 Jun 04 20:55	0° 			16383 May 10 06:40	0° 	
max. Earth dist.	16382 Jun 07 08:52	3°  58'55	1.44969 AU				
evening rise	16382 Jun 17 01:39	19°  04'53		superior conj	16383 May 13 18:54	6°  20'03	-0°52'04
	16382 Jun 24 06:49	0° 		minimum elong	16383 May 13 14:13	5°  21'43	0°51'55
asc. node	16382 Jul 14 17:01	27°  52'36		max. Earth dist.	16383 May 21 00:07	18°  04'32	1.43447 AU
evening max el	16382 Jul 15 12:50	28°  43'21	20°26'02	evening rise	16383 May 27 18:26	28°  50'59	
	16382 Jul 16 21:23	0° 			16383 May 28 12:08	0° 	
retrograde	16382 Jul 23 12:16	3°  16'16			16383 Jun 17 23:12	0° 	
evening set	16382 Jul 27 14:52	1°  40'19		evening max el	16383 Jun 28 09:18	12°  37'35	21°38'21
	16382 Jul 29 09:34	30°  00'00		asc. node	16383 Jul 01 13:53	15°  27'07	
inferior conj	16382 Aug 01 20:54	25°  35'29	3°05'02	retrograde	16383 Jul 07 10:55	17°  25'40	
minimum elong	16382 Aug 01 21:39	25°  32'55	3°04'33	evening set	16383 Jul 12 00:38	16°  20'00	
min. Earth dist.	16382 Aug 02 14:28	24°  35'12	0.68503 AU	inferior conj	16383 Jul 17 06:08	9°  45'41	3°07'57
morning rise	16382 Aug 07 04:07	19°  21'15		minimum elong	16383 Jul 17 05:56	9°  46'24	3°07'23
direct	16382 Aug 12 14:27	16°  49'57		min. Earth dist.	16383 Jul 17 10:24	9°  30'48	0.69064 AU
desc. node	16382 Aug 16 06:52	17°  44'00		morning rise	16383 Jul 22 11:02	3°  27'49	
morning max el	16382 Aug 23 17:22	23°  28'30	24°02'16	direct	16383 Jul 27 09:13	1°  21'32	
	16382 Aug 29 12:22	0° 		desc. node	16383 Aug 03 04:09	4°  23'25	
	16382 Sep 19 13:37	0° 		morning max el	16383 Aug 06 05:45	7°  21'40	22°33'20
morning set	16382 Sep 27 23:13	13°  49'13			16383 Aug 23 23:26	0° 	
max. Earth dist.	16382 Oct 01 16:30	20°  41'56	1.38483 AU	morning set	16383 Sep 08 19:52	24°  22'27	
	16382 Oct 07 00:28	0° 			16383 Sep 12 05:52	0° 	
				max. Earth dist.	16383 Sep 13 17:01	2°  27'23	1.40878 AU
superior conj	16382 Oct 09 03:10	3°  58'44	-0°14'24				
minimum elong	16382 Oct 09 04:10	4°  03'26	0°13'54	superior conj	16383 Sep 21 14:09	16°  28'57	-0°51'01
behind sun begin	16382 Oct 09 00:33	3°  46'19		minimum elong	16383 Sep 21 18:13	16°  28'57	0°50'14
behind sun end	16382 Oct 09 07:46	4°  20'34		asc. node	16383 Sep 27 14:48	27°  14'19	
asc. node	16382 Oct 10 18:04	7°  04'46			16383 Sep 29 02:09	0° 	
evening rise	16382 Oct 17 23:08	21°  12'59		evening rise	16383 Oct 01 15:27	4°  48'38	
	16382 Oct 22 11:47	0° 			16383 Oct 17 04:13	0° 	

evening max el	16383 Oct 17 13:05	0° X 22'42	18°21'36	asc. node	16384 Sep 13 11:31	17° L 17'06	
retrograde	16383 Oct 25 03:45	4° X 15'09		evening rise	16384 Sep 13 18:49	17° L 49'48	
evening set	16383 Oct 27 04:09	3° X 59'31			16384 Sep 20 16:12	0° M	
desc. node	16383 Oct 30 01:30	2° X 47'41		evening max el	16384 Sep 30 00:45	13° M 18'14	18°03'10
	16383 Nov 03 01:24	30° R M		retrograde	16384 Oct 06 19:45	16° M 48'00	
inferior conj	16383 Nov 03 20:02	29° M 22'27	-1°32'23	evening set	16384 Oct 09 03:07	16° M 23'54	
minimum elong	16383 Nov 03 16:29	29° M 29'40	1°30'25	desc. node	16384 Oct 15 22:45	11° M 33'29	
min. Earth dist.	16383 Nov 07 01:53	26° M 45'13	0.58298 AU	inferior conj	16384 Oct 16 01:50	11° M 26'14	-0°02'26
morning rise	16383 Nov 11 01:19	24° M 04'46		minimum elong	16384 Oct 16 01:46	11° M 26'24	0°02'02
direct	16383 Nov 17 10:01	22° M 18'58		transit middle	16384 Oct 16 01:46	11° M 26'24	0°02'02
morning max el	16383 Dec 01 16:42	29° M 54'49	27°18'14	transit begin	16384 Oct 15 22:30	11° M 34'04	
	16383 Dec 01 18:49	0° X		transit end	16384 Oct 16 05:02	11° M 18'42	
	16383 Dec 22 23:34	0° Z		min. Earth dist.	16384 Oct 19 05:18	8° M 30'01	0.60566 AU
asc. node	16383 Dec 24 14:55	3° Z 01'32		morning rise	16384 Oct 22 21:17	5° M 37'47	
morning set	16384 Jan 01 10:15	18° Z 44'06		direct	16384 Oct 29 13:00	3° M 27'57	
	16384 Jan 06 13:27	0° \approx		morning max el	16384 Nov 12 18:30	11° M 18'42	27°55'23
					16384 Nov 27 11:00	0° X	
superior conj	16384 Jan 08 06:32	3° \approx 50'01	1°37'23	asc. node	16384 Dec 10 11:59	22° X 34'06	
minimum elong	16384 Jan 08 05:59	3° \approx 46'56	1°37'58		16384 Dec 14 05:12	0° Z	
max. Earth dist.	16384 Jan 08 05:46	3° \approx 45'45	1.30988 AU	morning set	16384 Dec 15 14:16	2° Z 51'42	
evening rise	16384 Jan 15 01:23	18° \approx 48'37		max. Earth dist.	16384 Dec 21 12:25	15° Z 41'50	1.31121 AU
	16384 Jan 20 12:08	0° X					
desc. node	16384 Jan 26 00:52	10° X 15'14		superior conj	16384 Dec 22 17:28	18° Z 23'35	1°31'14
	16384 Feb 08 07:16	0° Y		minimum elong	16384 Dec 22 15:58	18° Z 15'13	1°31'46
evening max el	16384 Feb 14 02:07	6° Y 18'02	26°52'22		16384 Dec 27 22:42	0° \approx	
retrograde	16384 Feb 28 03:09	13° Y 33'10		evening rise	16384 Dec 29 10:01	3° \approx 12'26	
evening set	16384 Mar 05 15:16	11° Y 46'21		desc. node	16385 Jan 11 21:42	29° \approx 03'31	
min. Earth dist.	16384 Mar 09 16:09	9° Y 06'44	0.59130 AU		16385 Jan 12 11:40	0° X	
inferior conj	16384 Mar 12 21:27	6° Y 34'41	-2°44'29	evening max el	16385 Jan 25 21:07	17° X 14'51	25°40'37
minimum elong	16384 Mar 13 03:46	6° Y 22'12	2°42'06	retrograde	16385 Feb 08 19:19	24° X 15'56	
morning rise	16384 Mar 20 19:54	1° Y 57'01		evening set	16385 Feb 14 16:50	22° X 55'58	
asc. node	16384 Mar 21 12:37	1° Y 48'46		min. Earth dist.	16385 Feb 19 10:04	20° X 15'54	0.57030 AU
direct	16384 Mar 22 19:16	1° Y 42'44		inferior conj	16385 Feb 22 06:46	18° X 18'56	-4°15'28
morning max el	16384 Mar 30 12:44	5° Y 32'50	18°13'03	minimum elong	16385 Feb 22 15:59	18° X 03'12	4°12'27
	16384 Apr 14 23:33	0° Z		morning rise	16385 Mar 02 18:06	14° X 02'31	
morning set	16384 Apr 15 04:11	0° Z 21'48		direct	16385 Mar 04 17:55	13° X 50'23	
desc. node	16384 Apr 23 02:00	15° Z 06'02		asc. node	16385 Mar 08 09:56	14° X 33'55	
				morning max el	16385 Mar 13 17:12	18° X 14'20	18°56'30
superior conj	16384 Apr 24 20:11	18° Z 17'15	-0°14'38		16385 Mar 22 06:21	0° Y	
minimum elong	16384 Apr 24 19:00	18° Z 11'57	0°14'52	morning set	16385 Mar 30 02:20	14° Y 38'57	
behind sun begin	16384 Apr 24 16:15	17° Z 59'33			16385 Apr 06 23:06	0° Z	
behind sun end	16384 Apr 24 21:45	18° Z 24'20					
	16384 May 01 12:42	0° II		superior conj	16385 Apr 07 16:04	1° Z 20'51	0°19'14
max. Earth dist.	16384 May 02 10:26	1° II 32'08	1.41450 AU	minimum elong	16385 Apr 07 17:16	1° Z 26'35	0°18'44
evening rise	16384 May 07 05:15	9° II 27'22		desc. node	16385 Apr 09 22:46	5° Z 38'08	
	16384 May 20 12:45	0° E		max. Earth dist.	16385 Apr 14 17:20	14° Z 18'54	1.39193 AU
evening max el	16384 Jun 10 01:21	26° E 32'02	22°58'19	evening rise	16385 Apr 18 13:34	21° Z 00'04	
	16384 Jun 14 00:28	0° O			16385 Apr 23 23:39	0° II	
asc. node	16384 Jun 17 10:50	1° O 58'03			16385 May 14 13:37	0° E	
retrograde	16384 Jun 20 07:35	2° O 33'07		evening max el	16385 May 23 15:19	10° E 28'02	24°19'45
evening set	16384 Jun 25 08:49	0° O 24'31		retrograde	16385 Jun 04 00:56	17° E 08'04	
	16384 Jun 25 19:42	30° R E		asc. node	16385 Jun 04 07:50	17° E 07'43	
inferior conj	16384 Jun 30 16:10	24° E 01'04	3°00'13	evening set	16385 Jun 09 13:49	14° E 46'54	
minimum elong	16384 Jun 30 15:04	24° E 04'53	2°59'28	min. Earth dist.	16385 Jun 14 03:19	9° E 31'25	0.68728 AU
min. Earth dist.	16384 Jun 30 07:24	24° E 31'30	0.69139 AU	inferior conj	16385 Jun 15 01:06	8° E 17'59	2°42'02
morning rise	16384 Jul 05 21:12	17° E 50'54		minimum elong	16385 Jun 14 23:18	8° E 24'05	2°41'02
direct	16384 Jul 10 07:18	16° E 02'58		morning rise	16385 Jun 20 08:51	2° E 16'57	
morning max el	16384 Jul 18 22:06	21° E 01'10	21°09'36	direct	16385 Jun 24 07:17	0° E 48'33	
desc. node	16384 Jul 20 01:23	22° E 11'32		morning max el	16385 Jul 01 20:56	5° E 02'19	19°57'05
	16384 Jul 26 12:43	0° O		desc. node	16385 Jul 06 22:34	10° E 50'47	
	16384 Aug 16 04:12	0° P			16385 Jul 20 10:46	0° O	
morning set	16384 Aug 18 17:10	3° P 56'45		morning set	16385 Jul 28 23:01	12° O 54'10	
max. Earth dist.	16384 Aug 25 23:13	15° P 29'55	1.43036 AU	max. Earth dist.	16385 Aug 08 12:16	29° O 20'46	1.44715 AU
					16385 Aug 08 22:10	0° P	
superior conj	16384 Sep 02 04:22	27° P 28'50	-1°27'18				
minimum elong	16384 Sep 02 11:29	27° P 59'07	1°26'31	superior conj	16385 Aug 13 19:10	7° P 48'45	-1°57'15
	16384 Sep 03 15:48	0° L		minimum elong	16385 Aug 14 02:45	8° P 19'29	1°56'59

evening rise	16385 Aug 27 04:10	0°♄04'04		max. Earth dist.	16386 Jul 22 06:25	13°♄44'11	1.45738 AU
	16385 Aug 27 03:13	0°♄					
asc. node	16385 Aug 31 08:15	7°♄09'13		superior conj	16386 Jul 24 13:09	17°♄18'33	-2°13'17
evening max el	16385 Sep 13 15:33	26°♄40'26	18°03'42	minimum elong	16386 Jul 24 15:50	17°♄29'06	2°13'42
	16385 Sep 19 14:08	0°♄			16386 Aug 01 13:38	0°♄	
retrograde	16385 Sep 20 01:09	0°♄01'06		evening rise	16386 Aug 08 14:19	11°♄18'34	
	16385 Sep 20 12:11	30°♄		asc. node	16386 Aug 18 04:58	26°♄45'18	
evening set	16385 Sep 22 16:50	29°♄24'59			16386 Aug 20 07:34	0°♄	
inferior conj	16385 Sep 29 00:43	24°♄08'53	1°08'39	evening max el	16386 Aug 28 05:55	10°♄19'49	18°22'17
minimum elong	16385 Sep 29 02:30	24°♄04'07	1°08'14	retrograde	16386 Sep 03 15:37	13°♄44'52	
min. Earth dist.	16385 Oct 01 18:41	21°♄13'59	0.62840 AU	evening set	16386 Sep 06 16:14	12°♄53'58	
desc. node	16385 Oct 02 20:01	20°♄11'03		inferior conj	16386 Sep 12 12:37	7°♄21'59	2°00'58
morning rise	16385 Oct 05 09:53	17°♄58'58		minimum elong	16386 Sep 12 14:56	7°♄15'08	2°00'21
direct	16385 Oct 12 02:09	15°♄32'02		min. Earth dist.	16386 Sep 14 17:49	4°♄45'30	0.64904 AU
morning max el	16385 Oct 26 02:11	23°♄29'34	27°53'25	morning rise	16386 Sep 18 12:12	0°♄59'44	
	16385 Oct 31 22:21	0°♄		desc. node	16386 Sep 19 17:19	0°♄06'15	
	16385 Nov 20 18:36	0°♄			16386 Sep 19 21:11	30°♄	
asc. node	16385 Nov 27 09:00	12°♄24'20		direct	16386 Sep 24 23:49	28°♄24'01	
morning set	16385 Nov 29 11:32	16°♄37'38			16386 Sep 30 14:17	0°♄	
max. Earth dist.	16385 Dec 04 14:36	27°♄23'32	1.31823 AU	morning max el	16386 Oct 08 13:07	6°♄18'17	27°16'54
	16385 Dec 05 19:28	0°♄			16386 Oct 26 18:30	0°♄	
				morning set	16386 Nov 12 23:25	29°♄56'24	
superior conj	16385 Dec 07 02:02	2°♄47'09	1°18'58		16386 Nov 13 00:09	0°♄	
minimum elong	16385 Dec 06 23:52	2°♄35'14	1°19'21	asc. node	16386 Nov 14 05:56	2°♄26'40	
evening rise	16385 Dec 13 20:33	17°♄39'33		max. Earth dist.	16386 Nov 17 08:57	8°♄46'16	1.33089 AU
	16385 Dec 19 19:37	0°♄					
desc. node	16385 Dec 29 18:34	17°♄03'21		superior conj	16386 Nov 21 06:05	16°♄55'23	1°00'29
evening max el	16386 Jan 07 08:34	27°♄26'35	24°04'24	minimum elong	16386 Nov 21 03:43	16°♄42'45	1°00'43
	16386 Jan 10 07:35	0°♄			16386 Nov 27 07:41	0°♄	
retrograde	16386 Jan 20 21:44	4°♄10'09		evening rise	16386 Nov 28 07:10	2°♄05'46	
evening set	16386 Jan 25 19:53	3°♄17'31			16386 Dec 13 13:57	0°♄	
min. Earth dist.	16386 Jan 31 20:12	0°♄20'08	0.55388 AU	desc. node	16386 Dec 16 15:29	3°♄58'04	
	16386 Feb 01 09:44	30°♄		evening max el	16386 Dec 19 18:36	7°♄21'34	22°20'45
inferior conj	16386 Feb 02 18:51	29°♄10'13	-5°30'22	retrograde	16387 Jan 01 12:12	13°♄39'20	
minimum elong	16386 Feb 03 02:48	28°♄58'17	5°28'35	evening set	16387 Jan 05 04:00	13°♄09'53	
morning rise	16386 Feb 11 11:29	25°♄12'48		min. Earth dist.	16387 Jan 13 02:00	9°♄35'16	0.54482 AU
direct	16386 Feb 13 21:03	24°♄58'06		inferior conj	16387 Jan 13 14:23	9°♄17'54	-6°02'19
asc. node	16386 Feb 23 07:16	29°♄04'15		minimum elong	16387 Jan 13 14:35	9°♄17'37	6°01'46
	16386 Feb 24 07:29	0°♄		morning rise	16387 Jan 22 02:11	5°♄30'26	
morning max el	16386 Feb 24 09:06	0°♄03'55	20°02'53	direct	16387 Jan 25 08:21	5°♄06'39	
morning set	16386 Mar 14 07:34	29°♄12'36		morning max el	16387 Feb 06 10:01	10°♄56'43	21°32'08
	16386 Mar 14 16:52	0°♄		asc. node	16387 Feb 10 04:33	15°♄05'53	
					16387 Feb 19 17:42	0°♄	
superior conj	16386 Mar 22 02:05	15°♄01'19	0°47'33	morning set	16387 Feb 26 17:07	13°♄54'40	
minimum elong	16386 Mar 22 04:26	15°♄13'00	0°47'03				
desc. node	16386 Mar 27 19:30	26°♄08'37		superior conj	16387 Mar 05 22:28	29°♄08'27	1°09'37
max. Earth dist.	16386 Mar 28 00:05	26°♄30'13	1.36913 AU	minimum elong	16387 Mar 06 00:58	29°♄21'24	1°09'21
	16386 Mar 29 21:14	0°♄			16387 Mar 06 08:23	0°♄	
evening rise	16386 Mar 31 17:28	3°♄21'12		max. Earth dist.	16387 Mar 10 10:54	8°♄21'51	1.34837 AU
	16386 Apr 17 00:27	0°♄		evening rise	16387 Mar 14 13:40	16°♄21'52	
evening max el	16386 May 06 04:50	24°♄22'16	25°35'42	desc. node	16387 Mar 14 16:13	16°♄33'56	
	16386 May 13 08:29	0°♄			16387 Mar 22 03:27	0°♄	
retrograde	16386 May 18 13:54	1°♄31'24			16387 Apr 11 10:48	0°♄	
asc. node	16386 May 22 04:55	0°♄38'04		evening max el	16387 Apr 18 18:29	8°♄08'42	26°38'44
	16386 May 23 07:02	30°♄		retrograde	16387 May 01 21:40	15°♄35'35	
evening set	16386 May 24 13:54	29°♄01'40		evening set	16387 May 08 07:14	13°♄02'42	
min. Earth dist.	16386 May 28 19:58	24°♄23'08	0.67839 AU	asc. node	16387 May 09 02:02	12°♄22'34	
inferior conj	16386 May 30 06:55	22°♄31'08	2°12'55	min. Earth dist.	16387 May 12 07:22	8°♄59'14	0.66494 AU
minimum elong	16386 May 30 04:44	22°♄38'08	2°11'43	inferior conj	16387 May 14 07:26	6°♄35'48	1°31'54
morning rise	16386 Jun 04 20:05	16°♄40'35		minimum elong	16387 May 14 05:26	6°♄41'48	1°30'40
direct	16386 Jun 08 07:29	15°♄31'23		morning rise	16387 May 20 04:49	0°♄57'07	
morning max el	16386 Jun 15 03:02	19°♄12'29	18°59'12	direct	16387 May 23 05:58	0°♄05'26	
desc. node	16386 Jun 23 19:41	0°♄07'10		morning max el	16387 May 29 15:25	3°♄27'05	18°17'40
	16386 Jun 23 17:41	0°♄		desc. node	16387 Jun 10 16:44	19°♄50'59	
greatest brilliancy	16386 Jun 28 06:56	6°♄42'27	-0.7m		16387 Jun 17 02:42	0°♄	
morning set	16386 Jul 08 07:12	22°♄02'54		morning set	16387 Jun 18 11:42	2°♄11'23	
	16386 Jul 13 10:30	0°♄					

superior conj	16387 Jul 03 22:15	26°☿31'21	-2°09'46	minimum elong	16388 Jun 12 06:55	5°☿37'34	1°47'34
minimum elong	16387 Jul 03 17:13	26°☿11'44	2°10'12	max. Earth dist.	16388 Jun 16 22:32	12°☿59'04	1.45554 AU
max. Earth dist.	16387 Jul 05 02:41	28°☿22'14	1.46022 AU		16388 Jun 27 22:08	0°♌	
	16387 Jul 06 03:48	0°♌		evening rise	16388 Jun 28 13:53	1°♌00'17	
evening rise	16387 Jul 19 23:23	21°♌30'34		greatest brilliancy	16388 Jul 13 02:42	22°♌48'53	-0.6m
	16387 Jul 25 10:18	0°♍			16388 Jul 18 05:35	0°♍	
greatest brilliancy	16387 Jul 30 04:30	7°♍19'37	-0.8m	asc. node	16388 Jul 21 22:27	4°♍43'32	
asc. node	16387 Aug 05 01:41	15°♍59'13		evening max el	16388 Jul 24 22:57	8°♍03'06	19°49'51
evening max el	16387 Aug 11 17:01	24°♍09'00	18°58'04	retrograde	16388 Aug 01 09:56	12°♍14'37	
retrograde	16387 Aug 18 11:28	27°♍51'17		evening set	16388 Aug 05 06:17	10°♍49'13	
evening set	16387 Aug 21 21:35	26°♍43'40		inferior conj	16388 Aug 10 13:49	4°♍51'09	2°58'16
inferior conj	16387 Aug 27 09:58	20°♍57'53	2°36'43	minimum elong	16388 Aug 10 15:05	4°♍46'52	2°57'46
minimum elong	16387 Aug 27 11:59	20°♍51'27	2°36'08	min. Earth dist.	16388 Aug 11 15:20	3°♍25'22	0.67954 AU
min. Earth dist.	16387 Aug 29 01:20	18°♍52'32	0.66636 AU		16388 Aug 14 09:28	30°♌♌	
morning rise	16387 Sep 02 01:31	14°♍30'54		morning rise	16388 Aug 15 23:25	28°♌25'04	
desc. node	16387 Sep 06 14:39	12°♍04'41		direct	16388 Aug 21 16:28	25°♌55'56	
direct	16387 Sep 08 04:59	11°♍54'44		desc. node	16388 Aug 23 11:58	26°♌09'02	
morning max el	16387 Sep 21 00:44	19°♍31'53	26°13'31		16388 Aug 30 06:17	0°♍	
	16387 Sep 29 23:36	0°♎		morning max el	16388 Sep 02 11:46	2°♍59'59	24°52'42
	16387 Oct 19 20:11	0°♎			16388 Sep 23 03:11	0°♎	
morning set	16387 Oct 26 22:35	12°♎39'44		morning set	16388 Oct 08 05:12	24°♎39'22	
max. Earth dist.	16387 Oct 30 17:19	19°♎51'37	1.34883 AU		16388 Oct 11 04:44	0°♎	
asc. node	16387 Nov 01 02:45	22°♎35'38		max. Earth dist.	16388 Oct 11 17:43	0°♎59'16	1.37099 AU
	16387 Nov 04 19:00	0°♏		asc. node	16388 Oct 17 23:33	12°♎47'42	
superior conj	16387 Nov 05 03:01	0°♏41'07	0°35'48	superior conj	16388 Oct 18 13:51	13°♎57'34	0°05'22
minimum elong	16387 Nov 05 01:10	0°♏31'36	0°36'01	minimum elong	16388 Oct 18 13:29	13°♎55'45	0°05'43
evening rise	16387 Nov 12 15:52	16°♏25'17		behind sun begin	16388 Oct 18 07:18	13°♎25'30	
	16387 Nov 19 11:03	0°♐		behind sun end	16388 Oct 18 19:40	14°♎26'05	
evening max el	16387 Dec 01 13:07	17°♐37'43	20°46'59	evening rise	16388 Oct 26 20:28	0°♏33'12	
desc. node	16387 Dec 03 12:29	19°♐25'07			16388 Oct 26 13:53	0°♏	
retrograde	16387 Dec 12 22:05	23°♐16'05		evening max el	16388 Nov 12 21:58	28°♏40'22	19°33'00
evening set	16387 Dec 15 10:37	23°♐00'41			16388 Nov 14 08:13	0°♐	
inferior conj	16387 Dec 24 05:15	19°♐08'38	-5°33'21	desc. node	16388 Nov 19 09:32	3°♐00'33	
minimum elong	16387 Dec 23 21:05	19°♐20'23	5°31'16	retrograde	16388 Nov 22 15:30	3°♐32'25	
min. Earth dist.	16387 Dec 25 07:23	18°♐31'06	0.54492 AU	evening set	16388 Nov 24 14:44	3°♐21'22	
morning rise	16388 Jan 01 07:28	15°♐13'40			16388 Dec 02 02:49	30°♌♏	
direct	16388 Jan 05 15:52	14°♐32'55		inferior conj	16388 Dec 03 06:05	29°♏16'51	-4°12'58
morning max el	16388 Jan 18 22:23	21°♐02'35	23°18'28	minimum elong	16388 Dec 02 20:22	29°♏32'20	4°09'15
	16388 Jan 26 11:36	0°♑		min. Earth dist.	16388 Dec 05 15:24	27°♏45'31	0.55430 AU
asc. node	16388 Jan 28 01:49	2°♑19'26		morning rise	16388 Dec 11 00:09	24°♏56'17	
morning set	16388 Feb 11 04:44	28°♑38'01		direct	16388 Dec 16 08:31	23°♏52'11	
	16388 Feb 11 20:03	0°♒			16388 Dec 29 08:03	0°♐	
superior conj	16388 Feb 18 02:02	13°♒32'40	1°25'21	morning max el	16388 Dec 30 06:37	0°♐52'18	25°07'25
minimum elong	16388 Feb 18 04:01	13°♒43'21	1°25'24	asc. node	16389 Jan 13 23:02	20°♐27'58	
max. Earth dist.	16388 Feb 21 04:43	20°♒10'33	1.33131 AU		16389 Jan 19 05:12	0°♑	
evening rise	16388 Feb 25 22:38	29°♒52'35		morning set	16389 Jan 25 16:35	13°♑17'38	
	16388 Feb 26 00:08	0°♓		superior conj	16389 Feb 01 10:16	28°♑07'02	1°34'49
desc. node	16388 Feb 29 12:55	6°♓49'17		minimum elong	16389 Feb 01 11:22	28°♑13'06	1°35'10
	16388 Mar 14 05:15	0°♈			16389 Feb 02 06:46	0°♈	
evening max el	16388 Mar 31 07:46	21°♈37'56	27°21'29	max. Earth dist.	16389 Feb 03 05:56	2°♈06'58	1.31893 AU
retrograde	16388 Apr 13 23:20	29°♈11'19		evening rise	16389 Feb 08 17:19	13°♈45'59	
evening set	16388 Apr 20 15:43	26°♈42'05		desc. node	16389 Feb 15 09:37	26°♈49'52	
min. Earth dist.	16388 Apr 24 11:39	23°♈10'23	0.64738 AU		16389 Feb 17 03:19	0°♓	
asc. node	16388 Apr 24 23:13	22°♈39'32			16389 Mar 09 09:35	0°♈	
inferior conj	16388 Apr 27 00:08	20°♈25'43	0°37'44	evening max el	16389 Mar 13 19:11	4°♈38'28	27°36'42
minimum elong	16388 Apr 26 23:07	20°♈28'31	0°36'52	retrograde	16389 Mar 27 17:35	12°♈08'31	
morning rise	16388 May 03 08:33	15°♈00'42		evening set	16389 Apr 03 12:50	9°♈50'25	
direct	16388 May 06 00:26	14°♈23'50		min. Earth dist.	16389 Apr 07 07:05	6°♈45'25	0.62672 AU
morning max el	16388 May 12 07:50	17°♈38'37	17°53'14	inferior conj	16389 Apr 10 05:59	3°♈52'56	-0°30'39
	16388 May 21 12:01	0°♉		minimum elong	16389 Apr 10 07:00	3°♈50'27	0°30'34
desc. node	16388 May 27 13:44	9°♉54'44		asc. node	16389 Apr 11 20:29	2°♉21'02	
morning set	16388 May 29 19:33	13°♉38'12			16389 Apr 14 17:54	30°♌♓	
	16388 Jun 08 18:46	0°♊		morning rise	16389 Apr 17 04:02	28°♓43'57	
				direct	16389 Apr 19 11:54	28°♓18'34	
superior conj	16388 Jun 12 15:29	6°♊11'40	-1°47'40		16389 Apr 24 03:07	0°♈	

morning max el	16389 Apr 26 01:27	1° C 38'06	17°46'17	desc. node	16390 May 01 07:29	20° C 38'34	
morning set	16389 May 12 03:55	26° C 13'58					
desc. node	16389 May 14 10:38	0° II 12'05		superior conj	16390 May 05 17:36	28° C 28'39	-0°35'57
	16389 May 14 07:51	0° II		minimum elong	16390 May 05 14:30	28° C 15'06	0°35'58
					16390 May 06 14:37	0° II	
superior conj	16389 May 24 04:47	16° II 48'03	-1°13'47	max. Earth dist.	16390 May 13 05:53	11° II 13'33	1.42652 AU
minimum elong	16389 May 23 22:01	16° II 19'58	1°13'30	evening rise	16390 May 19 00:50	20° II 35'15	
max. Earth dist.	16389 May 30 16:08	27° II 20'39	1.44391 AU		16390 May 25 02:11	0° C	
	16389 Jun 01 08:08	0° C			16390 Jun 15 11:15	0° C	
evening rise	16389 Jun 08 01:08	10° C 28'52		evening max el	16390 Jun 20 17:22	5° C 52'49	22°11'42
	16389 Jun 21 01:49	0° C		asc. node	16390 Jun 25 16:11	9° C 57'07	
evening max el	16389 Jul 07 22:54	21° C 58'07	20°55'36	retrograde	16390 Jun 30 06:47	11° C 27'49	
asc. node	16389 Jul 08 19:16	22° C 47'20		evening set	16390 Jul 05 01:30	9° C 27'39	
retrograde	16389 Jul 16 08:56	26° C 48'36		inferior conj	16390 Jul 10 07:32	3° C 08'53	3°05'54
evening set	16389 Jul 20 16:10	25° C 05'20		minimum elong	16390 Jul 10 06:56	3° C 10'58	3°05'17
inferior conj	16389 Jul 25 21:42	18° C 56'11	3°07'34	min. Earth dist.	16390 Jul 10 06:13	3° C 13'29	0.69167 AU
minimum elong	16389 Jul 25 22:03	18° C 54'59	3°07'04		16390 Jul 12 15:21	30° R C	
min. Earth dist.	16389 Jul 26 09:39	18° C 14'48	0.68806 AU	morning rise	16390 Jul 15 12:12	26° C 54'21	
morning rise	16389 Jul 31 03:39	12° C 34'44		direct	16390 Jul 20 05:18	24° C 55'37	
direct	16389 Aug 05 08:58	10° C 18'46		desc. node	16390 Jul 28 06:35	29° C 09'49	
desc. node	16389 Aug 10 09:17	11° C 58'42			16390 Jul 29 03:43	0° C	
morning max el	16389 Aug 15 22:54	16° C 36'42	23°24'09	morning max el	16390 Jul 29 12:36	0° C 22'00	21°56'37
	16389 Aug 27 00:55	0° R			16390 Aug 20 19:05	0° R	
	16389 Sep 16 03:16	0° C		morning set	16390 Aug 31 01:30	15° R 52'16	
morning set	16389 Sep 19 15:07	5° C 45'26		max. Earth dist.	16390 Sep 05 19:38	25° R 13'46	1.41852 AU
max. Earth dist.	16389 Sep 23 16:29	12° C 39'52	1.39520 AU		16390 Sep 08 15:59	0° C	
superior conj	16389 Oct 01 10:46	26° C 35'41	-0°29'42	superior conj	16390 Sep 13 13:24	8° C 25'38	-1°06'45
minimum elong	16389 Oct 01 12:58	26° C 45'56	0°29'04	minimum elong	16390 Sep 13 18:53	8° C 49'41	1°05'55
	16389 Oct 03 06:29	0° R		asc. node	16390 Sep 21 17:01	23° C 06'00	
asc. node	16389 Oct 04 20:18	2° R 58'58		evening rise	16390 Sep 24 05:35	27° C 44'59	
evening rise	16389 Oct 10 18:12	14° R 22'38			16390 Sep 25 10:53	0° R	
	16389 Oct 19 04:43	0° C		evening max el	16390 Oct 10 04:18	23° R 07'58	18°11'15
evening max el	16389 Oct 26 20:19	10° C 32'52	18°41'22	retrograde	16390 Oct 17 09:15	26° R 49'16	
retrograde	16389 Nov 04 02:39	14° C 43'46		evening set	16390 Oct 19 12:23	26° R 30'27	
evening set	16389 Nov 06 00:47	14° C 31'00		desc. node	16390 Oct 24 03:53	23° R 57'35	
desc. node	16389 Nov 06 06:40	14° C 27'36		inferior conj	16390 Oct 26 20:45	21° R 43'58	-0°52'05
inferior conj	16389 Nov 14 02:29	10° C 06'09	-2°30'36	minimum elong	16390 Oct 26 18:52	21° R 48'02	0°50'50
minimum elong	16389 Nov 13 20:24	10° C 17'26	2°27'38	min. Earth dist.	16390 Oct 30 02:33	18° R 56'26	0.59247 AU
min. Earth dist.	16389 Nov 17 04:48	7° C 48'58	0.57110 AU	morning rise	16390 Nov 02 22:00	16° R 12'12	
morning rise	16389 Nov 21 12:52	5° C 09'47		direct	16390 Nov 09 10:23	14° R 15'54	
direct	16389 Nov 27 14:46	3° C 39'24		morning max el	16390 Nov 23 17:06	21° R 58'17	27°39'05
morning max el	16389 Dec 11 19:37	11° C 02'51	26°39'35		16390 Nov 30 19:04	0° C	
	16389 Dec 26 10:04	0° C		asc. node	16390 Dec 18 17:19	28° C 36'49	
asc. node	16389 Dec 31 20:13	9° C 17'29			16390 Dec 19 10:40	0° C	
morning set	16390 Jan 10 02:53	27° C 48'54		morning set	16390 Dec 25 09:45	12° C 06'20	
	16390 Jan 11 03:07	0° C					
				superior conj	16391 Jan 01 08:27	27° C 21'56	1°35'32
superior conj	16390 Jan 16 21:04	12° C 45'31	1°38'12	minimum elong	16391 Jan 01 07:29	27° C 16'28	1°36'05
minimum elong	16390 Jan 16 21:07	12° C 45'50	1°38'44	max. Earth dist.	16390 Dec 31 19:55	26° C 11'43	1.30974 AU
max. Earth dist.	16390 Jan 17 12:13	14° C 10'14	1.31163 AU		16391 Jan 02 12:40	0° C	
evening rise	16390 Jan 23 19:09	27° C 55'38		evening rise	16391 Jan 08 01:49	12° C 15'11	
	16390 Jan 24 18:48	0° C			16391 Jan 16 22:23	0° C	
desc. node	16390 Feb 02 06:20	16° C 29'32		desc. node	16391 Jan 20 03:07	5° C 39'24	
	16390 Feb 10 10:53	0° C		evening max el	16391 Feb 06 01:53	28° C 24'09	26°25'38
evening max el	16390 Feb 24 02:12	16° C 57'42	27°18'48		16391 Feb 07 20:23	0° C	
retrograde	16390 Mar 10 02:55	24° C 18'30		retrograde	16391 Feb 20 01:47	5° C 33'19	
evening set	16390 Mar 16 19:46	22° C 18'34		evening set	16391 Feb 26 09:02	3° C 57'20	
min. Earth dist.	16390 Mar 20 16:24	19° C 32'50	0.60431 AU	min. Earth dist.	16391 Mar 02 15:15	1° C 19'45	0.58201 AU
inferior conj	16390 Mar 23 21:25	16° C 48'34	-1°52'36		16391 Mar 04 10:47	30° R C	
minimum elong	16390 Mar 24 01:37	16° C 39'35	1°51'03	inferior conj	16391 Mar 05 18:33	29° C 00'44	-3°23'34
asc. node	16390 Mar 29 17:47	12° C 37'35		minimum elong	16391 Mar 06 02:21	28° C 46'16	3°20'43
morning rise	16390 Mar 31 10:55	11° C 58'33		morning rise	16391 Mar 13 23:06	24° C 32'19	
direct	16390 Apr 02 12:40	11° C 41'08		direct	16391 Mar 15 21:59	24° C 19'20	
morning max el	16390 Apr 09 17:02	15° C 16'35	17°57'40	asc. node	16391 Mar 16 15:07	24° C 21'08	
	16390 Apr 19 21:59	0° C		morning max el	16391 Mar 24 02:47	28° C 22'07	18°28'55
morning set	16390 Apr 25 07:04	9° C 41'39			16391 Mar 25 15:35	0° C	

morning set	16391 Apr 08 23:30	23° Υ 44'06		morning max el	16392 Mar 06 02:26	10° Υ 42'48	19°21'57
	16391 Apr 12 05:55	0° Υ			16392 Mar 18 21:10	0° Υ	
				morning set	16392 Mar 23 00:58	8° Υ 08'48	
superior conj	16391 Apr 18 03:23	11° Υ 05'24	0°00'19				
minimum elong	16391 Apr 18 03:22	11° Υ 05'21	0°00'05	superior conj	16392 Mar 31 05:45	24° Υ 25'57	0°31'58
behind sun begin	16391 Apr 17 20:20	10° Υ 32'55		minimum elong	16392 Mar 31 07:35	24° Υ 34'50	0°31'26
behind sun end	16391 Apr 18 10:24	11° Υ 37'42			16392 Apr 03 03:29	0° Υ	
desc. node	16391 Apr 18 04:16	11° Υ 09'32		desc. node	16392 Apr 04 01:01	1° Υ 41'14	
max. Earth dist.	16391 Apr 25 14:49	24° Υ 25'06	1.40510 AU	max. Earth dist.	16392 Apr 06 20:41	6° Υ 53'20	1.38206 AU
	16391 Apr 28 21:47	0° Υ		evening rise	16392 Apr 10 13:39	13° Υ 29'19	
evening rise	16391 Apr 29 20:43	1° Υ 35'26			16392 Apr 20 13:14	0° Υ	
	16391 May 18 10:13	0° Υ			16392 May 12 09:34	0° Υ	
evening max el	16391 Jun 03 08:10	19° Υ 47'29	23°33'03	evening max el	16392 May 15 21:34	3° Υ 42'25	24°53'10
asc. node	16391 Jun 12 13:10	25° Υ 55'58		retrograde	16392 May 27 18:00	10° Υ 37'03	
retrograde	16391 Jun 14 02:13	26° Υ 06'08		asc. node	16392 May 29 10:12	10° Υ 25'20	
evening set	16391 Jun 19 08:34	23° Υ 51'29		evening set	16392 Jun 02 11:41	8° Υ 11'31	
min. Earth dist.	16391 Jun 24 02:56	18° Υ 14'40	0.69028 AU	min. Earth dist.	16392 Jun 06 21:45	3° Υ 11'52	0.68403 AU
inferior conj	16391 Jun 24 17:20	17° Υ 25'12	2°53'46	inferior conj	16392 Jun 08 01:10	1° Υ 41'05	2°31'05
minimum elong	16391 Jun 24 15:54	17° Υ 30'07	2°52'56	minimum elong	16392 Jun 07 23:10	1° Υ 47'45	2°29'59
morning rise	16391 Jun 29 23:14	11° Υ 18'59			16392 Jun 09 08:08	30° Υ	
direct	16391 Jul 04 04:14	9° Υ 39'34		morning rise	16392 Jun 13 10:54	25° Υ 44'19	
morning max el	16391 Jul 12 07:39	14° Υ 17'32	20°37'07	direct	16392 Jun 17 04:26	24° Υ 24'24	
desc. node	16391 Jul 15 03:49	17° Υ 21'36		morning max el	16392 Jun 24 09:38	28° Υ 23'07	19°30'28
	16391 Jul 24 18:23	0° Υ			16392 Jun 25 22:50	0° Υ	
morning set	16391 Aug 10 14:43	25° Υ 07'10		desc. node	16392 Jul 01 00:59	6° Υ 18'09	
	16391 Aug 13 18:01	0° Υ		greatest brilliancy	16392 Jul 07 02:47	14° Υ 54'16	-0.6m
max. Earth dist.	16391 Aug 19 05:06	8° Υ 39'26	1.43820 AU		16392 Jul 17 03:39	0° Υ	
				morning set	16392 Jul 19 18:58	4° Υ 02'20	
superior conj	16391 Aug 25 17:44	19° Υ 18'55	-1°41'14	max. Earth dist.	16392 Jul 31 20:05	22° Υ 44'18	1.45232 AU
minimum elong	16391 Aug 26 01:35	19° Υ 51'32	1°40'35				
	16391 Sep 01 01:26	0° Υ		superior conj	16392 Aug 04 22:50	29° Υ 15'07	-2°06'12
evening rise	16391 Sep 07 02:00	10° Υ 28'26		minimum elong	16392 Aug 05 05:03	29° Υ 39'51	2°06'16
asc. node	16391 Sep 08 13:44	13° Υ 05'02			16392 Aug 05 10:06	0° Υ	
	16391 Sep 18 17:41	0° Υ		evening rise	16392 Aug 19 02:00	22° Υ 18'28	
evening max el	16391 Sep 23 17:43	6° Υ 16'03	18°01'05		16392 Aug 23 16:58	0° Υ	
retrograde	16391 Sep 30 07:42	9° Υ 40'42		asc. node	16392 Aug 25 10:26	2° Υ 51'01	
evening set	16391 Oct 02 18:22	9° Υ 12'01		evening max el	16392 Sep 06 08:42	19° Υ 46'35	18°09'29
inferior conj	16391 Oct 09 10:24	4° Υ 06'06	0°30'05	retrograde	16392 Sep 12 17:22	23° Υ 07'38	
minimum elong	16391 Oct 09 11:18	4° Υ 03'51	0°30'03	evening set	16392 Sep 15 12:42	22° Υ 25'41	
desc. node	16391 Oct 11 01:09	2° Υ 29'06		inferior conj	16392 Sep 21 15:17	17° Υ 02'49	1°33'02
min. Earth dist.	16391 Oct 12 10:23	1° Υ 07'58	0.61542 AU	minimum elong	16392 Sep 21 17:26	16° Υ 56'50	1°32'28
	16391 Oct 13 16:01	30° Υ		min. Earth dist.	16392 Sep 24 04:11	14° Υ 13'34	0.63752 AU
morning rise	16391 Oct 16 01:24	28° Υ 06'58		desc. node	16392 Sep 26 22:28	11° Υ 30'52	
direct	16391 Oct 22 17:52	25° Υ 48'59		morning rise	16392 Sep 27 20:12	10° Υ 46'28	
	16391 Nov 01 16:33	0° Υ		direct	16392 Oct 04 11:05	8° Υ 14'23	
morning max el	16391 Nov 05 22:02	3° Υ 44'24	27°59'15	morning max el	16392 Oct 18 07:23	16° Υ 12'51	27°41'36
	16391 Nov 25 10:42	0° Υ			16392 Oct 29 17:14	0° Υ	
asc. node	16391 Dec 05 14:21	18° Υ 17'58			16392 Nov 17 04:35	0° Υ	
morning set	16391 Dec 09 11:11	26° Υ 05'45		asc. node	16392 Nov 21 11:18	8° Υ 13'55	
	16391 Dec 11 07:52	0° Υ		morning set	16392 Nov 22 04:46	9° Υ 40'54	
max. Earth dist.	16391 Dec 15 01:11	8° Υ 03'06	1.31347 AU	max. Earth dist.	16392 Nov 27 00:05	19° Υ 35'33	1.32291 AU
superior conj	16391 Dec 16 18:37	11° Υ 51'56	1°26'48	superior conj	16392 Nov 30 01:30	26° Υ 09'39	1°11'53
minimum elong	16391 Dec 16 16:47	11° Υ 41'47	1°27'15	minimum elong	16392 Nov 29 23:10	25° Υ 57'01	1°12'12
evening rise	16391 Dec 23 11:29	26° Υ 40'50			16392 Dec 01 19:45	0° Υ	
	16391 Dec 25 00:37	0° Υ		evening rise	16392 Dec 06 22:14	11° Υ 07'43	
desc. node	16392 Jan 06 23:56	24° Υ 08'54			16392 Dec 16 09:37	0° Υ	
	16392 Jan 10 23:51	0° Υ		desc. node	16392 Dec 23 20:49	11° Υ 43'21	
evening max el	16392 Jan 18 17:02	8° Υ 58'28	25°01'42	evening max el	16392 Dec 30 02:44	18° Υ 58'31	23°20'06
retrograde	16392 Feb 01 12:32	15° Υ 53'34		retrograde	16393 Jan 12 09:37	25° Υ 32'45	
evening set	16392 Feb 07 01:11	14° Υ 45'11		evening set	16393 Jan 16 18:58	24° Υ 51'05	
min. Earth dist.	16392 Feb 12 05:22	12° Υ 00'02	0.56255 AU	min. Earth dist.	16393 Jan 23 13:34	21° Υ 39'59	0.54894 AU
inferior conj	16392 Feb 14 18:36	10° Υ 21'41	-4°50'45	inferior conj	16393 Jan 24 22:36	20° Υ 52'14	-5°50'45
minimum elong	16392 Feb 15 04:02	10° Υ 06'30	4°48'03	minimum elong	16393 Jan 25 03:56	20° Υ 44'31	5°49'44
morning rise	16392 Feb 23 09:29	6° Υ 14'21		morning rise	16393 Feb 02 14:14	17° Υ 00'16	
direct	16392 Feb 25 11:56	6° Υ 01'53		direct	16393 Feb 05 07:07	16° Υ 42'43	
asc. node	16392 Mar 02 12:26	7° Υ 51'34		morning max el	16393 Feb 16 12:03	22° Υ 08'16	20°38'15

asc. node	16393 Feb 17 09:43	23° \approx 02'43		direct	16394 Jan 16 15:35	26° \approx 29'50	
	16393 Feb 22 21:56	0° \approx			16394 Jan 26 03:59	0° \approx	
morning set	16393 Mar 07 08:18	22° \approx 46'38		morning max el	16394 Jan 29 06:43	2° \approx 37'49	22°15'58
	16393 Mar 10 19:48	0° \approx		asc. node	16394 Feb 04 07:01	9° \approx 37'14	
					16394 Feb 16 04:03	0° \approx	
superior conj	16393 Mar 14 20:35	8° \approx 18'48	0°57'41	morning set	16394 Feb 19 18:57	7° \approx 29'56	
minimum elong	16393 Mar 14 23:05	8° \approx 31'32	0°57'16				
max. Earth dist.	16393 Mar 20 04:16	18° \approx 52'24	1.35989 AU	superior conj	16394 Feb 26 20:18	22° \approx 33'53	1°17'04
desc. node	16393 Mar 21 21:43	22° \approx 10'08		minimum elong	16394 Feb 26 22:38	22° \approx 46'14	1°16'56
evening rise	16393 Mar 24 00:56	26° \approx 08'47			16394 Mar 02 09:51	0° \approx	
	16393 Mar 26 03:53	0° \approx		max. Earth dist.	16394 Mar 02 18:04	0° \approx 41'57	1.34059 AU
	16393 Apr 14 00:09	0° \approx		evening rise	16394 Mar 07 02:57	9° \approx 23'21	
evening max el	16393 Apr 28 11:12	17° \approx 35'00	26°04'41	desc. node	16394 Mar 08 18:23	12° \approx 31'43	
retrograde	16393 May 11 05:00	24° \approx 53'30			16394 Mar 18 16:28	0° \approx	
asc. node	16393 May 16 07:17	23° \approx 11'05			16394 Apr 09 18:30	0° \approx	
evening set	16393 May 17 09:08	22° \approx 21'57		evening max el	16394 Apr 11 01:04	1° \approx 16'19	27°00'00
min. Earth dist.	16393 May 21 12:34	17° \approx 58'20	0.67311 AU	retrograde	16394 Apr 24 10:06	8° \approx 46'31	
inferior conj	16393 May 23 05:02	15° \approx 52'03	1°57'06	evening set	16394 Apr 30 22:56	6° \approx 14'37	
minimum elong	16393 May 23 02:51	15° \approx 58'53	1°55'51	asc. node	16394 May 03 04:27	4° \approx 14'03	
morning rise	16393 May 28 21:19	10° \approx 06'06		min. Earth dist.	16394 May 04 21:10	2° \approx 25'03	0.65790 AU
direct	16393 Jun 01 04:14	9° \approx 04'36			16394 May 06 23:37	30° \approx 08	
morning max el	16393 Jun 07 18:34	12° \approx 36'08	18°39'28	inferior conj	16394 May 07 02:34	29° \approx 51'29	1°10'39
desc. node	16393 Jun 17 22:04	25° \approx 47'48		minimum elong	16394 May 07 00:52	29° \approx 56'24	1°09'30
	16393 Jun 20 16:48	0° \approx		morning rise	16394 May 13 04:15	24° \approx 18'07	
morning set	16393 Jun 29 10:13	13° \approx 32'42		direct	16394 May 16 01:26	23° \approx 32'57	
	16393 Jul 09 23:24	0° \approx		morning max el	16394 May 22 08:53	26° \approx 50'04	18°05'12
max. Earth dist.	16393 Jul 14 15:11	7° \approx 15'31	1.45953 AU		16394 May 25 05:13	0° \approx	
				desc. node	16394 Jun 04 19:05	15° \approx 40'58	
superior conj	16393 Jul 15 11:17	8° \approx 33'51	-2°14'18	morning set	16394 Jun 10 02:16	24° \approx 14'47	
minimum elong	16393 Jul 15 10:36	8° \approx 31'13	2°14'51		16394 Jun 13 15:45	0° \approx	
	16393 Jul 29 02:32	0° \approx					
evening rise	16393 Jul 31 01:23	3° \approx 06'05		superior conj	16394 Jun 24 21:46	17° \approx 53'01	-2°02'21
greatest brilliancy	16393 Aug 06 19:24	13° \approx 49'23	-0.9m	minimum elong	16394 Jun 24 14:28	17° \approx 24'22	2°02'33
asc. node	16393 Aug 12 07:09	22° \approx 18'58		max. Earth dist.	16394 Jun 27 12:02	21° \approx 56'46	1.45918 AU
	16393 Aug 17 19:10	0° \approx			16394 Jul 02 16:15	0° \approx	
evening max el	16393 Aug 20 22:04	3° \approx 31'49	18°35'27	evening rise	16394 Jul 11 01:10	12° \approx 56'30	
retrograde	16393 Aug 27 10:22	7° \approx 02'16			16394 Jul 22 05:09	0° \approx	
evening set	16393 Aug 30 15:00	6° \approx 04'25		greatest brilliancy	16394 Jul 23 07:46	1° \approx 39'17	-0.7m
inferior conj	16393 Sep 05 07:37	0° \approx 26'36	2°18'00	asc. node	16394 Jul 30 03:54	11° \approx 21'40	
minimum elong	16393 Sep 05 09:52	0° \approx 19'40	2°17'21	evening max el	16394 Aug 04 07:15	17° \approx 24'17	19°18'12
	16393 Sep 05 16:17	30° \approx 08		retrograde	16394 Aug 11 07:37	21° \approx 17'13	
min. Earth dist.	16393 Sep 07 07:02	28° \approx 01'59	0.65698 AU	evening set	16394 Aug 14 22:07	20° \approx 01'54	
morning rise	16393 Sep 11 03:35	24° \approx 01'44		inferior conj	16394 Aug 20 08:04	14° \approx 10'41	2°47'26
desc. node	16393 Sep 13 19:47	22° \approx 16'11		minimum elong	16394 Aug 20 09:48	14° \approx 05'00	2°46'53
direct	16393 Sep 17 12:17	21° \approx 24'37		min. Earth dist.	16394 Aug 21 17:26	12° \approx 21'40	0.67258 AU
morning max el	16393 Sep 30 18:36	29° \approx 12'58	26°52'29	morning rise	16394 Aug 25 20:51	7° \approx 43'48	
	16393 Oct 01 12:59	0° \approx		direct	16394 Aug 31 20:08	5° \approx 09'58	
	16393 Oct 23 13:56	0° \approx		desc. node	16394 Aug 31 17:07	5° \approx 10'02	
morning set	16393 Nov 05 11:38	22° \approx 45'21		morning max el	16394 Sep 13 06:01	12° \approx 34'00	25°40'41
asc. node	16393 Nov 08 08:11	28° \approx 19'35			16394 Sep 27 07:56	0° \approx	
	16393 Nov 09 04:19	0° \approx			16394 Oct 16 06:41	0° \approx	
max. Earth dist.	16393 Nov 09 14:00	0° \approx 48'33	1.33797 AU	morning set	16394 Oct 19 04:18	5° \approx 11'36	
				max. Earth dist.	16394 Oct 22 18:50	11° \approx 53'43	1.35792 AU
superior conj	16393 Nov 14 02:51	10° \approx 09'20	0°50'45	asc. node	16394 Oct 26 05:01	18° \approx 30'45	
minimum elong	16393 Nov 14 00:36	9° \approx 57'30	0°50'58				
evening rise	16393 Nov 21 08:15	25° \approx 31'40		superior conj	16394 Oct 28 19:58	23° \approx 44'19	0°23'33
	16393 Nov 23 11:29	0° \approx		minimum elong	16394 Oct 28 18:37	23° \approx 37'30	0°23'48
desc. node	16393 Dec 10 17:46	28° \approx 03'45			16394 Oct 31 21:42	0° \approx	
evening max el	16393 Dec 11 15:25	28° \approx 58'42	21°38'50	evening rise	16394 Nov 05 15:33	9° \approx 47'52	
	16393 Dec 12 17:31	0° \approx			16394 Nov 16 08:41	0° \approx	
retrograde	16393 Dec 23 20:13	5° \approx 00'24		evening max el	16394 Nov 23 15:46	9° \approx 33'27	20°12'43
evening set	16393 Dec 26 23:20	4° \approx 38'15		desc. node	16394 Nov 27 14:48	12° \approx 34'59	
inferior conj	16394 Jan 04 14:19	0° \approx 48'30	-5°57'36	retrograde	16394 Dec 04 07:50	14° \approx 52'17	
minimum elong	16394 Jan 04 10:25	0° \approx 53'56	5°56'42	evening set	16394 Dec 06 13:04	14° \approx 39'34	
min. Earth dist.	16394 Jan 04 18:43	0° \approx 42'20	0.54372 AU	inferior conj	16394 Dec 15 07:50	10° \approx 43'12	-5°03'55
	16394 Jan 06 01:11	30° \approx 08		minimum elong	16394 Dec 14 22:05	10° \approx 57'43	5°00'54
morning rise	16394 Jan 12 22:04	27° \approx 00'11		min. Earth dist.	16394 Dec 17 00:30	9° \approx 42'39	0.54787 AU

morning rise	16394 Dec 23 06:24	6°♄39'44		evening set	16395 Nov 17 05:58	25°♄20'38	
direct	16394 Dec 28 01:43	5°♄49'47		inferior conj	16395 Nov 25 16:21	21°♄07'45	-3°30'26
morning max el	16395 Jan 10 16:05	12°♄32'37	24°05'43	minimum elong	16395 Nov 25 07:52	21°♄22'10	3°26'46
asc. node	16395 Jan 22 04:16	27°♄16'37		min. Earth dist.	16395 Nov 28 10:35	19°♄15'30	0.56066 AU
	16395 Jan 23 20:11	0°♄		morning rise	16395 Dec 03 07:13	16°♄32'15	
morning set	16395 Feb 04 06:57	22°♄13'11		direct	16395 Dec 08 23:33	15°♄17'24	
	16395 Feb 07 20:47	0°♄		morning max el	16395 Dec 23 01:48	22°♄28'25	25°49'49
					16395 Dec 29 17:55	0°♄	
superior conj	16395 Feb 11 02:09	7°♄03'44	1°30'07	asc. node	16396 Jan 09 01:28	15°♄44'10	
minimum elong	16395 Feb 11 03:48	7°♄12'40	1°30'18		16396 Jan 16 12:37	0°♄	
max. Earth dist.	16395 Feb 13 15:31	12°♄35'27	1.32546 AU	morning set	16396 Jan 19 18:23	6°♄50'12	
evening rise	16395 Feb 18 16:26	23°♄05'02					
	16395 Feb 22 04:53	0°♄		superior conj	16396 Jan 26 11:45	21°♄40'51	1°37'00
desc. node	16395 Feb 23 15:05	2°♄41'53		minimum elong	16396 Jan 26 12:25	21°♄44'34	1°37'26
	16395 Mar 12 08:53	0°♄		max. Earth dist.	16396 Jan 27 19:12	24°♄35'10	1.31517 AU
evening max el	16395 Mar 24 13:48	14°♄34'58	27°31'38		16396 Jan 30 06:28	0°♄	
retrograde	16395 Apr 07 08:30	22°♄07'19		evening rise	16396 Feb 02 14:27	7°♄05'57	
evening set	16395 Apr 14 02:53	19°♄41'48		desc. node	16396 Feb 10 11:48	22°♄34'28	
min. Earth dist.	16395 Apr 17 21:43	16°♄22'27	0.63897 AU		16396 Feb 14 16:58	0°♄	
asc. node	16395 Apr 20 01:40	14°♄07'46		evening max el	16396 Mar 05 23:25	27°♄18'27	27°33'14
inferior conj	16395 Apr 20 15:02	13°♄32'44	0°10'29		16396 Mar 09 00:48	0°♄	
minimum elong	16395 Apr 20 14:44	13°♄33'31	0°09'57	retrograde	16396 Mar 19 23:16	4°♄45'46	
transit middle	16395 Apr 20 14:44	13°♄33'31	0°09'57	evening set	16396 Mar 26 18:21	2°♄34'12	
transit begin	16395 Apr 20 12:17	13°♄39'55			16396 Mar 30 03:06	30°♄	
transit end	16395 Apr 20 17:11	13°♄27'07		min. Earth dist.	16396 Mar 30 12:46	29°♄38'47	0.61730 AU
morning rise	16395 Apr 27 04:58	8°♄14'20		inferior conj	16396 Apr 02 15:10	26°♄47'24	-1°03'56
direct	16395 Apr 29 17:23	7°♄42'40		minimum elong	16396 Apr 02 17:25	26°♄42'12	1°03'16
morning max el	16395 May 06 02:11	10°♄57'40	17°48'08	asc. node	16396 Apr 05 22:57	23°♄55'36	
	16395 May 19 05:00	0°♄		morning rise	16396 Apr 09 19:43	21°♄46'31	
morning set	16395 May 22 21:06	6°♄12'37		direct	16396 Apr 12 00:39	21°♄25'02	
desc. node	16395 May 22 16:01	5°♄51'06		morning max el	16396 Apr 18 19:27	24°♄49'51	17°48'52
					16396 Apr 23 02:12	0°♄	
superior conj	16395 Jun 04 22:30	27°♄54'33	-1°34'14	morning set	16396 May 04 14:09	19°♄12'21	
minimum elong	16395 Jun 04 14:15	27°♄21'09	1°33'58	desc. node	16396 May 08 12:55	26°♄12'54	
	16395 Jun 06 05:37	0°♄			16396 May 10 16:37	0°♄	
max. Earth dist.	16395 Jun 10 07:32	6°♄30'11	1.45139 AU				
evening rise	16395 Jun 20 12:05	22°♄20'02		superior conj	16396 May 15 21:54	8°♄58'57	-0°57'49
	16395 Jun 25 13:14	0°♄		minimum elong	16396 May 15 16:39	8°♄36'42	0°57'38
asc. node	16395 Jul 17 00:42	29°♄50'13		max. Earth dist.	16396 May 22 23:19	20°♄40'03	1.43704 AU
	16395 Jul 17 04:18	0°♄			16396 May 28 20:03	0°♄	
evening max el	16395 Jul 18 10:35	1°♄18'46	20°16'16	evening rise	16396 May 30 03:00	2°♄00'42	
retrograde	16395 Jul 26 06:39	5°♄46'03			16396 Jun 18 01:10	0°♄	
evening set	16395 Jul 30 07:35	4°♄12'48		evening max el	16396 Jun 30 07:55	15°♄13'26	21°27'01
	16395 Aug 03 05:08	30°♄		asc. node	16396 Jul 02 21:34	17°♄33'12	
inferior conj	16395 Aug 04 13:55	28°♄09'37	3°03'36	retrograde	16396 Jul 09 05:29	20°♄23'13	
minimum elong	16395 Aug 04 14:49	28°♄06'33	3°03'08	evening set	16396 Jul 13 17:28	18°♄32'36	
min. Earth dist.	16395 Aug 05 09:31	27°♄02'38	0.68371 AU	inferior conj	16396 Jul 18 22:53	12°♄18'58	3°08'10
morning rise	16395 Aug 09 21:41	21°♄45'09		minimum elong	16396 Jul 18 22:50	12°♄19'11	3°07'38
direct	16395 Aug 15 09:43	19°♄21'19		min. Earth dist.	16396 Jul 19 05:10	11°♄57'06	0.69009 AU
desc. node	16395 Aug 18 14:28	20°♄02'04		morning rise	16396 Jul 24 03:58	6°♄00'00	
morning max el	16395 Aug 26 17:07	26°♄07'02	24°15'31	direct	16396 Jul 29 04:00	3°♄51'04	
	16395 Aug 30 06:54	0°♄		desc. node	16396 Aug 04 11:46	6°♄29'22	
	16395 Sep 20 20:40	0°♄		morning max el	16396 Aug 08 05:07	9°♄48'02	22°46'24
morning set	16395 Oct 01 02:40	16°♄50'06			16396 Aug 24 03:36	0°♄	
max. Earth dist.	16395 Oct 04 18:06	23°♄13'50	1.38120 AU	morning set	16396 Sep 11 02:51	27°♄32'25	
	16395 Oct 08 11:19	0°♄			16396 Sep 12 14:43	0°♄	
				max. Earth dist.	16396 Sep 15 17:53	5°♄15'07	1.40531 AU
superior conj	16395 Oct 12 01:24	6°♄45'48	-0°09'04				
minimum elong	16395 Oct 12 02:00	6°♄48'39	0°08'37	superior conj	16396 Sep 23 15:08	19°♄05'12	-0°45'22
behind sun begin	16395 Oct 11 20:07	6°♄20'32		minimum elong	16396 Sep 23 18:41	19°♄21'21	0°44'37
behind sun end	16395 Oct 12 07:52	7°♄16'49		asc. node	16396 Sep 28 22:32	28°♄53'26	
asc. node	16395 Oct 13 01:46	8°♄43'04			16396 Sep 29 12:41	0°♄	
evening rise	16395 Oct 20 17:40	23°♄49'32		evening rise	16396 Oct 03 11:33	7°♄29'18	
	16395 Oct 23 21:04	0°♄			16396 Oct 16 15:44	0°♄	
evening max el	16395 Nov 06 06:39	20°♄57'45	19°08'15	evening max el	16396 Oct 19 09:42	3°♄10'26	18°26'03
desc. node	16395 Nov 14 11:55	25°♄29'22		retrograde	16396 Oct 27 04:03	7°♄07'09	
retrograde	16395 Nov 15 08:32	25°♄31'44		evening set	16396 Oct 29 03:45	6°♄52'22	

desc. node	16396 Oct 31 09:06	6°♊03'32		evening set	16397 Oct 11 24:00	19°♌10'50	
inferior conj	16396 Nov 05 22:14	2°♊18'36	-1°47'24	desc. node	16397 Oct 18 06:20	14°♌58'54	
minimum elong	16396 Nov 05 18:02	2°♊26'55	1°45'08	inferior conj	16397 Oct 19 01:09	14°♌15'58	-0°14'57
	16396 Nov 08 20:14	30°♌♌		minimum elong	16397 Oct 19 00:40	14°♌17'06	0°14'20
min. Earth dist.	16396 Nov 09 03:38	29°♌45'54	0.57983 AU	transit middle	16397 Oct 19 00:40	14°♌17'06	0°14'20
morning rise	16396 Nov 13 04:53	27°♌06'17		transit begin	16397 Oct 18 23:07	14°♌20'39	
direct	16396 Nov 19 12:07	25°♌24'16		transit end	16397 Oct 19 02:12	14°♌13'32	
	16396 Nov 30 09:57	0°♊		min. Earth dist.	16397 Oct 22 05:28	11°♌21'26	0.60225 AU
morning max el	16396 Dec 03 18:25	2°♊57'12	27°09'19	morning rise	16397 Oct 25 22:08	8°♌31'42	
	16396 Dec 23 07:10	0°♊		direct	16397 Nov 01 13:17	6°♌25'11	
asc. node	16396 Dec 25 22:37	4°♊47'38		morning max el	16397 Nov 15 19:04	14°♌13'41	27°52'26
morning set	16397 Jan 03 03:28	21°♊16'25			16397 Nov 28 12:24	0°♊	
	16397 Jan 07 03:10	0°♊		asc. node	16397 Dec 12 19:42	24°♊17'22	
					16397 Dec 15 16:57	0°♊	
superior conj	16397 Jan 09 23:04	6°♊19'34	1°37'49	morning set	16397 Dec 18 08:18	5°♊27'08	
minimum elong	16397 Jan 09 22:41	6°♊17'22	1°38'22	max. Earth dist.	16397 Dec 24 09:26	18°♊36'22	1.31065 AU
max. Earth dist.	16397 Jan 10 02:21	6°♊37'56	1.31016 AU				
evening rise	16397 Jan 16 18:37	21°♊20'39		superior conj	16397 Dec 25 10:12	20°♊54'33	1°32'35
	16397 Jan 20 22:58	0°♊		minimum elong	16397 Dec 25 08:50	20°♊46'55	1°33'07
desc. node	16397 Jan 27 08:33	12°♊02'35			16397 Dec 29 11:59	0°♊	
	16397 Feb 08 00:21	0°♊		evening rise	16398 Jan 01 02:49	5°♊44'08	
evening max el	16397 Feb 16 03:33	9°♊15'58	27°00'22		16398 Jan 13 15:34	0°♊	
retrograde	16397 Mar 02 04:44	16°♊32'44		desc. node	16398 Jan 14 05:20	0°♊57'15	
evening set	16397 Mar 08 18:13	14°♊42'28		evening max el	16398 Jan 28 23:54	20°♊21'14	25°53'13
min. Earth dist.	16397 Mar 12 17:46	12°♊01'34	0.59460 AU	retrograde	16398 Feb 11 22:38	27°♊24'13	
inferior conj	16397 Mar 15 23:15	9°♊25'49	-2°30'40	evening set	16398 Feb 17 22:57	26°♊00'09	
minimum elong	16397 Mar 16 05:01	9°♊14'11	2°28'29	min. Earth dist.	16398 Feb 22 12:57	23°♊21'14	0.57321 AU
morning rise	16397 Mar 23 19:25	4°♊44'50		inferior conj	16398 Feb 25 11:44	21°♊18'13	-4°02'07
asc. node	16397 Mar 23 20:17	4°♊44'19		minimum elong	16398 Feb 25 20:41	21°♊02'37	3°59'06
direct	16397 Mar 25 19:13	4°♊29'53		morning rise	16398 Mar 05 21:31	16°♊58'37	
morning max el	16397 Apr 02 09:04	8°♊15'59	18°08'25	direct	16398 Mar 07 20:53	16°♊46'22	
	16397 Apr 16 09:37	0°♊		asc. node	16398 Mar 10 17:36	17°♊13'31	
morning set	16397 Apr 17 23:32	2°♊56'32		morning max el	16398 Mar 16 15:02	21°♊04'31	18°48'36
desc. node	16397 Apr 25 09:43	16°♊41'41			16398 Mar 23 10:34	0°♊	
				morning set	16398 Apr 01 20:20	17°♊10'47	
superior conj	16397 Apr 27 20:04	21°♊04'42	-0°20'08		16398 Apr 08 10:34	0°♊	
minimum elong	16397 Apr 27 18:25	20°♊57'19	0°20'20				
	16397 May 02 22:26	0°♊		superior conj	16398 Apr 10 13:29	4°♊02'05	0°14'24
max. Earth dist.	16397 May 05 10:27	4°♊14'23	1.41770 AU	minimum elong	16398 Apr 10 14:25	4°♊06'28	0°13'56
evening rise	16397 May 10 10:48	12°♊29'19		behind sun begin	16398 Apr 10 11:05	3°♊50'43	
	16397 May 21 18:26	0°♊		behind sun end	16398 Apr 10 17:45	4°♊22'11	
evening max el	16397 Jun 13 00:34	29°♊08'11	22°46'11	desc. node	16398 Apr 12 06:28	7°♊13'47	
	16397 Jun 13 21:55	0°♊		max. Earth dist.	16398 Apr 17 17:57	17°♊08'25	1.39541 AU
asc. node	16397 Jun 19 18:30	4°♊15'07		evening rise	16398 Apr 21 15:58	23°♊54'12	
retrograde	16397 Jun 23 02:28	5°♊02'32			16398 Apr 25 07:58	0°♊	
evening set	16397 Jun 28 01:59	2°♊56'07			16398 May 15 13:28	0°♊	
	16397 Jun 30 19:41	30°♊♊		evening max el	16398 May 26 14:42	13°♊04'02	24°07'44
inferior conj	16397 Jul 03 08:56	26°♊33'53	3°02'02	retrograde	16398 Jun 06 20:17	19°♊38'31	
minimum elong	16397 Jul 03 07:58	26°♊37'15	3°01'21	asc. node	16398 Jun 06 15:30	19°♊38'21	
min. Earth dist.	16397 Jul 03 02:07	26°♊57'33	0.69162 AU	evening set	16398 Jun 12 07:32	17°♊18'54	
morning rise	16397 Jul 08 13:47	20°♊22'31		min. Earth dist.	16398 Jun 16 22:15	11°♊57'58	0.68828 AU
direct	16397 Jul 13 01:43	18°♊31'38		inferior conj	16398 Jun 17 18:07	10°♊50'38	2°45'29
morning max el	16397 Jul 21 20:37	23°♊36'57	21°21'28	minimum elong	16398 Jun 17 16:24	10°♊56'28	2°44'31
desc. node	16397 Jul 22 09:01	24°♊08'23		morning rise	16398 Jun 23 01:19	4°♊48'17	
	16397 Jul 27 10:59	0°♊		direct	16398 Jun 27 01:28	3°♊17'00	
	16397 Aug 17 11:18	0°♊		morning max el	16398 Jul 04 18:23	7°♊36'27	20°06'56
morning set	16397 Aug 22 03:21	7°♊14'34		desc. node	16398 Jul 09 06:13	12°♊40'47	
max. Earth dist.	16397 Aug 28 23:09	18°♊10'08	1.42744 AU		16398 Jul 21 16:18	0°♊	
				morning set	16398 Aug 01 10:28	16°♊14'33	
superior conj	16397 Sep 05 08:40	0°♊31'58	-1°22'03		16398 Aug 10 06:23	0°♊	
minimum elong	16397 Sep 05 15:24	1°♊00'52	1°21'13	max. Earth dist.	16398 Aug 11 11:25	1°♊55'07	1.44505 AU
	16397 Sep 05 01:11	0°♊					
asc. node	16397 Sep 15 19:14	18°♊57'35		superior conj	16398 Aug 17 02:49	10°♊59'46	-1°53'27
evening rise	16397 Sep 16 17:07	20°♊36'20		minimum elong	16398 Aug 17 10:39	11°♊31'40	1°53'04
	16397 Sep 21 23:02	0°♊			16398 Aug 28 11:46	0°♊	
evening max el	16397 Oct 02 20:33	16°♊01'17	18°04'40	evening rise	16398 Aug 30 05:24	2°♊58'07	
retrograde	16397 Oct 09 17:44	19°♊33'29		asc. node	16398 Sep 02 15:55	8°♊51'26	

evening max el	16398 Sep 16 11:02	29° Ω 19'41	18°02'29	minimum elong	16399 Jul 28 03:10	20° Ω 50'38	2°12'24
	16398 Sep 17 04:07	0° \mathbb{M}			16399 Aug 02 21:44	0° \mathbb{M}	
retrograde	16398 Sep 22 21:28	2° \mathbb{M} 41'03		evening rise	16399 Aug 11 19:17	14° \mathbb{M} 22'32	
evening set	16398 Sep 25 11:51	2° \mathbb{M} 06'56		asc. node	16399 Aug 20 12:37	28° \mathbb{M} 30'35	
	16398 Sep 28 17:00	30° \mathbb{R} Ω			16399 Aug 21 11:19	0° Ω	
inferior conj	16398 Oct 01 21:42	26° Ω 53'16	0°59'08	evening max el	16399 Aug 31 01:37	12° Ω 57'07	18°18'25
minimum elong	16398 Oct 01 23:18	26° Ω 49'05	0°58'48	retrograde	16399 Sep 06 10:50	16° Ω 20'51	
min. Earth dist.	16398 Oct 04 17:19	23° Ω 57'04	0.62506 AU	evening set	16399 Sep 09 10:01	15° Ω 32'24	
desc. node	16398 Oct 05 03:37	23° Ω 31'28		inferior conj	16399 Sep 15 07:55	10° Ω 02'39	1°54'11
morning rise	16398 Oct 08 08:22	20° Ω 45'52		minimum elong	16399 Sep 15 10:12	9° Ω 55'58	1°53'32
direct	16398 Oct 15 00:47	18° Ω 21'07		min. Earth dist.	16399 Sep 17 15:07	7° Ω 22'25	0.64611 AU
morning max el	16398 Oct 29 02:06	26° Ω 18'17	27°56'11	morning rise	16399 Sep 21 08:48	3° Ω 41'35	
	16398 Nov 01 13:10	0° \mathbb{M}		desc. node	16399 Sep 22 00:56	3° Ω 10'58	
	16398 Nov 22 02:51	0° \mathbb{M}		direct	16399 Sep 27 21:21	1° Ω 06'35	
asc. node	16398 Nov 29 16:40	14° \mathbb{M} 05'27		morning max el	16399 Oct 11 12:47	9° Ω 02'39	27°24'16
morning set	16398 Dec 02 06:41	19° \mathbb{M} 16'45			16399 Oct 27 22:25	0° \mathbb{M}	
	16398 Dec 07 08:39	0° \mathbb{Z}			16399 Nov 14 11:15	0° \mathbb{M}	
max. Earth dist.	16398 Dec 07 12:36	0° \mathbb{Z} 21'23	1.31681 AU	morning set	16399 Nov 15 20:07	2° \mathbb{M} 40'05	
				asc. node	16399 Nov 16 13:33	4° \mathbb{M} 06'16	
superior conj	16398 Dec 09 19:12	5° \mathbb{Z} 19'55	1°21'14	max. Earth dist.	16399 Nov 20 08:12	11° \mathbb{M} 46'43	1.32862 AU
minimum elong	16398 Dec 09 17:06	5° \mathbb{Z} 08'22	1°21'39				
evening rise	16398 Dec 16 13:09	20° \mathbb{Z} 11'06		superior conj	16399 Nov 24 00:01	19° \mathbb{M} 30'46	1°03'41
	16398 Dec 21 05:36	0° \approx		minimum elong	16399 Nov 23 21:38	19° \mathbb{M} 18'00	1°03'58
desc. node	16399 Jan 01 02:11	19° \approx 05'40			16399 Nov 28 20:19	0° \mathbb{Z}	
	16399 Jan 09 20:29	0° \mathbb{H}		evening rise	16399 Nov 30 23:50	4° \mathbb{Z} 37'35	
evening max el	16399 Jan 10 12:08	0° \mathbb{H} 38'09	24°19'39		16399 Dec 14 11:33	0° \approx	
retrograde	16399 Jan 24 03:06	7° \mathbb{H} 24'55		desc. node	16399 Dec 18 23:06	6° \approx 11'40	
evening set	16399 Jan 29 05:24	6° \mathbb{H} 28'10		evening max el	16399 Dec 22 21:39	10° \approx 32'57	22°35'57
min. Earth dist.	16399 Feb 03 23:52	3° \mathbb{H} 34'41	0.55593 AU	retrograde	16400 Jan 04 19:14	16° \approx 55'39	
inferior conj	16399 Feb 06 02:49	2° \mathbb{H} 17'06	-5°21'09	evening set	16400 Jan 08 15:34	16° \approx 23'16	
minimum elong	16399 Feb 06 11:24	2° \mathbb{H} 04'02	5°19'05	min. Earth dist.	16400 Jan 16 06:10	12° \approx 55'17	0.54561 AU
	16399 Feb 10 02:48	30° \mathbb{R} \approx		inferior conj	16400 Jan 17 00:11	12° \approx 29'53	-6°01'16
morning rise	16399 Feb 14 19:23	28° \approx 17'27		minimum elong	16400 Jan 17 01:50	12° \approx 27'33	6°00'41
direct	16399 Feb 17 02:44	28° \approx 03'32		morning rise	16400 Jan 25 13:13	8° \approx 41'44	
	16399 Feb 23 12:59	0° \mathbb{H}		direct	16400 Jan 28 15:34	8° \approx 19'54	
asc. node	16399 Feb 25 14:55	1° \mathbb{H} 28'40		morning max el	16400 Feb 09 12:11	14° \approx 03'45	21°17'31
morning max el	16399 Feb 27 09:02	3° \mathbb{H} 02'33	19°51'31	asc. node	16400 Feb 12 12:12	17° \approx 17'36	
	16399 Mar 16 04:21	0° \mathbb{Y}			16400 Feb 21 00:43	0° \mathbb{H}	
morning set	16399 Mar 17 00:40	1° \mathbb{Y} 42'34		morning set	16400 Feb 29 09:41	16° \mathbb{H} 23'35	
					16400 Mar 06 21:07	0° \mathbb{Y}	
superior conj	16399 Mar 24 21:40	17° \mathbb{Y} 37'59	0°43'37				
minimum elong	16399 Mar 24 23:54	17° \mathbb{Y} 49'04	0°43'07	superior conj	16400 Mar 07 16:41	1° \mathbb{Y} 41'40	1°06'40
desc. node	16399 Mar 30 03:11	27° \mathbb{Y} 44'47		minimum elong	16400 Mar 07 19:12	1° \mathbb{Y} 54'40	1°06'21
max. Earth dist.	16399 Mar 31 00:26	29° \mathbb{Y} 24'16	1.37246 AU	max. Earth dist.	16400 Mar 12 10:07	11° \mathbb{Y} 16'23	1.35125 AU
	16399 Mar 31 08:07	0° \mathbb{Z}		desc. node	16400 Mar 15 23:52	18° \mathbb{Y} 11'03	
evening rise	16399 Apr 03 17:08	6° \mathbb{Z} 08'40		evening rise	16400 Mar 16 11:06	19° \mathbb{Y} 04'00	
	16399 Apr 18 05:39	0° \mathbb{H}			16400 Mar 22 12:23	0° \mathbb{Z}	
evening max el	16399 May 09 04:07	26° \mathbb{H} 58'39	25°24'57		16400 Apr 11 07:54	0° \mathbb{H}	
	16399 May 12 12:29	0° \mathbb{Z}		evening max el	16400 Apr 20 17:40	10° \mathbb{H} 46'42	26°30'29
retrograde	16399 May 21 10:00	4° \mathbb{Z} 04'21		retrograde	16400 May 03 18:42	18° \mathbb{H} 12'08	
asc. node	16399 May 24 12:34	3° \mathbb{Z} 24'52		evening set	16400 May 10 02:56	15° \mathbb{H} 39'19	
evening set	16399 May 27 08:27	1° \mathbb{Z} 35'26		asc. node	16400 May 10 09:42	15° \mathbb{H} 25'14	
	16399 May 29 00:07	30° \mathbb{R} \mathbb{H}		min. Earth dist.	16400 May 14 03:50	11° \mathbb{H} 30'44	0.66717 AU
min. Earth dist.	16399 May 31 15:29	26° \mathbb{H} 51'34	0.68004 AU	inferior conj	16400 May 16 01:58	9° \mathbb{H} 11'21	1°38'59
inferior conj	16399 Jun 02 00:30	25° \mathbb{H} 04'47	2°18'07	minimum elong	16400 May 15 23:54	9° \mathbb{H} 17'38	1°37'44
minimum elong	16399 Jun 01 22:22	25° \mathbb{H} 11'44	2°16'55	morning rise	16400 May 21 21:56	3° \mathbb{H} 30'46	
morning rise	16399 Jun 07 12:42	19° \mathbb{H} 12'41		direct	16400 May 25 00:31	2° \mathbb{H} 36'41	
direct	16399 Jun 11 01:40	18° \mathbb{H} 00'47		morning max el	16400 May 31 11:02	6° \mathbb{H} 00'35	18°22'47
morning max el	16399 Jun 17 23:28	21° \mathbb{H} 45'58	19°06'46	desc. node	16400 Jun 12 00:24	21° \mathbb{H} 32'57	
	16399 Jun 24 19:03	0° \mathbb{Z}			16400 Jun 17 09:51	0° \mathbb{Z}	
desc. node	16399 Jun 26 03:21	1° \mathbb{Z} 52'29		morning set	16400 Jun 20 17:49	5° \mathbb{Z} 16'31	
greatest brilliancy	16399 Jun 30 21:27	8° \mathbb{Z} 48'31	-0.7m				
morning set	16399 Jul 11 17:02	25° \mathbb{Z} 18'31		superior conj	16400 Jul 06 08:52	29° \mathbb{Z} 49'11	-2°11'36
	16399 Jul 14 17:59	0° Ω		minimum elong	16400 Jul 06 04:53	29° \mathbb{Z} 33'37	2°12'06
max. Earth dist.	16399 Jul 25 04:55	16° Ω 14'54	1.45630 AU		16400 Jul 06 11:39	0° Ω	
				max. Earth dist.	16400 Jul 07 00:48	0° Ω 51'15	1.46027 AU
superior conj	16399 Jul 27 23:24	20° Ω 35'49	-2°12'02	evening rise	16400 Jul 22 08:00	24° Ω 43'36	

	16400 Jul 25 16:50	0° \mathbb{M}		max. Earth dist.	16401 Jun 19 20:58	15° \mathbb{G} 29'53	1.45673 AU
greatest brilliancy	16400 Jul 31 18:27	9° \mathbb{M} 25'49	-0.8m		16401 Jun 29 05:18	0° \mathbb{Q}	
asc. node	16400 Aug 06 09:21	17° \mathbb{M} 48'43		evening rise	16401 Jul 02 00:29	4° \mathbb{Q} 17'46	
evening max el	16400 Aug 13 13:23	26° \mathbb{M} 45'33	18°51'40	greatest brilliancy	16401 Jul 16 01:56	25° \mathbb{Q} 27'57	-0.6m
	16400 Aug 18 03:15	0° \mathbb{L}			16401 Jul 19 05:57	0° \mathbb{M}	
retrograde	16400 Aug 20 06:02	0° \mathbb{L} 24'27		asc. node	16401 Jul 24 06:09	6° \mathbb{M} 38'36	
	16400 Aug 22 07:31	30° \mathbb{R} \mathbb{M}		evening max el	16401 Jul 27 20:17	10° \mathbb{M} 39'52	19°41'09
evening set	16400 Aug 23 14:41	29° \mathbb{M} 19'30		retrograde	16401 Aug 04 04:15	14° \mathbb{M} 46'02	
inferior conj	16400 Aug 29 04:03	23° \mathbb{M} 35'47	2°32'14	evening set	16401 Aug 07 23:04	13° \mathbb{M} 23'18	
minimum elong	16400 Aug 29 06:09	23° \mathbb{M} 29'10	2°31'38	inferior conj	16401 Aug 13 07:09	7° \mathbb{M} 27'03	2°55'45
min. Earth dist.	16400 Aug 30 21:33	21° \mathbb{M} 25'01	0.66406 AU	minimum elong	16401 Aug 13 08:33	7° \mathbb{M} 22'22	2°55'15
morning rise	16400 Sep 03 20:41	17° \mathbb{M} 09'05		min. Earth dist.	16401 Aug 14 10:43	5° \mathbb{M} 55'01	0.67793 AU
desc. node	16400 Sep 07 22:17	14° \mathbb{M} 50'04		morning rise	16401 Aug 18 17:32	1° \mathbb{M} 00'40	
direct	16400 Sep 10 01:35	14° \mathbb{M} 32'19			16401 Aug 20 00:25	30° \mathbb{R} \mathbb{Q}	
morning max el	16400 Sep 23 00:21	22° \mathbb{M} 13'07	26°24'12	direct	16401 Aug 24 12:17	28° \mathbb{Q} 30'02	
	16400 Sep 29 20:39	0° \mathbb{L}		desc. node	16401 Aug 25 19:37	28° \mathbb{Q} 36'49	
	16400 Oct 20 04:25	0° \mathbb{M}			16401 Aug 29 12:02	0° \mathbb{M}	
morning set	16400 Oct 28 21:23	15° \mathbb{M} 29'03		morning max el	16401 Sep 05 11:25	5° \mathbb{M} 39'32	25°05'21
max. Earth dist.	16400 Nov 01 17:49	22° \mathbb{M} 52'42	1.34585 AU		16401 Sep 24 08:06	0° \mathbb{L}	
asc. node	16400 Nov 02 10:24	24° \mathbb{M} 14'26		morning set	16401 Oct 11 06:44	27° \mathbb{L} 35'40	
	16400 Nov 05 07:11	0° \mathbb{X}			16401 Oct 12 14:56	0° \mathbb{M}	
				max. Earth dist.	16401 Oct 14 19:07	3° \mathbb{M} 58'15	1.36756 AU
superior conj	16400 Nov 06 22:11	3° \mathbb{X} 20'10	0°39'56	asc. node	16401 Oct 20 07:13	14° \mathbb{M} 26'19	
minimum elong	16400 Nov 06 20:12	3° \mathbb{X} 09'55	0°40'08				
evening rise	16400 Nov 14 08:55	18° \mathbb{X} 58'08		superior conj	16401 Oct 21 10:47	16° \mathbb{M} 41'38	0°10'19
	16400 Nov 19 19:23	0° \mathbb{Z}		minimum elong	16401 Oct 21 10:07	16° \mathbb{M} 38'23	0°10'37
evening max el	16400 Dec 03 14:24	20° \mathbb{Z} 43'52	20°59'53	behind sun begin	16401 Oct 21 05:12	16° \mathbb{M} 14'10	
desc. node	16400 Dec 04 20:06	21° \mathbb{Z} 53'28		behind sun end	16401 Oct 21 15:02	17° \mathbb{M} 02'38	
retrograde	16400 Dec 15 04:52	26° \mathbb{Z} 28'34			16401 Oct 28 01:17	0° \mathbb{X}	
evening set	16400 Dec 17 20:43	26° \mathbb{Z} 11'47		evening rise	16401 Oct 29 14:18	3° \mathbb{X} 08'12	
inferior conj	16400 Dec 26 14:46	22° \mathbb{Z} 20'54	-5°41'33		16401 Nov 14 08:15	0° \mathbb{Z}	
minimum elong	16400 Dec 26 07:29	22° \mathbb{Z} 31'14	5°39'51	evening max el	16401 Nov 15 21:05	1° \mathbb{Z} 38'56	19°42'34
min. Earth dist.	16400 Dec 27 11:31	21° \mathbb{Z} 51'22	0.54428 AU	desc. node	16401 Nov 21 17:12	5° \mathbb{Z} 47'15	
morning rise	16401 Jan 03 18:20	18° \mathbb{Z} 28'10		retrograde	16401 Nov 25 20:15	6° \mathbb{Z} 37'37	
direct	16401 Jan 07 22:56	17° \mathbb{Z} 50'17		evening set	16401 Nov 27 20:41	6° \mathbb{Z} 26'20	
morning max el	16401 Jan 21 01:57	24° \mathbb{Z} 14'56	23°02'04	inferior conj	16401 Dec 06 13:17	2° \mathbb{Z} 24'17	-4°27'13
	16401 Jan 26 05:24	0° \mathbb{A}		minimum elong	16401 Dec 06 03:21	2° \mathbb{Z} 39'48	4°23'36
asc. node	16401 Jan 29 09:27	4° \mathbb{A} 21'30		min. Earth dist.	16401 Dec 08 18:47	1° \mathbb{Z} 00'43	0.55236 AU
	16401 Feb 12 08:29	0° \mathbb{H}			16401 Dec 10 11:43	30° \mathbb{R} \mathbb{X}	
morning set	16401 Feb 12 21:09	1° \mathbb{H} 07'19		morning rise	16401 Dec 14 08:28	28° \mathbb{X} 08'42	
				direct	16401 Dec 19 13:46	27° \mathbb{X} 08'19	
superior conj	16401 Feb 19 19:21	16° \mathbb{H} 04'04	1°23'22		16401 Dec 28 07:50	0° \mathbb{Z}	
minimum elong	16401 Feb 19 21:27	16° \mathbb{H} 15'17	1°23'21	morning max el	16402 Jan 02 10:04	4° \mathbb{Z} 04'09	24°51'55
max. Earth dist.	16401 Feb 23 02:50	23° \mathbb{H} 05'05	1.33356 AU	asc. node	16402 Jan 16 06:41	22° \mathbb{Z} 22'44	
	16401 Feb 26 11:57	0° \mathbb{Y}			16402 Jan 20 13:59	0° \mathbb{A}	
evening rise	16401 Feb 27 18:24	2° \mathbb{Y} 31'15		morning set	16402 Jan 28 09:06	15° \mathbb{A} 47'59	
desc. node	16401 Mar 02 20:34	8° \mathbb{Y} 28'33			16402 Feb 03 20:16	0° \mathbb{H}	
	16401 Mar 15 09:45	0° \mathbb{B}					
evening max el	16401 Apr 03 07:15	24° \mathbb{B} 20'07	27°16'46	superior conj	16402 Feb 04 03:02	0° \mathbb{H} 37'21	1°33'47
	16401 Apr 10 13:34	0° \mathbb{I}		minimum elong	16402 Feb 04 04:17	0° \mathbb{H} 44'14	1°34'05
retrograde	16401 Apr 16 21:26	1° \mathbb{I} 53'06		max. Earth dist.	16402 Feb 06 03:12	5° \mathbb{H} 01'03	1.32043 AU
	16401 Apr 22 16:05	30° \mathbb{R} \mathbb{B}		evening rise	16402 Feb 11 11:50	16° \mathbb{H} 21'51	
evening set	16401 Apr 23 12:55	29° \mathbb{B} 23'01		desc. node	16402 Feb 17 17:17	28° \mathbb{H} 31'56	
asc. node	16401 Apr 27 06:54	25° \mathbb{B} 53'25			16402 Feb 18 12:22	0° \mathbb{Y}	
min. Earth dist.	16401 Apr 27 09:24	25° \mathbb{B} 46'44	0.65020 AU		16402 Mar 10 01:06	0° \mathbb{B}	
inferior conj	16401 Apr 29 20:04	23° \mathbb{B} 04'32	0°46'52	evening max el	16402 Mar 16 19:12	7° \mathbb{B} 26'17	27°36'29
minimum elong	16401 Apr 29 18:50	23° \mathbb{B} 07'59	0°45'56	retrograde	16402 Mar 30 16:44	14° \mathbb{B} 56'55	
morning rise	16401 May 06 02:38	17° \mathbb{B} 37'12		evening set	16402 Apr 06 11:56	12° \mathbb{B} 36'46	
direct	16401 May 08 19:51	16° \mathbb{B} 58'17		min. Earth dist.	16402 Apr 10 06:16	9° \mathbb{B} 28'14	0.62998 AU
morning max el	16401 May 15 03:02	20° \mathbb{B} 13'25	17°55'46	inferior conj	16402 Apr 13 03:48	6° \mathbb{B} 36'03	-0°19'21
	16401 May 22 16:04	0° \mathbb{I}		minimum elong	16402 Apr 13 04:25	6° \mathbb{B} 34'29	0°19'25
desc. node	16401 May 29 21:23	11° \mathbb{I} 34'20		asc. node	16402 Apr 14 04:11	5° \mathbb{B} 36'07	
morning set	16401 Jun 01 21:41	16° \mathbb{I} 32'23		morning rise	16402 Apr 19 23:39	1° \mathbb{B} 24'25	
	16401 Jun 10 03:11	0° \mathbb{G}		direct	16402 Apr 22 08:41	0° \mathbb{B} 57'29	
				morning max el	16402 Apr 28 20:41	4° \mathbb{B} 15'25	17°46'10
superior conj	16401 Jun 15 23:58	9° \mathbb{G} 23'22	-1°51'59	morning set	16402 May 15 02:45	28° \mathbb{B} 59'07	
minimum elong	16401 Jun 15 15:32	8° \mathbb{G} 49'57	1°51'56		16402 May 15 16:50	0° \mathbb{I}	

desc. node	16402 May 16 18:17	1° Π 49'58		superior conj	16403 May 08 19:13	1° Π 21'31	-0°41'41
				minimum elong	16403 May 08 15:34	1° Π 05'41	0°41'39
superior conj	16402 May 27 09:51	19° Π 50'17	-1°19'20	max. Earth dist.	16403 May 16 05:41	13° Π 53'31	1.42941 AU
minimum elong	16402 May 27 02:36	19° Π 20'27	1°19'03	evening rise	16403 May 22 08:11	23° Π 42'30	
max. Earth dist.	16402 Jun 02 15:16	29° Π 55'35	1.44610 AU		16403 May 26 09:10	0° \mathfrak{D}	
	16402 Jun 02 16:23	0° \mathfrak{D}			16403 Jun 16 08:25	0° Ω	
evening rise	16402 Jun 11 11:07	13° \mathfrak{D} 43'50		evening max el	16403 Jun 23 16:16	8° Ω 29'21	21°59'53
	16402 Jun 22 06:43	0° Ω		asc. node	16403 Jun 27 23:55	12° Ω 08'24	
evening max el	16402 Jul 10 21:09	24° Ω 35'01	20°45'01	retrograde	16403 Jul 03 01:29	13° Ω 57'49	
asc. node	16402 Jul 11 03:01	24° Ω 49'30		evening set	16403 Jul 07 18:28	11° Ω 59'58	
retrograde	16402 Jul 19 03:18	29° Ω 19'04		inferior conj	16403 Jul 13 00:15	5° Ω 42'23	3°06'49
evening set	16402 Jul 23 08:57	27° Ω 38'17		minimum elong	16403 Jul 12 23:48	5° Ω 43'58	3°06'14
inferior conj	16402 Jul 28 14:36	21° Ω 30'41	3°06'50	min. Earth dist.	16403 Jul 13 00:52	5° Ω 40'15	0.69143 AU
minimum elong	16402 Jul 28 15:06	21° Ω 28'59	3°06'22		16403 Jul 17 14:19	30° \mathfrak{R} \mathfrak{D}	
min. Earth dist.	16402 Jul 29 04:31	20° Ω 42'40	0.68713 AU	morning rise	16403 Jul 18 04:58	29° \mathfrak{D} 26'41	
morning rise	16402 Aug 02 20:58	15° Ω 08'28		direct	16403 Jul 22 23:49	27° \mathfrak{D} 25'21	
direct	16402 Aug 08 04:03	12° Ω 50'21			16403 Jul 29 02:59	0° Ω	
desc. node	16402 Aug 12 16:56	14° Ω 12'16		desc. node	16403 Jul 30 14:12	1° Ω 12'21	
morning max el	16402 Aug 18 22:30	19° Ω 15'27	23°37'28	morning max el	16403 Aug 01 11:43	2° Ω 59'37	22°09'17
	16402 Aug 28 01:00	0° \mathfrak{M}			16403 Aug 22 00:37	0° \mathfrak{M}	
	16402 Sep 17 11:05	0° \mathfrak{L}		morning set	16403 Sep 03 09:59	19° \mathfrak{M} 06'41	
morning set	16402 Sep 22 20:01	8° \mathfrak{L} 50'44		max. Earth dist.	16403 Sep 08 20:18	27° \mathfrak{M} 59'37	1.41518 AU
max. Earth dist.	16402 Sep 26 18:01	15° \mathfrak{L} 33'55	1.39160 AU		16403 Sep 10 01:03	0° \mathfrak{L}	
superior conj	16402 Oct 04 10:06	29° \mathfrak{L} 26'40	-0°24'09	superior conj	16403 Sep 16 15:43	11° \mathfrak{L} 24'20	-1°01'11
minimum elong	16402 Oct 04 11:51	29° \mathfrak{L} 34'53	0°23'35	minimum elong	16403 Sep 16 20:42	11° \mathfrak{L} 46'23	1°00'20
	16402 Oct 04 17:13	0° \mathfrak{M}		asc. node	16403 Sep 24 00:44	24° \mathfrak{L} 46'26	
asc. node	16402 Oct 07 04:00	4° \mathfrak{M} 38'24			16403 Sep 26 20:20	0° \mathfrak{M}	
evening rise	16402 Oct 13 13:21	17° \mathfrak{M} 01'39		evening rise	16403 Sep 27 02:33	0° \mathfrak{M} 28'53	
	16402 Oct 20 10:11	0° \mathfrak{J}		evening max el	16403 Oct 13 00:27	25° \mathfrak{M} 54'08	18°14'26
evening max el	16402 Oct 29 17:38	13° \mathfrak{J} 24'43	18°47'36	retrograde	16403 Oct 20 08:37	29° \mathfrak{M} 39'12	
retrograde	16402 Nov 07 04:43	17° \mathfrak{J} 41'18		evening set	16403 Oct 22 10:42	29° \mathfrak{M} 21'36	
desc. node	16402 Nov 08 14:20	17° \mathfrak{J} 34'38		desc. node	16403 Oct 26 11:32	27° \mathfrak{M} 20'08	
evening set	16402 Nov 09 02:28	17° \mathfrak{J} 29'04		inferior conj	16403 Oct 29 21:41	24° \mathfrak{M} 38'19	-1°06'08
inferior conj	16402 Nov 17 06:33	13° \mathfrak{J} 07'14	-2°46'20	minimum elong	16403 Oct 29 19:14	24° \mathfrak{M} 43'29	1°04'38
minimum elong	16402 Nov 16 23:47	13° \mathfrak{J} 19'30	2°43'07	min. Earth dist.	16403 Nov 02 03:41	21° \mathfrak{M} 53'58	0.58911 AU
min. Earth dist.	16402 Nov 20 07:09	10° \mathfrak{J} 56'10	0.56824 AU	morning rise	16403 Nov 06 00:20	19° \mathfrak{M} 11'15	
morning rise	16402 Nov 24 18:08	8° \mathfrak{J} 16'24		direct	16403 Nov 12 11:31	17° \mathfrak{M} 18'33	
direct	16402 Nov 30 17:46	6° \mathfrak{J} 50'08		morning max el	16403 Nov 26 18:25	24° \mathfrak{M} 58'50	27°32'38
morning max el	16402 Dec 14 22:05	14° \mathfrak{J} 10'14	26°27'42		16403 Dec 01 09:49	0° \mathfrak{J}	
	16402 Dec 27 12:02	0° \mathfrak{Z}			16403 Dec 20 20:16	0° \mathfrak{Z}	
asc. node	16403 Jan 03 03:51	11° \mathfrak{Z} 06'52		asc. node	16403 Dec 21 00:57	0° \mathfrak{Z} 22'12	
morning set	16403 Jan 12 19:45	0° \approx 20'55		morning set	16403 Dec 28 03:15	14° \mathfrak{Z} 40'44	
	16403 Jan 12 15:52	0° \approx		max. Earth dist.	16404 Jan 03 16:39	29° \mathfrak{Z} 05'44	1.30967 AU
superior conj	16403 Jan 19 13:36	15° \approx 15'33	1°38'05	superior conj	16404 Jan 04 01:00	29° \mathfrak{Z} 52'34	1°36'20
minimum elong	16403 Jan 19 13:49	15° \approx 16'47	1°38'35	minimum elong	16404 Jan 04 00:11	29° \mathfrak{Z} 47'57	1°36'54
max. Earth dist.	16403 Jan 20 08:59	17° \approx 03'46	1.31237 AU		16404 Jan 04 02:20	0° \approx	
	16403 Jan 26 07:12	0° \mathfrak{H}		evening rise	16404 Jan 10 18:49	14° \approx 47'30	
evening rise	16403 Jan 26 12:45	0° \mathfrak{H} 29'18			16404 Jan 18 07:00	0° \mathfrak{H}	
desc. node	16403 Feb 04 14:01	18° \mathfrak{H} 15'14		desc. node	16404 Jan 22 10:47	7° \mathfrak{H} 30'02	
	16403 Feb 11 13:25	0° \mathfrak{Y}			16404 Feb 07 16:59	0° \mathfrak{Y}	
evening max el	16403 Feb 27 02:57	19° \mathfrak{Y} 51'47	27°23'40	evening max el	16404 Feb 09 03:43	1° \mathfrak{Y} 25'43	26°35'38
retrograde	16403 Mar 13 03:25	27° \mathfrak{Y} 14'14		retrograde	16404 Feb 23 04:04	8° \mathfrak{Y} 37'10	
evening set	16403 Mar 19 21:07	25° \mathfrak{Y} 11'04		evening set	16404 Feb 29 13:12	6° \mathfrak{Y} 57'15	
min. Earth dist.	16403 Mar 23 16:57	22° \mathfrak{Y} 23'15	0.60770 AU	min. Earth dist.	16404 Mar 04 17:17	4° \mathfrak{Y} 19'18	0.58518 AU
inferior conj	16403 Mar 26 21:34	19° \mathfrak{Y} 36'34	-1°39'25	inferior conj	16404 Mar 07 21:34	1° \mathfrak{Y} 55'20	-3°09'38
minimum elong	16403 Mar 27 01:13	19° \mathfrak{Y} 28'34	1°38'06	minimum elong	16404 Mar 08 04:52	1° \mathfrak{Y} 41'30	3°06'56
asc. node	16403 Apr 01 01:27	15° \mathfrak{Y} 42'43			16404 Mar 10 13:04	30° \mathfrak{R} \mathfrak{H}	
morning rise	16403 Apr 03 08:44	14° \mathfrak{Y} 43'42		morning rise	16404 Mar 16 00:04	27° \mathfrak{H} 23'46	
direct	16403 Apr 05 11:17	14° \mathfrak{Y} 25'18		direct	16404 Mar 17 22:58	27° \mathfrak{H} 10'26	
morning max el	16403 Apr 12 12:47	17° \mathfrak{Y} 57'29	17°54'47	asc. node	16404 Mar 17 22:44	27° \mathfrak{H} 10'26	
	16403 Apr 21 04:39	0° \mathfrak{B}			16404 Mar 24 17:26	0° \mathfrak{Y}	
morning set	16403 Apr 28 03:26	12° \mathfrak{B} 19'50		morning max el	16404 Mar 25 23:39	1° \mathfrak{Y} 08'31	18°22'59
desc. node	16403 May 03 15:08	22° \mathfrak{B} 15'11		morning set	16404 Apr 10 18:09	26° \mathfrak{Y} 17'44	
	16403 May 08 00:26	0° Π			16404 Apr 12 16:48	0° \mathfrak{B}	
				desc. node	16404 Apr 19 11:56	12° \mathfrak{B} 45'38	

superior conj	16404 Apr 20 02:07	13°♄50'40	-0°04'58	superior conj	16405 Apr 03 02:16	27°♄05'10	0°27'31
minimum elong	16404 Apr 20 01:43	13°♄48'49	0°05'19	minimum elong	16405 Apr 03 03:54	27°♄13'02	0°27'00
behind sun begin	16404 Apr 19 18:48	13°♄17'10			16405 Apr 04 14:47	0°♄	
behind sun end	16404 Apr 20 08:38	14°♄20'24		desc. node	16405 Apr 06 08:39	3°♄17'18	
max. Earth dist.	16404 Apr 27 15:03	27°♄10'47	1.40840 AU	max. Earth dist.	16405 Apr 09 20:59	9°♄44'19	1.38546 AU
	16404 Apr 29 06:56	0°♄		evening rise	16405 Apr 13 14:47	16°♄20'47	
evening rise	16404 May 02 00:52	4°♄34'25			16405 Apr 21 20:25	0°♄	
	16404 May 18 13:56	0°♄			16405 May 13 03:01	0°♄	
evening max el	16404 Jun 05 07:23	22°♄24'01	23°20'52	evening max el	16405 May 18 20:55	6°♄19'11	24°41'38
asc. node	16404 Jun 13 20:51	28°♄19'22		retrograde	16405 May 30 13:44	13°♄09'04	
retrograde	16404 Jun 15 21:23	28°♄36'50		asc. node	16405 May 31 17:51	13°♄03'19	
evening set	16404 Jun 21 01:57	26°♄24'11		evening set	16405 Jun 05 05:44	10°♄45'02	
inferior conj	16404 Jun 26 10:10	19°♄58'46	2°56'20	min. Earth dist.	16405 Jun 09 16:58	5°♄39'47	0.68526 AU
minimum elong	16404 Jun 26 08:51	20°♄03'18	2°55'31	inferior conj	16405 Jun 10 18:24	4°♄15'00	2°35'17
min. Earth dist.	16404 Jun 25 21:43	20°♄41'41	0.69077 AU	minimum elong	16405 Jun 10 16:27	4°♄21'30	2°34'13
morning rise	16404 Jul 01 15:43	13°♄51'07			16405 Jun 14 05:13	30°♄	
direct	16404 Jul 05 22:28	12°♄08'45		morning rise	16405 Jun 16 03:22	28°♄16'39	
morning max el	16404 Jul 14 05:49	16°♄53'45	20°48'14	direct	16405 Jun 19 22:36	26°♄53'46	
desc. node	16404 Jul 16 11:26	19°♄16'14			16405 Jun 26 06:02	0°♄	
	16404 Jul 24 20:47	0°♄		morning max el	16405 Jun 27 06:38	0°♄57'35	19°39'27
morning set	16404 Aug 13 01:50	28°♄28'02		desc. node	16405 Jul 03 08:35	8°♄06'41	
	16404 Aug 14 01:30	0°♄		greatest brilliancy	16405 Jul 10 06:34	17°♄49'14	-0.6m
max. Earth dist.	16404 Aug 21 04:31	11°♄17'06	1.43559 AU		16405 Jul 18 10:08	0°♄	
				morning set	16405 Jul 23 06:12	7°♄22'43	
superior conj	16404 Aug 27 23:32	22°♄26'21	-1°36'27	max. Earth dist.	16405 Aug 03 18:43	25°♄16'50	1.45068 AU
minimum elong	16404 Aug 28 07:12	22°♄58'27	1°35'43		16405 Aug 06 18:12	0°♄	
	16404 Sep 01 10:33	0°♄					
evening rise	16404 Sep 09 01:29	13°♄18'48		superior conj	16405 Aug 08 07:55	2°♄30'32	-2°03'20
asc. node	16404 Sep 09 21:27	14°♄46'56		minimum elong	16405 Aug 08 14:45	2°♄57'53	2°03'17
	16404 Sep 18 19:07	0°♄		evening rise	16405 Aug 22 04:50	25°♄17'19	
evening max el	16404 Sep 25 13:18	8°♄57'56	18°01'25		16405 Aug 25 00:14	0°♄	
retrograde	16404 Oct 02 04:52	12°♄24'07		asc. node	16405 Aug 27 18:08	4°♄35'05	
evening set	16404 Oct 04 14:20	11°♄57'09		evening max el	16405 Sep 09 04:16	22°♄25'38	18°07'06
inferior conj	16404 Oct 11 08:40	6°♄54'07	0°18'51	retrograde	16405 Sep 15 13:04	25°♄46'11	
minimum elong	16404 Oct 11 09:15	6°♄52'41	0°18'58	evening set	16405 Sep 18 07:07	25°♄06'20	
desc. node	16404 Oct 12 08:47	5°♄54'53		inferior conj	16405 Sep 24 11:30	19°♄45'50	1°24'41
min. Earth dist.	16404 Oct 14 10:00	3°♄56'12	0.61203 AU	minimum elong	16405 Sep 24 13:32	19°♄40'14	1°24'09
morning rise	16404 Oct 18 01:13	0°♄58'28		min. Earth dist.	16405 Sep 27 02:16	16°♄54'15	0.63441 AU
	16404 Oct 19 16:40	30°♄		desc. node	16405 Sep 29 06:05	14°♄46'11	
direct	16404 Oct 24 17:33	28°♄43'06		morning rise	16405 Sep 30 17:54	13°♄31'37	
	16404 Oct 30 01:23	0°♄		direct	16405 Oct 07 09:24	11°♄01'05	
morning max el	16404 Nov 07 22:18	6°♄37'14	27°58'40	morning max el	16405 Oct 21 07:03	18°♄59'24	27°46'23
	16404 Nov 25 15:46	0°♄			16405 Oct 30 15:45	0°♄	
asc. node	16404 Dec 06 21:59	20°♄00'23			16405 Nov 18 14:18	0°♄	
morning set	16404 Dec 11 05:36	28°♄42'54		asc. node	16405 Nov 23 18:57	9°♄54'22	
	16404 Dec 11 20:21	0°♄		morning set	16405 Nov 25 00:31	12°♄21'58	
max. Earth dist.	16404 Dec 16 22:22	10°♄58'22	1.31255 AU	max. Earth dist.	16405 Nov 29 22:28	22°♄34'05	1.32112 AU
superior conj	16404 Dec 18 11:27	14°♄23'45	1°28'30	superior conj	16405 Dec 02 18:57	28°♄43'45	1°14'33
minimum elong	16404 Dec 18 09:44	14°♄14'12	1°29'01	minimum elong	16405 Dec 02 16:40	28°♄31'18	1°14'54
evening rise	16404 Dec 25 04:06	29°♄12'17			16405 Dec 03 08:56	0°♄	
	16404 Dec 25 12:56	0°♄		evening rise	16405 Dec 09 14:48	13°♄39'28	
desc. node	16405 Jan 08 07:36	26°♄06'19			16405 Dec 17 16:29	0°♄	
	16405 Jan 10 20:47	0°♄		desc. node	16405 Dec 26 04:29	13°♄50'27	
evening max el	16405 Jan 20 20:07	12°♄07'19	25°15'45	evening max el	16406 Jan 02 06:23	22°♄11'27	23°35'46
retrograde	16405 Feb 03 16:47	19°♄04'46		retrograde	16406 Jan 15 15:45	28°♄49'02	
evening set	16405 Feb 09 08:40	17°♄52'22		evening set	16406 Jan 20 05:41	28°♄03'42	
min. Earth dist.	16405 Feb 14 08:43	15°♄09'18	0.56510 AU	min. Earth dist.	16406 Jan 26 17:36	24°♄57'49	0.55049 AU
inferior conj	16405 Feb 17 00:49	13°♄24'13	-4°38'42	inferior conj	16406 Jan 28 07:37	24°♄02'16	-5°44'36
minimum elong	16405 Feb 17 10:18	13°♄08'39	4°35'51	minimum elong	16406 Jan 28 14:01	23°♄52'53	5°43'19
morning rise	16405 Feb 25 14:40	9°♄13'48		morning rise	16406 Feb 05 23:48	20°♄08'32	
direct	16405 Feb 27 15:55	9°♄01'36		direct	16406 Feb 08 13:54	19°♄52'06	
asc. node	16405 Mar 04 20:02	10°♄24'26		morning max el	16406 Feb 19 12:56	25°♄10'51	20°25'22
morning max el	16405 Mar 09 01:03	13°♄36'33	19°12'37	asc. node	16406 Feb 19 17:21	25°♄21'37	
	16405 Mar 20 05:54	0°♄			16406 Feb 23 17:54	0°♄	
morning set	16405 Mar 25 18:29	10°♄39'39		morning set	16406 Mar 10 01:08	25°♄16'20	
					16406 Mar 12 08:07	0°♄	

superior conj	16406 Mar 17 15:30	10° Υ 53'59	0°54'10	morning set	16407 Feb 22 11:29	9° X 59'14	
minimum elong	16406 Mar 17 17:57	11° Υ 06'25	0°53'43				
max. Earth dist.	16406 Mar 23 04:15	21° Υ 47'37	1.36308 AU	superior conj	16407 Mar 01 14:07	25° X 06'13	1°14'32
desc. node	16406 Mar 24 05:21	23° Υ 46'49		minimum elong	16407 Mar 01 16:31	25° X 18'51	1°14'20
evening rise	16406 Mar 26 23:36	28° Υ 54'16			16407 Mar 03 22:27	0° Υ	
	16406 Mar 27 14:04	0° Z		max. Earth dist.	16407 Mar 05 17:04	3° Υ 37'48	1.34324 AU
	16406 Apr 15 02:59	0° Π		evening rise	16407 Mar 09 23:40	12° Υ 03'55	
evening max el	16406 May 01 10:35	20° Π 12'37	25°54'50	desc. node	16407 Mar 11 02:04	14° Υ 09'37	
retrograde	16406 May 14 01:25	27° Π 27'53			16407 Mar 19 23:57	0° Z	
asc. node	16406 May 18 14:57	26° Π 04'52			16407 Apr 10 06:31	0° Π	
evening set	16406 May 20 04:08	24° Π 56'55		evening max el	16407 Apr 14 00:24	3° Π 55'45	26°53'00
min. Earth dist.	16406 May 24 08:28	20° Π 28'06	0.67508 AU	retrograde	16407 Apr 27 07:26	11° Π 24'51	
inferior conj	16406 May 25 22:59	18° Π 26'44	2°03'03	evening set	16407 May 03 19:13	8° Π 52'26	
minimum elong	16406 May 25 20:48	18° Π 33'39	2°01'48	asc. node	16407 May 05 12:07	7° Π 21'51	
morning rise	16406 May 31 14:07	12° Π 39'04		min. Earth dist.	16407 May 07 18:06	4° Π 58'07	0.66046 AU
direct	16406 Jun 03 22:37	11° Π 34'51		inferior conj	16407 May 09 21:39	2° Π 27'54	1°18'33
morning max el	16406 Jun 10 14:34	15° Π 09'25	18°46'00	minimum elong	16407 May 09 19:49	2° Π 33'15	1°17'22
desc. node	16406 Jun 20 05:41	27° Π 31'34			16407 May 12 02:16	30° R Z	
	16406 Jun 21 21:38	0° Z		morning rise	16407 May 15 21:45	26° Z 52'41	
greatest brilliancy	16406 Jun 24 13:21	4° Z 01'24	-0.8m	direct	16407 May 18 20:20	26° Z 05'14	
morning set	16406 Jul 02 18:38	16° Z 44'27		morning max el	16407 May 25 04:17	29° Z 33'35	18°09'14
	16406 Jul 11 07:12	0° Ω			16407 May 25 18:50	0° Π	
max. Earth dist.	16406 Jul 17 13:39	9° Ω 45'54	1.45898 AU	desc. node	16407 Jun 07 02:42	17° Π 21'16	
				morning set	16407 Jun 13 06:37	27° Π 14'40	
					16407 Jun 14 23:45	0° Z	
superior conj	16406 Jul 18 22:00	11° Ω 52'13	-2°14'21				
minimum elong	16406 Jul 18 22:33	11° Ω 54'21	2°14'53				
	16406 Jul 30 10:11	0° P		superior conj	16407 Jun 28 07:41	21° Z 08'16	-2°05'22
evening rise	16406 Aug 03 08:00	6° P 14'13		minimum elong	16407 Jun 28 01:04	20° Z 42'23	2°05'39
asc. node	16406 Aug 14 14:51	24° P 05'56		max. Earth dist.	16407 Jun 30 10:29	24° Z 26'46	1.45969 AU
	16406 Aug 18 15:52	0° Z			16407 Jul 04 00:05	0° Ω	
evening max el	16406 Aug 23 18:04	6° Z 08'55	18°30'29	evening rise	16407 Jul 14 10:55	16° Ω 11'58	
retrograde	16406 Aug 30 05:14	9° Z 37'05			16407 Jul 23 10:11	0° P	
evening set	16406 Sep 02 08:29	8° Z 41'40		greatest brilliancy	16407 Jul 26 00:41	3° P 56'06	-0.7m
inferior conj	16406 Sep 08 02:21	3° Z 05'50	2°12'12	asc. node	16407 Aug 01 11:38	13° P 13'05	
minimum elong	16406 Sep 08 04:38	2° Z 58'53	2°11'34	evening max el	16407 Aug 07 04:00	20° P 00'35	19°10'47
min. Earth dist.	16406 Sep 10 03:47	0° Z 36'54	0.65431 AU	retrograde	16407 Aug 14 02:07	23° P 49'34	
	16406 Sep 10 16:29	30° R P		evening set	16407 Aug 17 15:05	22° P 36'57	
morning rise	16406 Sep 13 23:33	26° P 41'47		inferior conj	16407 Aug 23 01:48	16° P 47'32	2°43'49
desc. node	16406 Sep 16 03:25	25° P 12'48		minimum elong	16407 Aug 23 03:39	16° P 41'32	2°43'17
direct	16406 Sep 20 09:21	24° P 05'04		min. Earth dist.	16407 Aug 24 13:15	14° P 52'43	0.67049 AU
	16406 Oct 01 18:03	0° Z		morning rise	16407 Aug 28 15:32	10° P 20'30	
morning max el	16406 Oct 03 18:11	1° Z 55'32	27°01'30	desc. node	16407 Sep 03 00:45	7° P 47'26	
	16406 Oct 24 20:06	0° P		direct	16407 Sep 03 16:17	7° P 45'47	
morning set	16406 Nov 08 09:11	25° P 31'12		morning max el	16407 Sep 16 05:47	15° P 14'38	25°52'29
asc. node	16406 Nov 10 15:50	29° P 58'39			16407 Sep 28 09:31	0° Z	
	16406 Nov 10 16:07	0° Z			16407 Oct 17 15:58	0° P	
max. Earth dist.	16406 Nov 12 13:57	3° Z 50'09	1.33539 AU	morning set	16407 Oct 22 04:15	8° P 03'51	
				max. Earth dist.	16407 Oct 25 20:06	14° P 55'30	1.35470 AU
				asc. node	16407 Oct 28 12:41	20° P 09'10	
superior conj	16406 Nov 16 21:19	12° Z 46'20	0°54'22				
minimum elong	16406 Nov 16 19:00	12° Z 34'07	0°54'35				
evening rise	16406 Nov 24 01:05	28° Z 04'06		superior conj	16407 Oct 31 15:53	26° P 25'20	0°28'05
	16406 Nov 24 23:00	0° Z		minimum elong	16407 Oct 31 14:19	26° P 17'27	0°28'17
	16406 Dec 12 17:05	0° \approx			16407 Nov 02 09:55	0° Z	
desc. node	16406 Dec 13 01:27	0° \approx 23'21		evening rise	16407 Nov 08 08:59	12° Z 21'47	
evening max el	16406 Dec 14 17:56	2° \approx 08'42	21°53'16		16407 Nov 17 11:57	0° Z	
retrograde	16406 Dec 27 03:23	8° \approx 16'14		evening max el	16407 Nov 26 16:06	12° Z 36'08	20°24'12
evening set	16406 Dec 30 10:53	7° \approx 51'41		desc. node	16407 Nov 29 22:30	15° Z 22'30	
inferior conj	16407 Jan 08 00:21	4° \approx 01'31	-6°00'36	retrograde	16407 Dec 07 14:09	18° Z 01'59	
minimum elong	16407 Jan 07 21:52	4° \approx 04'58	5°59'55	evening set	16407 Dec 09 21:39	17° Z 48'30	
min. Earth dist.	16407 Jan 07 22:50	4° \approx 03'38	0.54390 AU	inferior conj	16407 Dec 18 16:37	13° Z 53'48	-5°15'18
morning rise	16407 Jan 16 09:35	0° \approx 13'57		minimum elong	16407 Dec 18 07:15	14° Z 07'33	5°12'36
	16407 Jan 17 11:03	30° R Z		min. Earth dist.	16407 Dec 20 04:24	13° Z 01'15	0.54666 AU
direct	16407 Jan 19 23:05	29° Z 46'03		morning rise	16407 Dec 26 16:25	9° Z 53'41	
	16407 Jan 22 09:55	0° \approx		direct	16407 Dec 31 07:57	9° Z 07'07	
morning max el	16407 Feb 01 09:40	5° \approx 47'47	22°00'19	morning max el	16408 Jan 13 19:55	15° Z 45'30	23°49'16
asc. node	16407 Feb 06 14:38	11° \approx 44'28		asc. node	16408 Jan 24 11:54	29° Z 14'37	
	16407 Feb 17 14:14	0° X			16408 Jan 24 23:25	0° \approx	

morning set	16408 Feb 06 23:24	24° \approx 42'26		asc. node	16409 Jan 10 09:06	17° \approx 35'25	
	16408 Feb 09 10:05	0° \approx			16409 Jan 16 23:47	0° \approx	
				morning set	16409 Jan 21 11:01	9° \approx 20'25	
superior conj	16408 Feb 13 19:14	9° \approx 34'03	1°28'32				
minimum elong	16408 Feb 13 21:01	9° \approx 43'39	1°28'40	superior conj	16409 Jan 28 04:25	24° \approx 10'22	1°36'21
max. Earth dist.	16408 Feb 16 13:14	15° \approx 29'04	1.32739 AU	minimum elong	16409 Jan 28 05:15	24° \approx 14'56	1°36'45
evening rise	16408 Feb 21 11:38	25° \approx 41'34		max. Earth dist.	16409 Jan 29 16:04	27° \approx 27'26	1.31632 AU
	16408 Feb 23 16:00	0° \approx			16409 Jan 30 19:52	0° \approx	
desc. node	16408 Feb 25 22:46	4° \approx 21'28		evening rise	16409 Feb 04 08:32	9° \approx 39'59	
	16408 Mar 12 10:05	0° \approx		desc. node	16409 Feb 11 19:31	24° \approx 17'09	
evening max el	16408 Mar 26 13:20	17° \approx 17'58	27°28'41		16409 Feb 15 00:14	0° \approx	
retrograde	16408 Apr 09 07:01	24° \approx 50'59			16409 Mar 08 20:22	0° \approx	
evening set	16408 Apr 16 00:49	22° \approx 23'55		evening max el	16409 Mar 08 23:38	0° \approx 07'51	27°35'14
min. Earth dist.	16408 Apr 19 19:56	19° \approx 00'28	0.64196 AU	retrograde	16409 Mar 22 23:10	7° \approx 36'32	
asc. node	16408 Apr 21 09:22	17° \approx 22'17		evening set	16409 Mar 29 18:23	5° \approx 22'30	
inferior conj	16408 Apr 22 11:40	16° \approx 12'06	0°20'30	min. Earth dist.	16409 Apr 02 12:38	2° \approx 23'55	0.62059 AU
minimum elong	16408 Apr 22 11:05	16° \approx 13'39	0°19'52		16409 Apr 05 01:59	30° \approx 1'00	
morning rise	16408 Apr 28 23:37	10° \approx 51'26		inferior conj	16409 Apr 05 13:55	29° \approx 31'42	-0°51'44
direct	16408 May 01 13:14	10° \approx 18'02		minimum elong	16409 Apr 05 15:42	29° \approx 27'29	0°51'17
morning max el	16408 May 07 21:22	13° \approx 32'40	17°49'34	asc. node	16409 Apr 08 06:37	27° \approx 06'43	
	16408 May 19 12:21	0° \approx		morning rise	16409 Apr 12 16:10	24° \approx 27'57	
desc. node	16408 May 23 23:39	7° \approx 28'53		direct	16409 Apr 14 22:03	24° \approx 05'13	
morning set	16408 May 24 21:41	9° \approx 01'35		morning max el	16409 Apr 21 14:52	27° \approx 28'01	17°47'34
	16408 Jun 06 14:15	0° \approx			16409 Apr 23 21:51	0° \approx	
				morning set	16409 May 07 11:50	21° \approx 53'30	
superior conj	16408 Jun 07 05:34	1° \approx 01'38	-1°39'13	desc. node	16409 May 10 20:32	27° \approx 49'12	
minimum elong	16408 Jun 06 21:07	0° \approx 27'36	1°39'00		16409 May 12 02:23	0° \approx	
max. Earth dist.	16408 Jun 12 06:08	9° \approx 01'24	1.45295 AU				
evening rise	16408 Jun 22 22:41	25° \approx 36'18		superior conj	16409 May 19 01:27	11° \approx 56'28	-1°03'34
	16408 Jun 25 19:55	0° \approx		minimum elong	16409 May 18 19:38	11° \approx 32'02	1°03'21
	16408 Jul 16 19:46	0° \approx		max. Earth dist.	16409 May 25 22:28	23° \approx 15'22	1.43955 AU
asc. node	16408 Jul 18 08:27	1° \approx 47'27			16409 May 30 04:04	0° \approx	
evening max el	16408 Jul 20 08:15	3° \approx 54'45	20°06'45	evening rise	16409 Jun 02 12:01	5° \approx 12'06	
retrograde	16408 Jul 28 01:03	8° \approx 16'27			16409 Jun 19 04:13	0° \approx	
evening set	16408 Aug 01 00:21	6° \approx 45'58		evening max el	16409 Jul 03 06:29	17° \approx 49'30	21°15'50
inferior conj	16408 Aug 06 07:02	0° \approx 44'30	3°01'54	asc. node	16409 Jul 05 05:19	19° \approx 38'11	
minimum elong	16408 Aug 06 08:04	0° \approx 41'00	3°01'26	retrograde	16409 Jul 11 23:58	22° \approx 52'29	
	16408 Aug 06 20:06	30° \approx 30'00		evening set	16409 Jul 16 10:16	21° \approx 04'28	
min. Earth dist.	16408 Aug 07 04:42	29° \approx 30'51	0.68232 AU	inferior conj	16409 Jul 21 15:41	14° \approx 52'22	3°08'09
morning rise	16408 Aug 11 15:23	24° \approx 19'19		minimum elong	16409 Jul 21 15:46	14° \approx 52'04	3°07'39
direct	16408 Aug 17 05:09	21° \approx 53'34		min. Earth dist.	16409 Jul 21 23:57	14° \approx 23'35	0.68949 AU
desc. node	16408 Aug 19 22:05	22° \approx 22'45		morning rise	16409 Jul 26 21:00	8° \approx 32'26	
morning max el	16408 Aug 28 16:54	28° \approx 46'08	24°28'39	direct	16409 Jul 31 22:54	6° \approx 20'54	
	16408 Aug 29 21:22	0° \approx		desc. node	16409 Aug 06 19:20	8° \approx 36'50	
	16408 Sep 21 03:13	0° \approx		morning max el	16409 Aug 11 04:30	12° \approx 25'24	22°59'30
morning set	16408 Oct 03 05:37	19° \approx 50'00			16409 Aug 25 06:57	0° \approx	
max. Earth dist.	16408 Oct 06 19:39	26° \approx 10'42	1.37761 AU		16409 Sep 13 23:23	0° \approx	
	16408 Oct 08 22:00	0° \approx		morning set	16409 Sep 14 09:13	0° \approx 40'30	
				max. Earth dist.	16409 Sep 18 18:46	8° \approx 03'34	1.40181 AU
superior conj	16408 Oct 13 23:17	9° \approx 32'10	-0°03'49				
minimum elong	16408 Oct 13 23:31	9° \approx 33'18	0°03'25	superior conj	16409 Sep 26 15:35	21° \approx 58'11	-0°39'45
behind sun begin	16408 Oct 13 16:52	9° \approx 01'15		minimum elong	16409 Sep 26 18:40	22° \approx 12'12	0°39'02
behind sun end	16408 Oct 14 06:09	10° \approx 05'25			16409 Sep 30 23:23	0° \approx	
asc. node	16408 Oct 14 09:29	10° \approx 21'34		asc. node	16409 Oct 01 06:14	0° \approx 32'14	
evening rise	16408 Oct 22 12:02	26° \approx 25'42		evening rise	16409 Oct 06 07:19	10° \approx 08'51	
	16408 Oct 24 07:10	0° \approx			16409 Oct 17 12:05	0° \approx	
evening max el	16408 Nov 08 04:55	23° \approx 52'50	19°16'23	evening max el	16409 Oct 22 06:26	5° \approx 58'44	18°30'58
desc. node	16408 Nov 15 19:37	28° \approx 23'59		retrograde	16409 Oct 30 04:44	10° \approx 00'02	
retrograde	16408 Nov 17 12:11	28° \approx 32'57		evening set	16409 Nov 01 03:47	9° \approx 46'02	
evening set	16408 Nov 19 09:59	28° \approx 22'01		desc. node	16409 Nov 02 16:45	9° \approx 16'37	
inferior conj	16408 Nov 27 22:18	24° \approx 12'14	-3°45'50	inferior conj	16409 Nov 09 00:51	5° \approx 15'25	-2°02'34
minimum elong	16408 Nov 27 13:18	24° \approx 27'11	3°42'06	minimum elong	16409 Nov 08 20:00	5° \approx 24'50	2°00'03
min. Earth dist.	16408 Nov 30 13:46	22° \approx 26'58	0.55831 AU	min. Earth dist.	16409 Nov 12 05:28	2° \approx 47'47	0.57673 AU
morning rise	16408 Dec 05 14:15	19° \approx 42'01		morning rise	16409 Nov 16 08:50	0° \approx 08'41	
direct	16408 Dec 11 03:58	18° \approx 30'55			16409 Nov 16 15:45	30° \approx 00'00	
morning max el	16408 Dec 25 05:00	25° \approx 38'28	25°35'28	direct	16409 Nov 22 14:26	28° \approx 30'34	
	16408 Dec 29 07:17	0° \approx			16409 Nov 28 16:14	0° \approx	

morning max el	16409 Dec 06 20:13	6° X 00'15	26°59'38		16410 Nov 29 11:52	0° X	
	16409 Dec 24 13:34	0° Z		asc. node	16410 Dec 15 03:17	26° X 00'22	
asc. node	16409 Dec 28 06:13	6° Z 33'58			16410 Dec 17 04:15	0° Z	
morning set	16410 Jan 05 20:32	23° Z 48'14		morning set	16410 Dec 21 02:06	8° Z 01'36	
	16410 Jan 08 16:44	0° \approx		max. Earth dist.	16410 Dec 27 06:22	21° Z 30'29	1.31025 AU
superior conj	16410 Jan 12 15:34	8° \approx 48'56	1°38'04	superior conj	16410 Dec 28 02:49	23° Z 24'43	1°33'46
minimum elong	16410 Jan 12 15:20	8° \approx 47'38	1°38'37	minimum elong	16410 Dec 28 01:35	23° Z 17'49	1°34'19
max. Earth dist.	16410 Jan 12 22:55	9° \approx 30'07	1.31056 AU		16410 Dec 31 01:30	0° \approx	
evening rise	16410 Jan 19 11:54	23° \approx 52'53		evening rise	16411 Jan 03 19:37	8° \approx 15'23	
	16410 Jan 22 10:21	0° H			16411 Jan 14 21:13	0° H	
desc. node	16410 Jan 29 16:16	13° H 49'28		desc. node	16411 Jan 16 13:03	2° H 49'55	
	16410 Feb 08 21:04	0° Y		evening max el	16411 Feb 01 02:23	23° H 25'37	26°05'06
evening max el	16410 Feb 19 04:50	12° Y 13'00	27°07'37		16411 Feb 11 11:17	0° Y	
retrograde	16410 Mar 05 06:00	19° Y 31'14		retrograde	16411 Feb 15 01:31	0° Y 30'33	
evening set	16410 Mar 11 20:45	17° Y 37'37			16411 Feb 18 15:16	30° R H	
min. Earth dist.	16410 Mar 15 19:09	14° Y 55'12	0.59795 AU	evening set	16411 Feb 21 04:27	29° H 02'18	
inferior conj	16410 Mar 19 00:37	12° Y 16'08	-2°16'55	min. Earth dist.	16411 Feb 25 15:30	26° H 24'10	0.57625 AU
minimum elong	16410 Mar 19 05:49	12° Y 05'25	2°14'57	inferior conj	16411 Feb 28 16:07	24° H 15'20	-3°48'33
asc. node	16410 Mar 26 03:54	7° Y 42'33		minimum elong	16411 Mar 01 00:43	24° H 00'01	3°45'34
morning rise	16410 Mar 26 18:28	7° Y 31'54		morning rise	16411 Mar 09 00:11	19° H 52'37	
direct	16410 Mar 28 18:51	7° Y 16'10		direct	16411 Mar 10 23:17	19° H 40'10	
morning max el	16410 Apr 05 05:12	10° Y 58'23	18°04'13	asc. node	16411 Mar 13 01:10	19° H 54'47	
	16410 Apr 17 19:02	0° B		morning max el	16411 Mar 19 12:31	23° H 52'42	18°41'16
morning set	16410 Apr 20 19:08	5° B 32'06			16411 Mar 24 11:49	0° Y	
desc. node	16410 Apr 27 17:21	18° B 17'07		morning set	16411 Apr 04 14:27	19° Y 42'12	
					16411 Apr 09 22:05	0° B	
superior conj	16410 Apr 30 20:24	23° B 53'23	-0°25'45	superior conj	16411 Apr 13 11:12	6° B 43'29	0°09'28
minimum elong	16410 Apr 30 18:15	23° B 43'51	0°25'52	minimum elong	16411 Apr 13 11:50	6° B 46'24	0°09'02
	16410 May 04 08:19	0° II		behind sun begin	16411 Apr 13 06:04	6° B 19'24	
max. Earth dist.	16410 May 08 10:29	6° II 56'08	1.42087 AU	behind sun end	16411 Apr 13 17:36	7° B 13'20	
evening rise	16410 May 13 16:52	15° II 32'39		desc. node	16411 Apr 14 14:08	8° B 48'48	
	16410 May 23 00:36	0° E		max. Earth dist.	16411 Apr 20 18:32	19° B 56'25	1.39884 AU
	16410 Jun 14 07:37	0° Q		evening rise	16411 Apr 24 18:47	26° B 48'40	
evening max el	16410 Jun 15 23:43	1° Q 44'09	22°34'01		16411 Apr 26 16:45	0° II	
asc. node	16410 Jun 22 02:14	6° Q 30'15			16411 May 16 14:54	0° E	
retrograde	16410 Jun 25 21:12	7° Q 31'35		evening max el	16411 May 29 14:02	15° E 39'25	23°55'38
evening set	16410 Jun 30 19:04	5° Q 27'20		asc. node	16411 Jun 08 23:11	22° E 06'24	
	16410 Jul 05 10:13	30° R E		retrograde	16411 Jun 09 15:34	22° E 08'23	
inferior conj	16410 Jul 06 01:39	29° E 06'21	3°03'38	evening set	16411 Jun 15 01:09	19° E 50'21	
minimum elong	16410 Jul 06 00:48	29° E 09'16	3°02'58	min. Earth dist.	16411 Jun 19 17:06	14° E 23'57	0.68910 AU
min. Earth dist.	16410 Jul 05 20:47	29° E 23'17	0.69177 AU	inferior conj	16411 Jun 20 11:03	13° E 22'46	2°48'41
morning rise	16410 Jul 11 06:24	22° E 53'48		minimum elong	16411 Jun 20 09:26	13° E 28'16	2°47'46
direct	16410 Jul 15 20:09	21° E 00'07		morning rise	16411 Jun 25 17:45	7° E 19'06	
desc. node	16410 Jul 24 16:34	26° E 05'54		direct	16411 Jun 29 19:37	5° E 44'57	
morning max el	16410 Jul 24 19:15	26° E 12'33	21°33'31	morning max el	16411 Jul 07 16:02	10° E 10'34	20°17'13
	16410 Jul 28 06:30	0° Q		desc. node	16411 Jul 11 13:47	14° E 31'04	
	16410 Aug 18 18:10	0° P			16411 Jul 22 21:20	0° Q	
morning set	16410 Aug 25 13:04	10° P 30'48		morning set	16411 Aug 04 21:59	19° Q 35'01	
max. Earth dist.	16410 Aug 31 23:15	20° P 51'09	1.42440 AU		16411 Aug 11 14:34	0° P	
	16410 Sep 06 10:37	0° A		max. Earth dist.	16411 Aug 14 10:44	4° P 30'11	1.44278 AU
superior conj	16410 Sep 08 12:22	3° A 33'12	-1°16'41	superior conj	16411 Aug 20 10:03	14° P 09'31	-1°49'20
minimum elong	16410 Sep 08 18:42	4° A 00'31	1°15'50	minimum elong	16411 Aug 20 18:00	14° P 42'06	1°48'51
asc. node	16410 Sep 18 02:58	20° A 37'39			16411 Aug 29 20:40	0° A	
evening rise	16410 Sep 19 14:59	23° A 21'23		evening rise	16411 Sep 02 06:12	5° A 50'50	
	16410 Sep 23 06:59	0° M		asc. node	16411 Sep 04 23:40	10° A 33'22	
evening max el	16410 Oct 05 16:23	18° M 44'27	18°06'36		16411 Sep 17 11:01	0° M	
retrograde	16410 Oct 12 16:01	22° M 19'32		evening max el	16411 Sep 19 06:31	1° M 59'02	18°01'38
evening set	16410 Oct 14 21:11	21° M 58'17		retrograde	16411 Sep 25 18:01	5° M 21'22	
desc. node	16410 Oct 20 13:56	18° M 23'17		evening set	16411 Sep 28 07:04	4° M 49'13	
inferior conj	16410 Oct 22 00:49	17° M 06'15	-0°27'50		16411 Oct 04 10:30	30° R A	
minimum elong	16410 Oct 21 23:52	17° M 08'24	0°27'01	inferior conj	16411 Oct 04 19:01	29° A 38'07	0°49'08
min. Earth dist.	16410 Oct 25 05:48	14° M 13'50	0.59880 AU	minimum elong	16411 Oct 04 20:24	29° A 34'34	0°48'54
morning rise	16410 Oct 28 23:18	11° M 26'16		desc. node	16411 Oct 07 11:13	26° A 53'16	
direct	16410 Nov 04 13:39	9° M 23'16		min. Earth dist.	16411 Oct 07 16:12	26° A 40'56	0.62168 AU
morning max el	16410 Nov 18 19:45	17° M 09'30	27°48'36				

morning rise	16411 Oct 11 07:10	23° Ω 33'24		morning rise	16412 Sep 23 05:44	6° Ω 23'39	
direct	16411 Oct 17 23:40	21° Ω 10'56		desc. node	16412 Sep 23 08:32	6° Ω 18'11	
morning max el	16411 Nov 01 02:09	29° Ω 07'41	27°58'05	direct	16412 Sep 29 19:09	3° Ω 49'28	
	16411 Nov 01 22:51	0° \mathbb{M}		morning max el	16412 Oct 13 12:30	11° Ω 46'49	27°30'55
	16411 Nov 23 10:29	0° \mathbb{J}			16412 Oct 28 01:28	0° \mathbb{M}	
asc. node	16411 Dec 02 00:17	15° \mathbb{J} 46'07			16412 Nov 14 22:14	0° \mathbb{J}	
morning set	16411 Dec 05 01:36	21° \mathbb{J} 54'42		morning set	16412 Nov 17 16:33	5° \mathbb{J} 22'04	
	16411 Dec 08 21:50	0° \mathbb{Z}		asc. node	16412 Nov 17 21:15	5° \mathbb{J} 45'18	
max. Earth dist.	16411 Dec 10 10:23	3° \mathbb{Z} 18'01	1.31552 AU	max. Earth dist.	16412 Nov 22 07:09	14° \mathbb{J} 45'16	1.32648 AU
superior conj	16411 Dec 12 12:14	7° \mathbb{Z} 51'38	1°23'22	superior conj	16412 Nov 25 17:50	22° \mathbb{J} 04'43	1°06'46
minimum elong	16411 Dec 12 10:13	7° \mathbb{Z} 40'33	1°23'48	minimum elong	16412 Nov 25 15:27	21° \mathbb{J} 51'56	1°07'02
evening rise	16411 Dec 19 05:44	22° \mathbb{Z} 41'51			16412 Nov 29 09:24	0° \mathbb{Z}	
	16411 Dec 22 16:32	0° \approx		evening rise	16412 Dec 02 16:28	7° \mathbb{Z} 08'13	
desc. node	16412 Jan 03 09:54	21° \approx 06'13			16412 Dec 14 13:01	0° \approx	
	16412 Jan 10 01:20	0° \mathbb{H}		desc. node	16412 Dec 20 06:49	8° \approx 22'38	
evening max el	16412 Jan 13 15:30	3° \mathbb{H} 48'04	24°34'37	evening max el	16412 Dec 25 00:52	13° \approx 43'43	22°51'21
retrograde	16412 Jan 27 08:10	10° \mathbb{H} 37'55		retrograde	16413 Jan 07 02:05	20° \approx 10'54	
evening set	16412 Feb 01 14:19	9° \mathbb{H} 37'03		evening set	16413 Jan 11 02:59	19° \approx 35'27	
min. Earth dist.	16412 Feb 07 03:25	6° \mathbb{H} 46'53	0.55814 AU	min. Earth dist.	16413 Jan 18 10:22	16° \approx 13'44	0.54656 AU
inferior conj	16412 Feb 09 10:18	5° \mathbb{H} 21'51	-5°11'03	inferior conj	16413 Jan 19 09:49	15° \approx 40'27	-5°58'46
minimum elong	16412 Feb 09 19:19	5° \mathbb{H} 07'51	5°08'44	minimum elong	16413 Jan 19 12:51	15° \approx 36'07	5°58'06
morning rise	16412 Feb 18 02:31	1° \mathbb{H} 19'42		morning rise	16413 Jan 27 23:56	11° \approx 51'14	
direct	16412 Feb 20 07:54	1° \mathbb{H} 06'26		direct	16413 Jan 30 22:42	11° \approx 31'07	
asc. node	16412 Feb 27 22:28	3° \mathbb{H} 54'07		morning max el	16413 Feb 11 14:04	17° \approx 08'46	21°03'21
morning max el	16412 Mar 01 08:35	5° \mathbb{H} 58'51	19°40'42	asc. node	16413 Feb 13 19:47	19° \approx 30'02	
	16412 Mar 16 15:31	0° \mathbb{Y}			16413 Feb 21 06:03	0° \mathbb{H}	
morning set	16412 Mar 18 17:50	4° \mathbb{Y} 11'40		morning set	16413 Mar 03 02:19	18° \mathbb{H} 51'45	
					16413 Mar 08 09:59	0° \mathbb{Y}	
superior conj	16412 Mar 26 17:26	20° \mathbb{Y} 14'18	0°39'35	superior conj	16413 Mar 10 11:04	4° \mathbb{Y} 14'30	1°03'35
minimum elong	16412 Mar 26 19:33	20° \mathbb{Y} 24'41	0°39'03	minimum elong	16413 Mar 10 13:36	4° \mathbb{Y} 27'30	1°03'13
desc. node	16412 Mar 31 10:53	29° \mathbb{Y} 20'14		max. Earth dist.	16413 Mar 15 09:28	14° \mathbb{Y} 10'07	1.35420 AU
	16412 Mar 31 19:22	0° \mathbb{B}		desc. node	16413 Mar 18 07:36	19° \mathbb{Y} 47'37	
max. Earth dist.	16412 Apr 02 00:40	2° \mathbb{B} 16'12	1.37578 AU	evening rise	16413 Mar 19 08:50	21° \mathbb{Y} 46'09	
evening rise	16412 Apr 05 17:07	8° \mathbb{B} 56'05			16413 Mar 23 21:54	0° \mathbb{B}	
	16412 Apr 18 11:43	0° \mathbb{I}			16413 Apr 12 07:16	0° \mathbb{I}	
evening max el	16412 May 11 03:22	29° \mathbb{I} 34'15	25°14'03	evening max el	16413 Apr 23 16:58	13° \mathbb{I} 23'59	26°21'50
	16412 May 11 13:55	0° \mathbb{G}		retrograde	16413 May 06 15:42	20° \mathbb{I} 47'27	
retrograde	16412 May 23 06:04	6° \mathbb{G} 36'31		evening set	16413 May 12 22:29	18° \mathbb{I} 14'56	
asc. node	16412 May 25 20:13	6° \mathbb{G} 08'52		asc. node	16413 May 12 17:21	18° \mathbb{I} 25'18	
evening set	16412 May 29 02:54	4° \mathbb{G} 08'36		min. Earth dist.	16413 May 17 00:13	14° \mathbb{I} 01'09	0.66932 AU
	16412 Jun 01 22:13	30° \mathbb{R} \mathbb{I}		inferior conj	16413 May 18 20:24	11° \mathbb{I} 46'05	1°45'45
min. Earth dist.	16412 Jun 02 10:56	29° \mathbb{I} 19'18	0.68152 AU	minimum elong	16413 May 18 18:16	11° \mathbb{I} 52'37	1°44'30
inferior conj	16412 Jun 03 18:01	27° \mathbb{I} 37'53	2°23'01	morning rise	16413 May 24 15:00	6° \mathbb{I} 03'35	
minimum elong	16412 Jun 03 15:54	27° \mathbb{I} 44'47	2°21'52	direct	16413 May 27 19:04	5° \mathbb{I} 06'59	
morning rise	16412 Jun 09 05:18	21° \mathbb{I} 44'11		morning max el	16413 Jun 03 06:48	8° \mathbb{I} 33'25	18°28'15
direct	16412 Jun 12 19:50	20° \mathbb{I} 29'34		desc. node	16413 Jun 14 08:01	23° \mathbb{I} 14'32	
morning max el	16412 Jun 19 20:06	24° \mathbb{I} 19'15	19°14'47		16413 Jun 18 16:43	0° \mathbb{G}	
	16412 Jun 24 18:08	0° \mathbb{G}		morning set	16413 Jun 24 00:36	8° \mathbb{G} 22'50	
desc. node	16412 Jun 27 10:57	3° \mathbb{G} 37'52			16413 Jul 07 19:42	0° \mathbb{Q}	
greatest brilliancy	16412 Jul 02 14:11	11° \mathbb{G} 02'24	-0.7m	superior conj	16413 Jul 09 19:40	3° \mathbb{Q} 06'54	-2°13'00
morning set	16412 Jul 14 03:25	28° \mathbb{G} 35'22		minimum elong	16413 Jul 09 16:49	2° \mathbb{Q} 55'45	2°13'31
	16412 Jul 15 01:25	0° \mathbb{Q}		max. Earth dist.	16413 Jul 09 22:59	3° \mathbb{Q} 19'49	1.46017 AU
max. Earth dist.	16412 Jul 27 03:26	18° \mathbb{Q} 45'24	1.45506 AU	evening rise	16413 Jul 25 16:11	27° \mathbb{Q} 54'56	
superior conj	16412 Jul 30 09:30	23° \mathbb{Q} 52'31	-2°10'21		16413 Jul 26 23:57	0° \mathbb{P}	
minimum elong	16412 Jul 30 14:15	24° \mathbb{Q} 11'16	2°10'36	greatest brilliancy	16413 Aug 03 06:48	11° \mathbb{P} 25'05	-0.8m
	16412 Aug 03 06:03	0° \mathbb{P}		asc. node	16413 Aug 08 17:08	19° \mathbb{P} 37'14	
evening rise	16412 Aug 13 23:47	17° \mathbb{P} 24'49		evening max el	16413 Aug 16 09:43	29° \mathbb{P} 21'48	18°45'38
asc. node	16412 Aug 21 20:23	0° \mathbb{A} 15'19			16413 Aug 17 01:47	0° \mathbb{A}	
	16412 Aug 21 16:34	0° \mathbb{A}		retrograde	16413 Aug 23 00:42	2° \mathbb{A} 57'28	
evening max el	16412 Sep 01 21:18	15° \mathbb{A} 34'12	18°14'55	evening set	16413 Aug 26 07:55	1° \mathbb{A} 55'04	
retrograde	16412 Sep 08 06:12	18° \mathbb{A} 56'49			16413 Aug 28 15:56	30° \mathbb{R} \mathbb{P}	
evening set	16412 Sep 11 03:59	18° \mathbb{A} 10'44		inferior conj	16413 Aug 31 22:22	26° \mathbb{P} 13'27	2°27'22
inferior conj	16412 Sep 17 03:28	12° \mathbb{A} 43'21	1°46'55	minimum elong	16413 Sep 01 00:32	26° \mathbb{P} 06'40	2°26'46
minimum elong	16412 Sep 17 05:43	12° \mathbb{A} 36'51	1°46'18	min. Earth dist.	16413 Sep 02 17:58	23° \mathbb{P} 57'33	0.66170 AU
min. Earth dist.	16412 Sep 19 12:42	9° \mathbb{A} 59'36	0.64318 AU				































































































































morning rise	16413 Sep 06 16:08	19° \mathbb{M} 47'14		min. Earth dist.	16414 Aug 17 06:11	8° \mathbb{M} 24'07	0.67618 AU
desc. node	16413 Sep 10 05:52	17° \mathbb{M} 38'01		morning rise	16414 Aug 21 11:46	3° \mathbb{M} 35'36	
direct	16413 Sep 12 22:27	17° \mathbb{M} 10'05		direct	16414 Aug 27 08:10	1° \mathbb{M} 03'44	
morning max el	16413 Sep 25 23:58	24° \mathbb{M} 53'56	26°34'27	desc. node	16414 Aug 28 03:12	1° \mathbb{M} 06'13	
	16413 Sep 30 15:20	0° \mathbb{L}		morning max el	16414 Sep 08 11:06	8° \mathbb{M} 18'26	25°17'53
	16413 Oct 21 12:24	0° \mathbb{M}			16414 Sep 25 12:27	0° \mathbb{L}	
morning set	16413 Oct 31 19:53	18° \mathbb{M} 16'43		morning set	16414 Oct 14 07:52	0° \mathbb{M} 30'22	
asc. node	16413 Nov 04 18:09	25° \mathbb{M} 52'51			16414 Oct 14 01:05	0° \mathbb{M}	
max. Earth dist.	16413 Nov 04 18:10	25° \mathbb{M} 52'58	1.34297 AU	max. Earth dist.	16414 Oct 17 20:36	6° \mathbb{M} 57'51	1.36414 AU
	16413 Nov 06 19:30	0° \mathbb{X}		asc. node	16414 Oct 22 14:59	16° \mathbb{M} 04'43	
superior conj	16413 Nov 09 17:13	5° \mathbb{X} 58'01	0°43'57	superior conj	16414 Oct 24 07:29	19° \mathbb{M} 24'33	0°15'10
minimum elong	16413 Nov 09 15:07	5° \mathbb{X} 47'06	0°44'08	minimum elong	16414 Oct 24 06:33	19° \mathbb{M} 19'55	0°15'27
evening rise	16413 Nov 17 01:57	21° \mathbb{X} 30'06		behind sun begin	16414 Oct 24 04:42	19° \mathbb{M} 10'44	
	16413 Nov 21 05:07	0° \mathbb{Z}		behind sun end	16414 Oct 24 08:24	19° \mathbb{M} 29'06	
evening max el	16413 Dec 06 16:07	23° \mathbb{Z} 50'35	21°13'12		16414 Oct 29 13:06	0° \mathbb{X}	
desc. node	16413 Dec 07 03:48	24° \mathbb{Z} 18'49		evening rise	16414 Nov 01 08:05	5° \mathbb{X} 42'34	
retrograde	16413 Dec 18 11:50	29° \mathbb{Z} 41'21			16414 Nov 14 22:18	0° \mathbb{Z}	
evening set	16413 Dec 21 07:22	29° \mathbb{Z} 22'57		evening max el	16414 Nov 18 20:32	4° \mathbb{Z} 38'11	19°52'37
inferior conj	16413 Dec 30 00:31	25° \mathbb{Z} 32'53	-5°48'33	desc. node	16414 Nov 24 00:51	8° \mathbb{Z} 30'34	
minimum elong	16413 Dec 29 18:19	25° \mathbb{Z} 41'38	5°47'10	retrograde	16414 Nov 29 01:30	9° \mathbb{Z} 43'46	
min. Earth dist.	16413 Dec 30 15:41	25° \mathbb{Z} 11'28	0.54383 AU	evening set	16414 Dec 01 03:22	9° \mathbb{Z} 32'06	
morning rise	16414 Jan 07 05:31	21° \mathbb{Z} 42'06		inferior conj	16414 Dec 09 20:57	5° \mathbb{Z} 32'14	-4°40'56
direct	16414 Jan 11 06:18	21° \mathbb{Z} 06'57		minimum elong	16414 Dec 09 10:57	5° \mathbb{Z} 47'36	4°37'29
morning max el	16414 Jan 24 05:25	27° \mathbb{Z} 26'11	22°45'46	min. Earth dist.	16414 Dec 11 22:17	4° \mathbb{Z} 16'36	0.55062 AU
	16414 Jan 26 16:47	0° \approx		morning rise	16414 Dec 17 17:17	1° \mathbb{Z} 21'18	
asc. node	16414 Jan 31 17:04	6° \approx 24'08		direct	16414 Dec 22 19:17	0° \mathbb{Z} 24'36	
	16414 Feb 13 20:37	0° \mathbb{H}		morning max el	16415 Jan 05 13:39	7° \mathbb{Z} 15'55	24°36'04
morning set	16414 Feb 15 13:36	3° \mathbb{H} 35'58		asc. node	16415 Jan 18 14:19	24° \mathbb{Z} 17'41	
					16415 Jan 21 21:44	0° \approx	
superior conj	16414 Feb 22 12:49	18° \mathbb{H} 35'01	1°21'13	morning set	16415 Jan 31 01:36	18° \approx 17'26	
minimum elong	16414 Feb 22 15:00	18° \mathbb{H} 46'42	1°21'10		16415 Feb 05 09:54	0° \mathbb{H}	
max. Earth dist.	16414 Feb 26 01:14	25° \mathbb{H} 59'37	1.33593 AU				
	16414 Feb 28 00:11	0° \mathbb{Y}		superior conj	16415 Feb 06 19:54	3° \mathbb{H} 06'59	1°32'35
evening rise	16414 Mar 02 14:26	5° \mathbb{Y} 09'49		minimum elong	16415 Feb 06 21:17	3° \mathbb{H} 14'38	1°32'51
desc. node	16414 Mar 05 04:18	10° \mathbb{Y} 07'05		max. Earth dist.	16415 Feb 09 00:37	7° \mathbb{H} 54'32	1.32206 AU
	16414 Mar 16 15:25	0° \mathbb{B}		evening rise	16415 Feb 14 06:31	18° \mathbb{H} 57'13	
evening max el	16414 Apr 06 06:45	27° \mathbb{B} 00'57	27°11'23		16415 Feb 19 22:14	0° \mathbb{Y}	
	16414 Apr 09 15:14	0° \mathbb{I}		desc. node	16415 Feb 20 01:00	0° \mathbb{Y} 12'54	
retrograde	16414 Apr 19 19:17	4° \mathbb{I} 33'05			16415 Mar 10 20:34	0° \mathbb{B}	
evening set	16414 Apr 26 09:52	2° \mathbb{I} 02'18		evening max el	16415 Mar 19 19:03	10° \mathbb{B} 11'53	27°35'28
	16414 Apr 28 17:12	30° \mathbb{R} \mathbb{B}		retrograde	16415 Apr 02 15:37	17° \mathbb{B} 43'04	
asc. node	16414 Apr 29 14:32	29° \mathbb{B} 05'27		evening set	16415 Apr 09 10:38	15° \mathbb{B} 20'56	
min. Earth dist.	16414 Apr 30 06:58	28° \mathbb{B} 21'21	0.65301 AU	min. Earth dist.	16415 Apr 13 05:06	12° \mathbb{B} 08'46	0.63320 AU
inferior conj	16414 May 02 15:47	25° \mathbb{B} 41'58	0°55'42	inferior conj	16415 Apr 16 01:14	9° \mathbb{B} 17'10	-0°08'19
minimum elong	16414 May 02 14:22	25° \mathbb{B} 45'59	0°54'41	minimum elong	16415 Apr 16 01:30	9° \mathbb{B} 16'29	0°08'35
morning rise	16414 May 08 20:35	20° \mathbb{B} 12'23		transit middle	16415 Apr 16 01:30	9° \mathbb{B} 16'29	0°08'35
direct	16414 May 11 15:09	19° \mathbb{B} 31'19		transit begin	16415 Apr 15 22:49	9° \mathbb{B} 23'17	
morning max el	16414 May 17 22:16	22° \mathbb{B} 46'54	17°58'38	transit end	16415 Apr 16 04:11	9° \mathbb{B} 09'42	
	16414 May 23 18:23	0° \mathbb{I}		asc. node	16415 Apr 16 11:46	8° \mathbb{B} 50'36	
desc. node	16414 Jun 01 05:02	13° \mathbb{I} 13'14		morning rise	16415 Apr 22 18:57	4° \mathbb{B} 03'03	
morning set	16414 Jun 05 00:20	19° \mathbb{I} 26'56		direct	16415 Apr 25 05:11	3° \mathbb{B} 34'29	
	16414 Jun 11 11:47	0° \mathbb{E}		morning max el	16415 May 01 15:50	6° \mathbb{B} 51'04	17°46'28
					16415 May 17 01:41	0° \mathbb{I}	
superior conj	16414 Jun 19 08:48	12° \mathbb{E} 34'51	-1°55'58	morning set	16415 May 18 01:58	1° \mathbb{I} 44'12	
minimum elong	16414 Jun 19 00:39	12° \mathbb{E} 02'38	1°56'00	desc. node	16415 May 19 01:57	3° \mathbb{I} 27'09	
max. Earth dist.	16414 Jun 22 19:23	17° \mathbb{E} 59'24	1.45778 AU				
	16414 Jun 30 12:55	0° \mathbb{Q}		superior conj	16415 May 30 15:22	22° \mathbb{I} 52'48	-1°24'47
evening rise	16414 Jul 05 10:54	7° \mathbb{Q} 33'48		minimum elong	16415 May 30 07:43	22° \mathbb{I} 21'27	1°24'29
greatest brilliancy	16414 Jul 18 22:44	27° \mathbb{Q} 57'30	-0.7m		16415 Jun 04 00:59	0° \mathbb{E}	
	16414 Jul 20 08:23	0° \mathbb{M}		max. Earth dist.	16415 Jun 05 14:16	2° \mathbb{E} 28'46	1.44811 AU
asc. node	16414 Jul 26 13:55	8° \mathbb{M} 31'48		evening rise	16415 Jun 14 21:16	16° \mathbb{E} 58'19	
evening max el	16414 Jul 30 17:29	13° \mathbb{M} 15'37	19°32'49		16415 Jun 23 12:22	0° \mathbb{Q}	
retrograde	16414 Aug 06 22:36	17° \mathbb{M} 16'48		asc. node	16415 Jul 13 10:43	26° \mathbb{Q} 49'25	
evening set	16414 Aug 10 15:54	15° \mathbb{M} 56'40		evening max el	16415 Jul 13 19:12	27° \mathbb{Q} 10'47	20°34'43
inferior conj	16414 Aug 16 00:35	10° \mathbb{M} 02'13	2°53'00		16415 Jul 17 02:09	0° \mathbb{M}	
minimum elong	16414 Aug 16 02:07	9° \mathbb{M} 57'08	2°52'29	retrograde	16415 Jul 21 21:39	1° \mathbb{M} 48'44	

evening set	16415 Jul 26 01:41	0° \mathbb{M} 10'30		retrograde	16416 Jul 04 20:06	16° Ω 27'11	
	16415 Jul 26 06:51	30° $\mathbb{R}\Omega$		evening set	16416 Jul 09 11:19	14° Ω 31'47	
inferior conj	16415 Jul 31 07:31	24° Ω 04'25	3°05'54	inferior conj	16416 Jul 14 16:56	8° Ω 15'28	3°07'32
minimum elong	16415 Jul 31 08:09	24° Ω 02'13	3°05'26	minimum elong	16416 Jul 14 16:37	8° Ω 16'34	3°06'58
min. Earth dist.	16415 Jul 31 23:23	23° Ω 09'47	0.68604 AU	min. Earth dist.	16416 Jul 14 19:30	8° Ω 06'31	0.69107 AU
morning rise	16415 Aug 05 14:19	17° Ω 41'25		morning rise	16416 Jul 19 21:44	1° Ω 58'35	
direct	16415 Aug 10 23:08	15° Ω 21'17			16416 Jul 23 17:22	30° $\mathbb{R}\mathfrak{S}$	
desc. node	16415 Aug 15 00:30	16° Ω 26'51		direct	16416 Jul 24 18:22	29° \mathfrak{S} 54'37	
morning max el	16415 Aug 21 22:09	21° Ω 53'38	23°50'49		16416 Jul 25 20:00	0° Ω	
	16415 Aug 28 23:35	0° \mathbb{M}		desc. node	16416 Jul 31 21:46	3° Ω 15'42	
	16415 Sep 18 18:42	0° \mathfrak{L}		morning max el	16416 Aug 03 10:55	5° Ω 36'54	22°22'07
morning set	16415 Sep 26 00:24	11° \mathfrak{L} 54'03			16416 Aug 22 05:47	0° \mathbb{M}	
max. Earth dist.	16415 Sep 29 19:40	18° \mathfrak{L} 28'38	1.38797 AU	morning set	16416 Sep 05 17:54	22° \mathbb{M} 19'07	
	16415 Oct 06 04:05	0° \mathbb{M}			16416 Sep 10 10:04	0° \mathfrak{L}	
				max. Earth dist.	16416 Sep 10 20:57	0° \mathfrak{L} 45'35	1.41179 AU
superior conj	16415 Oct 07 09:00	2° \mathbb{M} 15'46	-0°18'42	superior conj	16416 Sep 18 17:29	14° \mathfrak{L} 20'58	-0°55'33
minimum elong	16415 Oct 07 10:20	2° \mathbb{M} 22'00	0°18'09	minimum elong	16416 Sep 18 21:58	14° \mathfrak{L} 40'58	0°54'45
asc. node	16415 Oct 09 11:45	6° \mathbb{M} 17'13		asc. node	16416 Sep 25 08:27	26° \mathfrak{L} 26'06	
evening rise	16415 Oct 16 08:15	19° \mathbb{M} 39'21			16416 Sep 27 06:18	0° \mathbb{M}	
	16415 Oct 21 17:32	0° \mathfrak{X}		evening rise	16416 Sep 28 23:08	3° \mathbb{M} 11'05	
evening max el	16415 Nov 01 15:09	16° \mathfrak{X} 16'37	18°54'19	evening max el	16416 Oct 14 20:42	28° \mathbb{M} 40'21	18°18'05
retrograde	16415 Nov 10 07:12	20° \mathfrak{X} 39'10			16416 Oct 16 07:40	0° \mathfrak{X}	
desc. node	16415 Nov 10 21:57	20° \mathfrak{X} 37'54		retrograde	16416 Oct 22 08:16	2° \mathfrak{X} 29'17	
evening set	16415 Nov 12 04:42	20° \mathfrak{X} 27'25		evening set	16416 Oct 24 09:24	2° \mathfrak{X} 12'48	
inferior conj	16415 Nov 20 11:05	16° \mathfrak{X} 08'40	-3°02'02	desc. node	16416 Oct 27 19:09	0° \mathfrak{X} 40'03	
minimum elong	16415 Nov 20 03:41	16° \mathfrak{X} 21'48	2°58'38		16416 Oct 28 19:23	30° $\mathbb{R}\mathbb{M}$	
min. Earth dist.	16415 Nov 23 09:43	14° \mathfrak{X} 03'56	0.56549 AU	inferior conj	16416 Oct 31 23:02	27° \mathbb{M} 32'50	-1°20'31
morning rise	16415 Nov 27 23:49	11° \mathfrak{X} 23'13		minimum elong	16416 Oct 31 19:59	27° \mathbb{M} 39'09	1°18'46
direct	16415 Dec 03 21:01	10° \mathfrak{X} 01'02		min. Earth dist.	16416 Nov 04 05:01	24° \mathbb{M} 52'08	0.58582 AU
morning max el	16415 Dec 18 00:48	17° \mathfrak{X} 17'56	26°15'05	morning rise	16416 Nov 08 03:05	22° \mathbb{M} 10'43	
	16415 Dec 28 11:53	0° \mathfrak{Z}		direct	16416 Nov 14 13:01	20° \mathbb{M} 21'40	
asc. node	16416 Jan 05 11:30	12° \mathfrak{Z} 56'09		morning max el	16416 Nov 28 19:51	27° \mathbb{M} 59'41	27°25'16
	16416 Jan 14 04:23	0° \approx			16416 Nov 30 19:04	0° \mathfrak{X}	
morning set	16416 Jan 15 12:32	2° \approx 51'42			16416 Dec 21 05:14	0° \mathfrak{Z}	
superior conj	16416 Jan 22 06:06	17° \approx 44'35	1°37'49	asc. node	16416 Dec 22 08:36	2° \mathfrak{Z} 07'33	
minimum elong	16416 Jan 22 06:29	17° \approx 46'43	1°38'18	morning set	16416 Dec 29 20:36	17° \mathfrak{Z} 13'57	
max. Earth dist.	16416 Jan 23 05:43	19° \approx 56'08	1.31323 AU		16417 Jan 04 16:05	0° \approx	
	16416 Jan 27 20:04	0° \mathfrak{X}		superior conj	16417 Jan 05 17:30	2° \approx 22'26	1°36'59
evening rise	16416 Jan 29 06:25	3° \mathfrak{X} 02'09		minimum elong	16417 Jan 05 16:50	2° \approx 18'40	1°37'33
desc. node	16416 Feb 06 21:44	19° \mathfrak{X} 59'28		max. Earth dist.	16417 Jan 05 13:14	1° \approx 58'29	1.30970 AU
	16416 Feb 12 17:42	0° \mathbb{Y}		evening rise	16417 Jan 12 11:50	17° \approx 19'15	
evening max el	16416 Mar 01 03:26	22° \mathbb{Y} 43'32	27°27'46		16417 Jan 18 16:37	0° \mathfrak{X}	
	16416 Mar 13 10:36	0° \mathfrak{X}		desc. node	16417 Jan 23 18:30	9° \mathfrak{X} 19'26	
retrograde	16416 Mar 15 03:41	0° \mathfrak{X} 07'47			16417 Feb 07 00:28	0° \mathbb{Y}	
	16416 Mar 16 20:09	30° $\mathbb{R}\mathbb{Y}$		evening max el	16417 Feb 11 05:22	4° \mathbb{Y} 25'50	26°45'02
evening set	16416 Mar 21 22:03	28° \mathbb{Y} 01'28		retrograde	16417 Feb 25 06:10	11° \mathbb{Y} 39'30	
min. Earth dist.	16416 Mar 25 17:14	25° \mathbb{Y} 11'19	0.61105 AU	evening set	16417 Mar 03 16:57	9° \mathbb{Y} 55'51	
inferior conj	16416 Mar 28 21:15	22° \mathbb{Y} 22'34	-1°26'30	min. Earth dist.	16417 Mar 07 19:13	7° \mathbb{Y} 17'09	0.58838 AU
minimum elong	16416 Mar 29 00:23	22° \mathbb{Y} 15'35	1°25'25	inferior conj	16417 Mar 11 00:09	4° \mathbb{Y} 48'39	-2°55'44
asc. node	16416 Apr 02 09:02	18° \mathbb{Y} 48'42		minimum elong	16417 Mar 11 06:56	4° \mathbb{Y} 35'32	2°53'11
morning rise	16416 Apr 05 06:06	17° \mathbb{Y} 26'56		morning rise	16417 Mar 19 00:30	0° \mathbb{Y} 13'52	
direct	16416 Apr 07 09:26	17° \mathbb{Y} 07'32		asc. node	16417 Mar 20 06:19	0° \mathbb{Y} 01'58	
morning max el	16416 Apr 14 08:23	20° \mathbb{Y} 36'48	17°52'21	direct	16417 Mar 20 23:34	0° \mathbb{Y} 00'05	
	16416 Apr 21 09:48	0° \mathfrak{X}		morning max el	16417 Mar 28 20:19	3° \mathbb{Y} 53'47	18°17'30
morning set	16416 Apr 30 00:03	14° \mathfrak{X} 57'55		morning set	16417 Apr 13 13:01	28° \mathbb{Y} 51'37	
desc. node	16416 May 04 22:47	23° \mathfrak{X} 51'16			16417 Apr 14 03:29	0° \mathfrak{X}	
	16416 May 08 10:24	0° \mathbb{I}		desc. node	16417 Apr 21 19:36	14° \mathfrak{X} 21'32	
superior conj	16416 May 10 21:16	4° \mathbb{I} 14'54	-0°47'27	superior conj	16417 Apr 23 01:15	16° \mathfrak{X} 36'37	-0°10'20
minimum elong	16416 May 10 17:03	3° \mathbb{I} 56'46	0°47'21	minimum elong	16417 Apr 23 00:26	16° \mathfrak{X} 32'53	0°10'37
max. Earth dist.	16416 May 18 05:16	16° \mathbb{I} 31'39	1.43216 AU	behind sun begin	16417 Apr 22 18:51	16° \mathfrak{X} 07'32	
evening rise	16416 May 24 15:55	26° \mathbb{I} 50'12		behind sun end	16417 Apr 23 06:01	16° \mathfrak{X} 58'11	
	16416 May 26 16:37	0° \mathfrak{S}		max. Earth dist.	16417 Apr 30 15:07	29° \mathfrak{X} 54'52	1.41168 AU
	16416 Jun 16 07:52	0° Ω			16417 Apr 30 16:20	0° \mathbb{I}	
evening max el	16416 Jun 25 14:59	11° Ω 05'12	21°48'13	evening rise	16417 May 05 05:30	7° \mathbb{I} 34'25	
asc. node	16416 Jun 29 07:34	14° Ω 17'21					

	16417 May 19 18:31	0°☿		max. Earth dist.	16418 Apr 12 21:27	12°♊35'03	1.38893 AU
evening max el	16417 Jun 08 06:36	25°☿00'12	23°08'39	evening rise	16418 Apr 16 16:25	19°♊13'24	
	16417 Jun 14 15:23	0°♊			16418 Apr 23 04:05	0°♊	
asc. node	16417 Jun 16 04:30	0°♊40'11			16418 May 13 23:30	0°☿	
retrograde	16417 Jun 18 16:26	1°♊06'49		evening max el	16418 May 21 20:22	8°☿55'54	24°29'53
	16417 Jun 22 08:57	30°♊☿		retrograde	16418 Jun 02 09:22	15°☿40'32	
evening set	16417 Jun 23 19:13	28°☿56'18		asc. node	16418 Jun 03 01:31	15°☿38'37	
min. Earth dist.	16417 Jun 28 16:29	23°☿08'06	0.69119 AU	evening set	16418 Jun 07 23:40	13°☿18'02	
inferior conj	16417 Jun 29 02:56	22°☿31'54	2°58'35	min. Earth dist.	16418 Jun 12 12:07	8°☿07'15	0.68642 AU
minimum elong	16417 Jun 29 01:44	22°☿36'02	2°57'50	inferior conj	16418 Jun 13 11:34	6°☿48'34	2°39'10
morning rise	16417 Jul 04 08:11	16°☿22'49		minimum elong	16418 Jun 13 09:42	6°☿54'50	2°38'09
direct	16417 Jul 08 16:43	14°☿37'28		morning rise	16418 Jun 18 19:52	0°☿48'43	
morning max el	16417 Jul 17 04:04	19°☿29'31	20°59'34		16418 Jun 20 03:28	30°♊♊	
desc. node	16417 Jul 18 18:59	21°☿11'16		direct	16418 Jun 22 16:50	29°♊22'50	
	16417 Jul 25 21:56	0°♊			16418 Jun 25 09:17	0°☿	
	16417 Aug 15 08:55	0°♊☿		morning max el	16418 Jun 30 03:47	3°☿31'54	19°48'46
morning set	16417 Aug 16 12:36	1°♊47'28		desc. node	16418 Jul 05 16:11	9°☿55'36	
max. Earth dist.	16417 Aug 24 03:57	13°♊54'48	1.43288 AU		16418 Jul 19 16:19	0°♊	
				morning set	16418 Jul 26 17:37	10°♊43'23	
superior conj	16417 Aug 31 04:44	25°♊31'49	-1°31'27	max. Earth dist.	16418 Aug 06 17:35	27°♊50'08	1.44888 AU
minimum elong	16417 Aug 31 12:08	26°♊03'02	1°30'42		16418 Aug 08 02:22	0°♊☿	
	16417 Sep 02 19:50	0°♊					
evening rise	16417 Sep 12 00:29	16°♊07'15		superior conj	16418 Aug 11 16:35	5°♊44'41	-2°00'08
asc. node	16417 Sep 12 05:09	16°♊28'03		minimum elong	16418 Aug 11 23:53	6°♊14'07	1°59'57
	16417 Sep 19 23:15	0°♊☿		evening rise	16418 Aug 25 07:07	28°♊14'37	
evening max el	16417 Sep 28 08:55	11°♊39'47	18°02'10		16418 Aug 26 08:04	0°♊	
retrograde	16417 Oct 05 02:15	15°♊07'47		asc. node	16418 Aug 30 01:53	6°♊18'44	
evening set	16417 Oct 07 10:34	14°♊42'25		evening max el	16418 Sep 11 23:51	25°♊05'00	18°05'07
inferior conj	16417 Oct 14 07:14	9°♊42'15	0°07'11	retrograde	16418 Sep 18 08:59	28°♊25'27	
minimum elong	16417 Oct 14 07:29	9°♊41'41	0°07'28	evening set	16418 Sep 21 01:45	27°♊47'39	
transit middle	16417 Oct 14 07:29	9°♊41'41	0°07'28	inferior conj	16418 Sep 27 08:00	22°♊29'30	1°15'53
transit begin	16417 Oct 14 04:35	9°♊48'37		minimum elong	16418 Sep 27 09:54	22°♊24'21	1°15'25
transit end	16417 Oct 14 10:23	9°♊34'44		min. Earth dist.	16418 Sep 30 00:31	19°♊36'00	0.63119 AU
desc. node	16417 Oct 14 16:23	9°♊20'20		desc. node	16418 Oct 01 13:39	18°♊03'50	
min. Earth dist.	16417 Oct 17 09:48	6°♊45'03	0.60863 AU	morning rise	16418 Oct 03 15:52	16°♊17'34	
morning rise	16417 Oct 21 01:20	3°♊50'25		direct	16418 Oct 10 07:51	13°♊48'54	
direct	16417 Oct 27 17:25	1°♊37'53		morning max el	16418 Oct 24 06:49	21°♊46'52	27°50'31
morning max el	16417 Nov 10 22:36	9°♊30'18	27°57'16		16418 Oct 31 11:56	0°♊☿	
	16417 Nov 26 19:40	0°♊☿			16418 Nov 19 23:29	0°♊☿	
asc. node	16417 Dec 09 05:39	21°♊42'53		asc. node	16418 Nov 26 02:39	11°♊35'16	
	16417 Dec 13 08:37	0°♊☿		morning set	16418 Nov 27 20:05	15°♊02'31	
morning set	16417 Dec 13 23:51	1°♊19'14		max. Earth dist.	16418 Dec 02 20:45	25°♊32'44	1.31950 AU
max. Earth dist.	16417 Dec 19 19:27	13°♊53'06	1.31175 AU		16418 Dec 04 22:08	0°♊☿	
superior conj	16417 Dec 21 04:13	16°♊55'09	1°30'07	superior conj	16418 Dec 05 12:21	1°♊17'37	1°17'06
minimum elong	16417 Dec 21 02:38	16°♊46'15	1°30'37	minimum elong	16418 Dec 05 10:07	1°♊05'27	1°17'27
	16417 Dec 27 01:41	0°♊☿		evening rise	16418 Dec 12 07:26	16°♊11'25	
evening rise	16417 Dec 27 20:47	1°♊43'44			16418 Dec 19 00:46	0°♊☿	
desc. node	16418 Jan 10 15:19	28°♊02'35		desc. node	16418 Dec 28 12:11	15°♊55'54	
	16418 Jan 11 20:58	0°♊☿		evening max el	16419 Jan 05 10:04	25°♊24'05	23°51'15
evening max el	16418 Jan 23 23:09	15°♊15'37	25°29'24		16419 Jan 11 11:07	0°♊☿	
retrograde	16418 Feb 06 20:47	22°♊15'07		retrograde	16419 Jan 18 21:33	2°♊04'51	
evening set	16418 Feb 12 15:43	20°♊58'43		evening set	16419 Jan 23 15:59	1°♊15'38	
min. Earth dist.	16418 Feb 17 11:58	18°♊17'24	0.56780 AU		16419 Jan 26 16:22	30°♊☿	
inferior conj	16418 Feb 20 06:40	16°♊25'49	-4°26'07	min. Earth dist.	16419 Jan 29 21:32	28°♊14'31	0.55225 AU
minimum elong	16418 Feb 20 16:03	16°♊10'05	4°23'09	inferior conj	16419 Jan 31 16:17	27°♊11'13	-5°37'11
morning rise	16418 Feb 28 19:15	12°♊12'12		minimum elong	16419 Jan 31 23:36	27°♊00'22	5°35'39
direct	16418 Mar 02 19:36	12°♊00'05		morning rise	16419 Feb 09 08:51	23°♊15'33	
asc. node	16418 Mar 07 03:38	12°♊59'42		direct	16419 Feb 11 20:22	23°♊00'07	
morning max el	16418 Mar 11 23:25	16°♊29'11	19°03'46	asc. node	16419 Feb 22 00:58	27°♊42'14	
	16418 Mar 21 13:17	0°♊☿		morning max el	16419 Feb 22 13:29	28°♊11'55	20°13'01
morning set	16418 Mar 28 12:11	13°♊10'57			16419 Feb 24 06:49	0°♊☿	
				morning set	16419 Mar 12 18:06	27°♊46'07	
superior conj	16418 Apr 05 23:07	29°♊45'12	0°22'56		16419 Mar 13 20:14	0°♊☿	
minimum elong	16418 Apr 06 00:32	29°♊51'55	0°22'25				
	16418 Apr 06 02:13	0°♊☿		superior conj	16419 Mar 20 10:39	13°♊29'34	0°50'31
desc. node	16418 Apr 08 16:22	4°♊53'26		minimum elong	16419 Mar 20 13:03	13°♊41'37	0°50'02

max. Earth dist.	16419 Mar 26 04:26	24° Υ 42'32	1.36633 AU	superior conj	16420 Mar 03 08:05	27° Υ 39'03	1°11'50
desc. node	16419 Mar 26 13:07	25° Υ 23'35		minimum elong	16420 Mar 03 10:32	27° Υ 51'53	1°11'36
	16419 Mar 29 00:36	0° \mathcal{B}			16420 Mar 04 11:08	0° Υ	
evening rise	16419 Mar 29 22:37	1° \mathcal{B} 40'18		max. Earth dist.	16420 Mar 07 16:07	6° Υ 33'15	1.34596 AU
	16419 Apr 16 06:52	0° Π		evening rise	16420 Mar 11 20:37	14° Υ 45'06	
evening max el	16419 May 04 09:58	22° Π 49'50	25°44'41	desc. node	16420 Mar 12 09:50	15° Υ 47'47	
	16419 May 16 04:48	0° \mathcal{E}			16420 Mar 20 08:00	0° \mathcal{B}	
retrograde	16419 May 16 21:43	0° \mathcal{E} 01'50			16420 Apr 09 22:53	0° Π	
	16419 May 17 14:22	30° $\mathcal{R}\Pi$		evening max el	16420 Apr 15 23:42	6° Π 34'57	26°45'35
asc. node	16419 May 20 22:36	28° Π 56'15		retrograde	16420 Apr 29 04:43	14° Π 03'03	
evening set	16419 May 22 23:00	27° Π 31'28		evening set	16420 May 05 15:21	11° Π 30'16	
min. Earth dist.	16419 May 27 04:16	22° Π 57'27	0.67691 AU	asc. node	16420 May 06 19:46	10° Π 28'36	
inferior conj	16419 May 28 16:51	21° Π 01'06	2°08'42	min. Earth dist.	16420 May 09 14:52	7° Π 31'09	0.66287 AU
minimum elong	16419 May 28 14:40	21° Π 08'05	2°07'29	inferior conj	16420 May 11 16:34	5° Π 04'25	1°26'11
morning rise	16419 Jun 03 06:53	15° Π 11'51		minimum elong	16420 May 11 14:38	5° Π 10'09	1°24'58
direct	16419 Jun 06 16:57	14° Π 04'56			16420 May 16 18:11	30° $\mathcal{R}\mathcal{B}$	
morning max el	16419 Jun 13 10:45	17° Π 42'52	18°52'57	morning rise	16420 May 17 15:10	29° \mathcal{B} 27'24	
desc. node	16419 Jun 22 13:19	29° Π 15'52		direct	16420 May 20 15:09	28° \mathcal{B} 37'40	
	16419 Jun 23 01:26	0° \mathcal{E}			16420 May 24 14:33	0° Π	
greatest brilliancy	16419 Jun 26 21:34	5° \mathcal{E} 43'37	-0.8m	morning max el	16420 May 26 23:48	1° Π 57'38	18°13'38
morning set	16419 Jul 06 03:40	19° \mathcal{E} 58'01		desc. node	16420 Jun 08 10:22	19° Π 02'36	
	16419 Jul 12 14:52	0° Ω		morning set	16420 Jun 15 11:37	0° \mathcal{E} 16'52	
max. Earth dist.	16419 Jul 20 12:15	12° Ω 16'59	1.45820 AU		16420 Jun 15 07:24	0° \mathcal{E}	
superior conj	16419 Jul 22 08:41	15° Ω 10'43	-2°13'58	superior conj	16420 Jun 30 17:56	24° \mathcal{E} 25'05	-2°07'58
minimum elong	16419 Jul 22 10:26	15° Ω 17'35	2°14'26	minimum elong	16420 Jun 30 12:08	24° \mathcal{E} 02'28	2°08'21
	16419 Jul 31 17:58	0° \mathcal{M}		max. Earth dist.	16420 Jul 02 08:53	26° \mathcal{E} 57'03	1.46003 AU
evening rise	16419 Aug 06 14:07	9° \mathcal{M} 21'27			16420 Jul 04 07:51	0° Ω	
asc. node	16419 Aug 16 22:36	25° \mathcal{M} 52'49		evening rise	16420 Jul 16 20:21	19° Ω 27'15	
	16419 Aug 19 16:05	0° \mathcal{A}			16420 Jul 23 15:46	0° \mathcal{M}	
evening max el	16419 Aug 26 14:01	8° \mathcal{A} 46'35	18°25'53	greatest brilliancy	16420 Jul 27 16:49	6° \mathcal{M} 10'39	-0.7m
retrograde	16419 Sep 02 00:17	12° \mathcal{A} 12'55		asc. node	16420 Aug 02 19:22	15° \mathcal{M} 04'17	
evening set	16419 Sep 05 02:07	11° \mathcal{A} 19'57		evening max el	16420 Aug 09 00:38	22° \mathcal{M} 37'27	19°03'44
inferior conj	16419 Sep 10 21:19	5° \mathcal{A} 46'07	2°06'03	retrograde	16420 Aug 15 20:42	26° \mathcal{M} 22'44	
minimum elong	16419 Sep 10 23:37	5° \mathcal{A} 39'13	2°05'24	evening set	16420 Aug 19 08:07	25° \mathcal{M} 12'49	
min. Earth dist.	16419 Sep 13 00:45	3° \mathcal{A} 13'06	0.65152 AU	inferior conj	16420 Aug 24 19:42	19° \mathcal{M} 25'18	2°39'55
	16419 Sep 16 02:33	30° $\mathcal{R}\mathcal{M}$		minimum elong	16420 Aug 24 21:39	19° \mathcal{M} 19'03	2°39'21
morning rise	16419 Sep 16 19:47	29° \mathcal{M} 23'00		min. Earth dist.	16420 Aug 26 09:15	17° \mathcal{M} 24'45	0.66833 AU
desc. node	16419 Sep 18 10:59	28° \mathcal{M} 13'02		morning rise	16420 Aug 30 10:24	12° \mathcal{M} 58'12	
direct	16419 Sep 23 06:36	26° \mathcal{M} 46'47		desc. node	16420 Sep 04 08:18	10° \mathcal{M} 28'08	
	16419 Oct 01 09:47	0° \mathcal{A}		direct	16420 Sep 05 12:36	10° \mathcal{M} 22'41	
morning max el	16419 Oct 06 17:52	4° \mathcal{A} 39'18	27°10'01	morning max el	16420 Sep 18 05:32	17° \mathcal{M} 56'06	26°03'54
	16419 Oct 26 01:24	0° \mathcal{M}			16420 Sep 28 09:32	0° \mathcal{A}	
morning set	16419 Nov 11 06:29	28° \mathcal{M} 16'48			16420 Oct 18 00:45	0° \mathcal{M}	
	16419 Nov 12 03:37	0° \mathcal{A}		morning set	16420 Oct 24 03:48	10° \mathcal{M} 55'28	
asc. node	16419 Nov 12 23:34	1° \mathcal{A} 38'31		max. Earth dist.	16420 Oct 27 21:08	17° \mathcal{M} 57'38	1.35154 AU
max. Earth dist.	16419 Nov 15 13:46	6° \mathcal{A} 52'09	1.33293 AU	asc. node	16420 Oct 29 20:26	21° \mathcal{M} 48'28	
superior conj	16419 Nov 19 15:37	15° \mathcal{A} 23'11	0°57'51	superior conj	16420 Nov 02 11:30	29° \mathcal{M} 05'58	0°32'26
minimum elong	16419 Nov 19 13:16	15° \mathcal{A} 10'41	0°58'05	minimum elong	16420 Nov 02 09:46	28° \mathcal{M} 57'08	0°32'39
	16419 Nov 26 10:59	0° \mathcal{B}			16420 Nov 02 22:04	0° \mathcal{A}	
evening rise	16419 Nov 26 17:54	0° \mathcal{B} 36'49		evening rise	16420 Nov 10 02:15	14° \mathcal{A} 55'38	
	16419 Dec 13 04:46	0° \approx			16420 Nov 17 17:32	0° \mathcal{B}	
desc. node	16419 Dec 15 09:08	2° \approx 40'56		evening max el	16420 Nov 28 16:45	15° \mathcal{B} 40'21	20°36'11
evening max el	16419 Dec 17 20:38	5° \approx 19'25	22°07'56	desc. node	16420 Dec 01 06:07	17° \mathcal{B} 55'36	
retrograde	16419 Dec 30 10:34	11° \approx 32'33		retrograde	16420 Dec 09 20:42	21° \mathcal{B} 13'00	
evening set	16420 Jan 02 22:32	11° \approx 05'25		evening set	16420 Dec 12 06:47	20° \mathcal{B} 58'34	
inferior conj	16420 Jan 11 10:21	7° \approx 14'28	-6°02'09	inferior conj	16420 Dec 21 01:40	17° \mathcal{B} 05'25	-5°25'40
minimum elong	16420 Jan 11 09:20	7° \approx 15'53	6°01'35	minimum elong	16420 Dec 20 16:53	17° \mathcal{B} 18'09	5°23'19
min. Earth dist.	16420 Jan 11 02:59	7° \approx 24'46	0.54431 AU	min. Earth dist.	16420 Dec 22 08:23	16° \mathcal{B} 20'52	0.54564 AU
morning rise	16420 Jan 19 21:02	3° \approx 27'08		morning rise	16420 Dec 29 02:44	13° \mathcal{B} 08'13	
direct	16420 Jan 23 06:31	3° \approx 01'34		direct	16421 Jan 02 14:28	12° \mathcal{B} 24'51	
morning max el	16420 Feb 04 12:25	8° \approx 57'03	21°45'00	morning max el	16421 Jan 15 23:42	18° \mathcal{B} 58'45	23°32'47
asc. node	16420 Feb 08 22:16	13° \approx 53'19			16421 Jan 24 23:49	0° \approx	
	16420 Feb 18 23:25	0° \mathcal{K}		asc. node	16421 Jan 25 19:32	1° \approx 14'23	
morning set	16420 Feb 25 04:02	12° \mathcal{K} 28'36		morning set	16421 Feb 08 15:49	27° \approx 12'02	
					16421 Feb 09 23:02	0° \mathcal{K}	

superior conj	16421 Feb 15 12:23	12° H 05'09	1°26'48	asc. node	16422 Jan 12 16:44	19° Z 28'49	
minimum elong	16421 Feb 15 14:17	12° H 15'22	1°26'53		16422 Jan 18 09:59	0° \approx	
max. Earth dist.	16421 Feb 18 11:03	18° H 23'19	1.32941 AU	morning set	16422 Jan 24 03:35	11° \approx 51'20	
evening rise	16421 Feb 23 06:59	28° H 19'13					
	16421 Feb 24 03:20	0° Y		superior conj	16422 Jan 30 21:05	26° \approx 40'52	1°35'33
desc. node	16421 Feb 27 06:31	6° Y 01'41		minimum elong	16422 Jan 30 22:04	26° \approx 46'18	1°35'55
	16421 Mar 13 12:35	0° B			16422 Feb 01 09:12	0° H	
evening max el	16421 Mar 29 12:49	20° B 01'09	27°25'08	max. Earth dist.	16422 Feb 01 13:01	0° H 20'58	1.31764 AU
retrograde	16421 Apr 12 05:27	27° B 34'35		evening rise	16422 Feb 07 02:45	12° H 15'25	
evening set	16421 Apr 18 22:31	25° B 06'14		desc. node	16422 Feb 14 03:12	26° H 00'17	
min. Earth dist.	16421 Apr 22 18:01	21° B 38'28	0.64490 AU		16422 Feb 16 08:08	0° Y	
asc. node	16421 Apr 23 16:58	20° B 37'40			16422 Mar 09 02:28	0° B	
inferior conj	16421 Apr 25 08:04	18° B 51'51	0°30'17	evening max el	16422 Mar 11 23:43	2° B 57'08	27°36'22
minimum elong	16421 Apr 25 07:13	18° B 54'08	0°29'31	retrograde	16422 Mar 25 22:45	10° B 26'44	
morning rise	16421 May 01 18:04	13° B 28'52		evening set	16422 Apr 01 18:01	8° B 10'30	
direct	16421 May 04 08:53	12° B 53'38		min. Earth dist.	16422 Apr 05 12:13	5° B 08'31	0.62391 AU
morning max el	16421 May 10 16:34	16° B 08'15	17°51'22	inferior conj	16422 Apr 08 12:16	2° B 15'56	-0°39'50
	16421 May 20 18:34	0° II		minimum elong	16422 Apr 08 13:37	2° B 12'42	0°39'35
desc. node	16421 May 26 07:20	9° II 08'04		asc. node	16422 Apr 10 14:12	0° B 19'56	
morning set	16421 May 27 22:46	11° II 52'51			16422 Apr 10 23:24	30° R Y	
	16421 Jun 07 22:42	0° E		morning rise	16422 Apr 15 12:14	27° Y 09'20	
				direct	16422 Apr 17 19:10	26° Y 45'13	
superior conj	16421 Jun 10 13:09	4° E 10'57	-1°44'00		16422 Apr 24 07:36	0° B	
minimum elong	16421 Jun 10 04:36	3° E 36'43	1°43'50	morning max el	16422 Apr 24 10:09	0° B 06'09	17°46'40
max. Earth dist.	16421 Jun 15 04:36	11° E 32'45	1.45440 AU	morning set	16422 May 10 09:52	24° B 36'21	
evening rise	16421 Jun 26 09:20	28° E 53'39		desc. node	16422 May 13 04:14	29° B 26'53	
	16421 Jun 27 02:42	0° O			16422 May 13 11:50	0° II	
greatest brilliancy	16421 Jul 11 04:26	21° O 02'45	-0.6m				
	16421 Jul 17 15:43	0° M		superior conj	16422 May 22 05:29	14° II 55'52	-1°09'16
asc. node	16421 Jul 20 16:09	3° M 44'14		minimum elong	16422 May 21 23:09	14° II 29'23	1°09'00
evening max el	16421 Jul 23 05:47	6° M 31'26	19°57'30	max. Earth dist.	16422 May 28 21:30	25° II 50'25	1.44199 AU
retrograde	16421 Jul 30 19:24	10° M 47'35			16422 May 31 12:06	0° E	
evening set	16421 Aug 03 17:05	9° M 19'52		evening rise	16422 Jun 05 21:22	8° E 25'05	
inferior conj	16421 Aug 09 00:12	3° M 20'14	2°59'55		16422 Jun 20 08:01	0° O	
minimum elong	16421 Aug 09 01:22	3° M 16'16	2°59'26	evening max el	16422 Jul 06 04:53	20° O 26'03	21°04'51
min. Earth dist.	16421 Aug 09 23:56	1° M 59'59	0.68088 AU	asc. node	16422 Jul 07 12:58	21° O 42'09	
	16421 Aug 11 12:44	30° R O		retrograde	16422 Jul 14 18:20	25° O 22'13	
morning rise	16421 Aug 14 09:13	26° O 54'27		evening set	16422 Jul 19 02:59	23° O 36'45	
direct	16421 Aug 20 00:44	24° O 26'50		inferior conj	16422 Jul 24 08:26	17° O 26'16	3°07'53
desc. node	16421 Aug 22 05:37	24° O 46'13		minimum elong	16422 Jul 24 08:40	17° O 25'28	3°07'24
	16421 Aug 30 05:26	0° M		min. Earth dist.	16422 Jul 24 18:42	16° O 50'37	0.68878 AU
morning max el	16421 Aug 31 16:37	1° M 25'49	24°41'37	morning rise	16422 Jul 29 14:05	11° O 05'28	
	16421 Sep 22 09:05	0° A		direct	16422 Aug 03 17:49	8° O 51'29	
morning set	16421 Oct 06 08:03	22° A 49'07		desc. node	16422 Aug 09 02:56	10° O 46'36	
max. Earth dist.	16421 Oct 09 21:02	29° A 08'20	1.37405 AU	morning max el	16422 Aug 14 03:53	15° O 03'15	23°12'42
	16421 Oct 10 08:22	0° M			16422 Aug 26 09:07	0° M	
					16422 Sep 15 07:39	0° A	
superior conj	16421 Oct 16 20:48	12° M 18'15	0°01'21	morning set	16422 Sep 17 15:02	3° A 47'51	
minimum elong	16421 Oct 16 20:41	12° M 17'42	0°01'44	max. Earth dist.	16422 Sep 21 19:50	10° A 54'07	1.39825 AU
behind sun begin	16421 Oct 16 14:04	11° M 45'29					
behind sun end	16421 Oct 17 03:19	12° M 50'00		superior conj	16422 Sep 29 15:37	24° A 50'49	-0°34'08
asc. node	16421 Oct 16 17:13	12° M 00'48		minimum elong	16422 Sep 29 18:12	25° A 02'44	0°33'29
evening rise	16421 Oct 25 06:11	29° M 01'56			16422 Oct 02 10:01	0° M	
	16421 Oct 25 17:45	0° A		asc. node	16422 Oct 03 13:57	2° M 11'52	
evening max el	16421 Nov 11 03:29	26° A 49'54	19°25'05	evening rise	16422 Oct 09 02:48	12° M 48'30	
	16421 Nov 15 03:02	0° Z			16422 Oct 18 13:04	0° A	
desc. node	16421 Nov 18 03:10	1° Z 16'25		evening max el	16422 Oct 25 03:21	8° A 48'51	18°36'23
retrograde	16421 Nov 20 16:13	1° Z 36'19		retrograde	16422 Nov 02 05:52	12° A 55'11	
evening set	16421 Nov 22 14:41	1° Z 25'23		evening set	16422 Nov 04 04:23	12° A 41'52	
	16421 Nov 26 15:53	30° R A		desc. node	16422 Nov 05 00:19	12° A 28'24	
inferior conj	16421 Dec 01 04:42	27° A 18'32	-4°00'56	inferior conj	16422 Nov 12 03:58	8° A 14'21	-2°18'01
minimum elong	16421 Nov 30 19:16	27° A 33'52	3°57'11	minimum elong	16422 Nov 11 22:26	8° A 24'49	2°15'14
min. Earth dist.	16421 Dec 03 17:01	25° A 40'38	0.55607 AU	min. Earth dist.	16422 Nov 15 07:29	5° A 52'12	0.57366 AU
morning rise	16421 Dec 08 21:45	22° A 53'37		morning rise	16422 Nov 19 13:13	3° A 13'15	
direct	16421 Dec 14 08:42	21° A 46'13		direct	16422 Nov 25 16:57	1° A 39'13	
morning max el	16421 Dec 28 08:15	28° A 49'59	25°20'38	morning max el	16422 Dec 09 22:12	9° A 05'28	26°49'11
	16421 Dec 29 12:38	0° Z			16422 Dec 25 18:20	0° Z	

asc. node	16422 Dec 30 13:53	8°  22'30			16423 Dec 18 14:54	0° 	
morning set	16423 Jan 08 13:30	26°  20'49		morning set	16423 Dec 23 19:48	10°  36'26	
	16423 Jan 10 05:54	0° 		max. Earth dist.	16423 Dec 30 03:15	24°  25'04	1.30995 AU
superior conj	16423 Jan 15 08:02	11°  19'14	1°38'12	superior conj	16423 Dec 30 19:23	25°  55'21	1°34'49
minimum elong	16423 Jan 15 07:58	11°  18'50	1°38'44	minimum elong	16423 Dec 30 18:18	25°  49'15	1°35'22
max. Earth dist.	16423 Jan 15 19:34	12°  23'46	1.31109 AU		16424 Jan 01 15:04	0° 	
evening rise	16423 Jan 22 05:17	26°  26'24		evening rise	16424 Jan 06 12:28	10°  47'21	
	16423 Jan 23 22:01	0° 			16424 Jan 16 04:04	0° 	
desc. node	16423 Jan 31 23:55	15°  36'27		desc. node	16424 Jan 18 20:42	4°  42'07	
evening max el	16423 Feb 09 20:16	0° 		evening max el	16424 Feb 04 04:39	26°  29'31	26°16'24
	16423 Feb 22 05:55	15°  09'36	27°13'58		16424 Feb 08 09:57	0° 	
retrograde	16423 Mar 08 06:53	22°  29'10		retrograde	16424 Feb 18 04:09	3°  36'36	
evening set	16423 Mar 14 22:47	20°  32'11		evening set	16424 Feb 24 09:30	2°  04'11	
min. Earth dist.	16423 Mar 18 20:12	17°  48'04	0.60136 AU		16424 Feb 27 22:20	30°  R 	
inferior conj	16423 Mar 22 01:30	15°  06'03	-2°03'22	min. Earth dist.	16424 Feb 28 17:52	29°  26'27	0.57933 AU
minimum elong	16423 Mar 22 06:08	14°  56'17	2°01'37	inferior conj	16424 Mar 02 20:03	27°  12'03	-3°34'49
asc. node	16423 Mar 28 11:29	10°  43'47		minimum elong	16424 Mar 03 04:14	26°  57'10	3°31'53
morning rise	16423 Mar 29 17:01	10°  18'38		morning rise	16424 Mar 11 02:16	22°  46'15	
direct	16423 Mar 31 18:06	10°  02'02		direct	16424 Mar 13 01:12	22°  33'33	
morning max el	16423 Apr 08 01:09	13°  40'31	18°00'31	asc. node	16424 Mar 14 08:49	22°  39'32	
	16423 Apr 19 03:30	0° 		morning max el	16424 Mar 21 09:47	26°  40'40	18°34'25
morning set	16423 Apr 23 14:58	8°  08'58			16424 Mar 24 08:02	0° 	
desc. node	16423 Apr 30 01:04	19°  53'48		morning set	16424 Apr 06 08:45	22°  14'49	
					16424 Apr 10 09:19	0° 	
superior conj	16423 May 03 21:09	26°  43'52	-0°31'23	superior conj	16424 Apr 15 09:16	9°  26'39	0°04'26
minimum elong	16423 May 03 18:29	26°  32'07	0°31'28	minimum elong	16424 Apr 15 09:33	9°  28'00	0°04'01
	16423 May 05 18:07	0° 		behind sun begin	16424 Apr 15 02:41	8°  56'07	
max. Earth dist.	16423 May 11 10:28	9°  37'49	1.42396 AU	behind sun end	16424 Apr 15 16:25	9°  59'47	
evening rise	16423 May 16 23:22	18°  37'45		desc. node	16424 Apr 15 21:51	10°  24'54	
	16423 May 24 06:59	0° 		max. Earth dist.	16424 Apr 22 19:01	22°  44'13	1.40220 AU
	16423 Jun 14 23:13	0° 		evening rise	16424 Apr 26 22:03	29°  45'07	
evening max el	16423 Jun 18 22:47	4°  20'50	22°21'59		16424 Apr 27 01:37	0° 	
asc. node	16423 Jun 24 09:51	8°  24'42			16424 May 16 17:11	0° 	
retrograde	16423 Jun 28 15:53	10°  20'12		evening max el	16424 May 31 13:19	18°  15'45	23°43'31
evening set	16423 Jul 03 12:04	7°  25'23		asc. node	16424 Jun 10 06:50	24°  23'28	
inferior conj	16423 Jul 08 18:20	1°  39'36	3°04'59	retrograde	16424 Jun 11 10:51	24°  29'16	
minimum elong	16423 Jul 08 17:38	1°  42'03	3°04'21	evening set	16424 Jun 16 18:43	22°  22'56	
min. Earth dist.	16423 Jul 08 15:23	1°  49'54	0.69177 AU	min. Earth dist.	16424 Jun 21 11:56	16°  25'59	0.68979 AU
	16423 Jul 09 23:09	30°  R 		inferior conj	16424 Jun 22 03:59	15°  26'03	2°51'38
morning rise	16423 Jul 13 23:02	25°  25'59		minimum elong	16424 Jun 22 02:28	16°  20'14	2°50'46
direct	16423 Jul 18 14:35	23°  29'35		morning rise	16424 Jun 27 10:14	9°  25'10	
desc. node	16423 Jul 27 00:13	28°  25'53		direct	16424 Jul 01 13:47	8°  24'03	
morning max el	16423 Jul 27 18:03	28°  49'26	21°45'52	morning max el	16424 Jul 09 13:55	12°  23'46	20°27'48
	16423 Jul 28 21:23	0° 		desc. node	16424 Jul 12 21:27	16°  23'46	
	16423 Aug 20 00:26	0° 			16424 Jul 23 01:24	0° 	
morning set	16423 Aug 28 22:22	13°  47'01		morning set	16424 Aug 07 09:29	22°  26'34	
max. Earth dist.	16423 Sep 03 23:42	23°  34'53	1.42126 AU		16424 Aug 11 22:23	0° 	
	16423 Sep 07 19:50	0° 		max. Earth dist.	16424 Aug 16 10:09	7°  26'52	1.44041 AU
superior conj	16423 Sep 11 15:35	6°  23'59	-1°11'12	superior conj	16424 Aug 22 16:50	17°  29'08	-1°44'58
minimum elong	16423 Sep 11 21:27	6°  25'34	1°10'22	minimum elong	16424 Aug 23 00:46	17°  25'55	1°44'23
asc. node	16423 Sep 20 10:39	22°  21'12			16424 Aug 30 05:35	0° 	
evening rise	16423 Sep 22 12:30	26°  26'28		evening rise	16424 Sep 04 06:35	8°  24'22	
	16423 Sep 24 15:33	0° 		asc. node	16424 Sep 06 07:22	12°  21'35	
evening max el	16423 Oct 08 12:18	21°  29'01	18°08'57		16424 Sep 17 04:55	0° 	
retrograde	16423 Oct 15 14:41	25°  27'22		evening max el	16424 Sep 21 02:03	4°  39'36	18°01'09
evening set	16423 Oct 17 18:45	24°  27'26		retrograde	16424 Sep 27 14:50	8°  23'07	
desc. node	16423 Oct 22 21:33	21°  27'47		evening set	16424 Sep 30 02:34	7°  32'53	
inferior conj	16423 Oct 25 00:55	19°  25'82	-0°41'10	inferior conj	16424 Oct 06 16:41	2°  24'30	0°38'43
minimum elong	16423 Oct 24 23:28	20°  21'32	0°40'07	minimum elong	16424 Oct 06 17:48	2°  21'38	0°38'34
min. Earth dist.	16423 Oct 28 06:23	17°  28'26	0.59537 AU	desc. node	16424 Oct 08 18:50	0° 	
morning rise	16423 Nov 01 00:53	14°  22'44			16424 Oct 09 01:46	30°  R 	
direct	16423 Nov 07 14:15	12°  23'20		min. Earth dist.	16424 Oct 09 15:23	29°  26'40	0.61834 AU
morning max el	16423 Nov 21 20:42	20° 27'25	27°43'52	morning rise	16424 Oct 13 06:21	26° 22'41	
	16423 Nov 30 08:40	0°		direct	16424 Oct 19 22:53	24° 20'33	
asc. node	16423 Dec 17 10:59	27° 27'45'04					

	16424 Oct 31 23:52	0°♍		direct	16425 Oct 02 17:10	6°♊33'54	
morning max el	16424 Nov 03 02:20	1°♍58'41	27°59'05	morning max el	16425 Oct 16 12:11	14°♊32'00	27°36'54
	16424 Nov 23 17:13	0°♊			16425 Oct 29 02:59	0°♍	
asc. node	16424 Dec 03 08:00	17°♊27'56			16425 Nov 16 08:45	0°♊	
morning set	16424 Dec 06 20:23	24°♊32'36		asc. node	16425 Nov 20 04:58	7°♊25'06	
	16424 Dec 09 10:46	0°♊		morning set	16425 Nov 20 12:47	8°♊03'55	
max. Earth dist.	16424 Dec 12 07:56	6°♊14'08	1.31433 AU	max. Earth dist.	16425 Nov 25 05:51	17°♊43'42	1.32447 AU
superior conj	16424 Dec 14 05:13	10°♊23'36	1°25'21	superior conj	16425 Nov 28 11:33	24°♊38'57	1°09'42
minimum elong	16424 Dec 14 03:19	10°♊13'01	1°25'48	minimum elong	16425 Nov 28 09:12	24°♊26'13	1°09'59
evening rise	16424 Dec 20 22:20	25°♊13'01			16425 Nov 30 22:34	0°♊	
	16424 Dec 23 04:05	0°♊		evening rise	16425 Dec 05 09:06	9°♊39'23	
desc. node	16425 Jan 04 17:34	23°♊05'47			16425 Dec 15 17:00	0°♊	
	16425 Jan 09 14:22	0°♊		desc. node	16425 Dec 22 14:27	10°♊32'08	
evening max el	16425 Jan 15 18:50	6°♊58'09	24°49'25	evening max el	16425 Dec 28 04:18	16°♊55'33	23°06'51
retrograde	16425 Jan 29 13:07	13°♊51'01		retrograde	16426 Jan 10 08:46	23°♊26'44	
evening set	16425 Feb 03 22:52	12°♊46'06		evening set	16426 Jan 14 14:12	22°♊48'02	
min. Earth dist.	16425 Feb 09 06:59	9°♊58'50	0.56040 AU	min. Earth dist.	16426 Jan 21 14:35	19°♊32'14	0.54769 AU
inferior conj	16425 Feb 11 17:26	8°♊26'31	-5°00'09	inferior conj	16426 Jan 22 19:15	18°♊51'09	-5°54'58
minimum elong	16425 Feb 12 02:45	8°♊11'47	4°57'37	minimum elong	16426 Jan 22 23:37	18°♊44'54	5°54'07
morning rise	16425 Feb 20 09:03	4°♊21'42		morning rise	16426 Jan 31 10:18	15°♊00'35	
direct	16425 Feb 22 12:43	4°♊08'57		direct	16426 Feb 03 05:44	14°♊41'57	
asc. node	16425 Mar 01 06:08	6°♊23'06		morning max el	16426 Feb 14 15:38	20°♊13'18	20°49'41
morning max el	16425 Mar 04 07:53	8°♊55'08	19°30'24	asc. node	16426 Feb 16 03:28	21°♊45'15	
	16425 Mar 18 01:48	0°♊			16426 Feb 22 08:39	0°♊	
morning set	16425 Mar 21 11:10	6°♊42'07		morning set	16426 Mar 05 19:04	21°♊20'56	
					16426 Mar 09 22:39	0°♊	
superior conj	16425 Mar 29 13:31	22°♊52'26	0°35'22	superior conj	16426 Mar 13 05:40	6°♊48'39	1°00'19
minimum elong	16425 Mar 29 15:29	23°♊02'01	0°34'50	minimum elong	16426 Mar 13 08:11	7°♊01'32	0°59'55
	16425 Apr 02 06:33	0°♊		max. Earth dist.	16426 Mar 18 09:06	17°♊05'03	1.35721 AU
desc. node	16425 Apr 02 18:35	0°♊56'36		desc. node	16426 Mar 20 15:17	21°♊24'36	
max. Earth dist.	16425 Apr 05 01:00	5°♊08'39	1.37913 AU	evening rise	16426 Mar 22 06:55	24°♊30'00	
evening rise	16425 Apr 08 17:33	11°♊45'40			16426 Mar 25 07:37	0°♊	
	16425 Apr 19 18:11	0°♊			16426 Apr 13 08:05	0°♊	
evening max el	16425 May 11 23:59	0°♊		evening max el	16426 Apr 26 16:19	16°♊01'52	26°12'45
retrograde	16425 May 14 02:42	2°♊10'47	25°02'51	retrograde	16426 May 09 12:29	23°♊22'48	
asc. node	16425 May 26 02:05	9°♊09'08		asc. node	16426 May 15 01:01	21°♊23'36	
evening set	16425 May 28 03:54	8°♊51'16		evening set	16426 May 15 17:51	20°♊50'43	
min. Earth dist.	16425 May 31 21:15	6°♊42'25		min. Earth dist.	16426 May 19 20:28	16°♊31'38	0.67144 AU
inferior conj	16425 Jun 05 06:20	1°♊47'34	0.68293 AU	inferior conj	16426 May 21 14:40	14°♊21'12	1°52'15
minimum elong	16425 Jun 06 11:27	0°♊11'47	2°27'40	minimum elong	16426 May 21 12:30	14°♊27'55	1°50'59
	16425 Jun 06 09:24	0°♊18'34	2°26'33	morning rise	16426 May 21 12:30	14°♊27'55	1°50'59
	16425 Jun 06 15:02	30°♊		direct	16426 May 27 07:59	8°♊36'47	
morning rise	16425 Jun 11 21:52	24°♊16'26		morning max el	16426 May 30 13:34	7°♊37'33	
direct	16425 Jun 15 14:01	22°♊58'59		desc. node	16426 Jun 06 02:38	11°♊06'39	18°34'04
morning max el	16425 Jun 22 16:54	26°♊53'26	19°23'05		16426 Jun 16 15:40	24°♊57'20	
	16425 Jun 25 13:26	0°♊			16426 Jun 19 22:53	0°♊	
desc. node	16425 Jun 29 18:36	5°♊24'57		morning set	16426 Jun 27 07:57	11°♊31'14	
greatest brilliancy	16425 Jul 05 09:13	13°♊25'22	-0.7m		16426 Jul 09 03:38	0°♊	
	16425 Jul 16 08:28	0°♊		superior conj	16426 Jul 13 06:29	6°♊25'05	-2°13'54
morning set	16425 Jul 17 14:09	1°♊53'52		minimum elong	16426 Jul 13 04:48	6°♊18'34	2°14'27
max. Earth dist.	16425 Jul 30 01:57	21°♊16'42	1.45370 AU	max. Earth dist.	16426 Jul 12 21:11	5°♊48'51	1.45992 AU
superior conj	16425 Aug 02 19:18	27°♊09'14	-2°08'14		16426 Jul 28 07:18	0°♊	
minimum elong	16425 Aug 03 00:55	27°♊31'29	2°08'22	evening rise	16426 Jul 28 23:48	1°♊05'17	
	16425 Aug 04 14:15	0°♊		greatest brilliancy	16426 Aug 05 16:35	13°♊14'37	-0.8m
evening rise	16425 Aug 17 03:44	20°♊26'14		asc. node	16426 Aug 11 00:50	21°♊25'10	
	16425 Aug 22 22:42	0°♊			16426 Aug 17 09:48	0°♊	
asc. node	16425 Aug 24 04:06	1°♊59'53		evening max el	16426 Aug 19 05:57	1°♊58'39	18°40'01
evening max el	16425 Sep 04 16:59	18°♊12'14	18°11'46	retrograde	16426 Aug 25 19:24	5°♊31'21	
retrograde	16425 Sep 11 01:41	21°♊33'53		evening set	16426 Aug 29 01:13	4°♊31'27	
evening set	16425 Sep 13 22:07	20°♊50'04			16426 Sep 02 18:31	30°♊	
inferior conj	16425 Sep 19 23:15	15°♊25'05	1°39'19	inferior conj	16426 Sep 03 16:48	28°♊51'53	2°22'13
minimum elong	16425 Sep 20 01:27	15°♊18'52	1°38'43	minimum elong	16426 Sep 03 19:02	28°♊45'00	2°21'36
min. Earth dist.	16425 Sep 22 10:29	12°♊38'12	0.64021 AU	min. Earth dist.	16426 Sep 05 14:28	26°♊31'12	0.65920 AU
desc. node	16425 Sep 25 16:09	9°♊28'45		morning rise	16426 Sep 09 11:45	22°♊26'21	
morning rise	16425 Sep 26 02:56	9°♊07'04		desc. node	16426 Sep 12 13:27	20°♊29'28	

direct	16426 Sep 15 19:23	19° \mathbb{M} 49'08		min. Earth dist.	16427 Aug 20 01:42	10° \mathbb{M} 53'52	0.67428 AU
morning max el	16426 Sep 28 23:32	27° \mathbb{M} 35'34	26°44'21	morning rise	16427 Aug 24 06:07	6° \mathbb{M} 11'06	
	16426 Oct 01 06:18	0° \mathbb{L}		direct	16427 Aug 30 04:04	3° \mathbb{M} 38'09	
	16426 Oct 22 19:40	0° \mathbb{M}		desc. node	16427 Aug 30 10:47	3° \mathbb{M} 38'28	
morning set	16426 Nov 03 18:03	21° \mathbb{M} 04'07		morning max el	16427 Sep 11 10:45	10° \mathbb{M} 57'53	25°30'15
asc. node	16426 Nov 07 01:51	27° \mathbb{M} 31'47			16427 Sep 26 15:49	0° \mathbb{L}	
max. Earth dist.	16426 Nov 07 18:26	28° \mathbb{M} 54'16	1.34023 AU		16427 Oct 15 10:52	0° \mathbb{M}	
	16426 Nov 08 07:33	0° \mathbb{X}		morning set	16427 Oct 17 08:32	3° \mathbb{M} 24'14	
				max. Earth dist.	16427 Oct 20 22:07	9° \mathbb{M} 58'57	1.36079 AU
superior conj	16426 Nov 12 12:03	8° \mathbb{X} 36'00	0°47'49	asc. node	16427 Oct 24 22:39	17° \mathbb{M} 43'02	
minimum elong	16426 Nov 12 09:51	8° \mathbb{X} 24'32	0°48'01				
evening rise	16426 Nov 19 18:55	24° \mathbb{X} 02'37		superior conj	16427 Oct 27 03:50	22° \mathbb{M} 06'49	0°19'54
	16426 Nov 22 15:37	0° \mathbb{Z}		minimum elong	16427 Oct 27 02:40	22° \mathbb{M} 00'56	0°20'09
desc. node	16426 Dec 09 11:25	26° \mathbb{Z} 41'58			16427 Oct 31 01:03	0° \mathbb{X}	
evening max el	16426 Dec 09 18:06	26° \mathbb{Z} 58'33	21°26'50	evening rise	16427 Nov 04 01:40	8° \mathbb{X} 16'49	
	16426 Dec 13 08:27	0° \mathbb{A}			16427 Nov 15 19:18	0° \mathbb{Z}	
retrograde	16426 Dec 21 18:47	2° \mathbb{A} 55'12		evening max el	16427 Nov 21 20:15	7° \mathbb{Z} 38'37	20°03'10
evening set	16426 Dec 24 18:19	2° \mathbb{A} 34'52		desc. node	16427 Nov 26 08:28	11° \mathbb{Z} 11'03	
	16426 Dec 31 04:05	30° \mathbb{R} \mathbb{Z}		retrograde	16427 Dec 02 07:07	12° \mathbb{Z} 51'15	
inferior conj	16427 Jan 02 10:21	28° \mathbb{Z} 45'11	-5°54'06	evening set	16427 Dec 04 10:43	12° \mathbb{Z} 39'04	
minimum elong	16427 Jan 02 05:22	28° \mathbb{Z} 52'10	5°53'01	inferior conj	16427 Dec 13 05:02	8° \mathbb{Z} 41'09	-4°53'51
min. Earth dist.	16427 Jan 02 19:49	28° \mathbb{Z} 31'55	0.54367 AU	minimum elong	16427 Dec 12 19:06	8° \mathbb{Z} 56'08	4°50'38
morning rise	16427 Jan 10 16:51	24° \mathbb{Z} 55'54		min. Earth dist.	16427 Dec 15 01:51	7° \mathbb{Z} 33'33	0.54910 AU
direct	16427 Jan 14 13:44	24° \mathbb{Z} 23'23		morning rise	16427 Dec 21 02:33	4° \mathbb{Z} 34'23	
	16427 Jan 26 16:55	0° \mathbb{A}		direct	16427 Dec 26 01:02	3° \mathbb{Z} 41'21	
morning max el	16427 Jan 27 08:40	0° \mathbb{A} 36'43	22°29'38	morning max el	16428 Jan 08 17:21	10° \mathbb{Z} 28'05	24°19'51
asc. node	16427 Feb 03 00:44	8° \mathbb{A} 28'21		asc. node	16428 Jan 20 21:57	26° \mathbb{Z} 13'37	
	16427 Feb 15 08:09	0° \mathbb{H}			16428 Jan 23 04:05	0° \mathbb{A}	
morning set	16427 Feb 18 06:02	6° \mathbb{H} 04'27		morning set	16428 Feb 02 18:01	20° \mathbb{A} 46'22	
					16428 Feb 06 23:30	0° \mathbb{H}	
superior conj	16427 Feb 25 06:21	21° \mathbb{H} 06'00	1°18'56				
minimum elong	16427 Feb 25 08:37	21° \mathbb{H} 18'05	1°18'50	superior conj	16428 Feb 09 12:45	5° \mathbb{H} 36'17	1°31'16
max. Earth dist.	16427 Feb 28 23:46	28° \mathbb{H} 54'01	1.33840 AU	minimum elong	16428 Feb 09 14:18	5° \mathbb{H} 44'41	1°31'28
	16427 Mar 01 12:39	0° \mathbb{Y}		max. Earth dist.	16428 Feb 11 22:05	10° \mathbb{H} 47'33	1.32383 AU
evening rise	16427 Mar 05 10:37	7° \mathbb{Y} 48'37		evening rise	16428 Feb 17 01:18	21° \mathbb{H} 32'25	
desc. node	16427 Mar 07 11:59	11° \mathbb{Y} 45'04			16428 Feb 21 08:43	0° \mathbb{Y}	
	16427 Mar 17 21:54	0° \mathbb{B}		desc. node	16428 Feb 22 08:41	1° \mathbb{Y} 52'54	
evening max el	16427 Apr 09 06:09	29° \mathbb{B} 41'03	27°05'30		16428 Mar 10 18:46	0° \mathbb{B}	
	16427 Apr 09 14:01	0° \mathbb{I}		evening max el	16428 Mar 21 18:44	12° \mathbb{B} 56'03	27°33'45
retrograde	16427 Apr 22 16:51	7° \mathbb{I} 12'10		retrograde	16428 Apr 04 14:19	20° \mathbb{B} 27'54	
evening set	16427 Apr 29 06:32	4° \mathbb{I} 40'46		evening set	16428 Apr 11 09:02	18° \mathbb{B} 03'54	
asc. node	16427 May 01 22:11	2° \mathbb{I} 15'47		min. Earth dist.	16428 Apr 15 03:39	14° \mathbb{B} 48'00	0.63630 AU
min. Earth dist.	16427 May 03 04:15	0° \mathbb{I} 55'12	0.65570 AU	inferior conj	16428 Apr 17 22:19	11° \mathbb{B} 57'14	0°02'18
	16427 May 03 23:53	30° \mathbb{R} \mathbb{B}		minimum elong	16428 Apr 17 22:16	11° \mathbb{B} 57'23	0°01'54
inferior conj	16427 May 05 11:14	28° \mathbb{B} 18'49	1°04'13	transit middle	16428 Apr 17 22:16	11° \mathbb{B} 57'23	0°01'54
minimum elong	16427 May 05 09:38	28° \mathbb{B} 23'22	1°03'07	transit begin	16428 Apr 17 19:08	12° \mathbb{B} 05'27	
morning rise	16427 May 11 14:19	22° \mathbb{B} 47'09		transit end	16428 Apr 18 01:23	11° \mathbb{B} 49'20	
direct	16427 May 14 10:18	22° \mathbb{B} 03'52		asc. node	16428 Apr 17 19:24	12° \mathbb{B} 04'47	
morning max el	16427 May 20 17:28	25° \mathbb{B} 20'06	18°01'57	morning rise	16428 Apr 24 13:58	6° \mathbb{B} 40'49	
	16427 May 24 17:41	0° \mathbb{I}		direct	16428 Apr 27 01:23	6° \mathbb{B} 10'34	
desc. node	16427 Jun 03 12:40	14° \mathbb{I} 52'44		morning max el	16428 May 03 10:56	9° \mathbb{B} 26'10	17°47'13
morning set	16427 Jun 08 03:32	22° \mathbb{I} 23'13			16428 May 17 10:06	0° \mathbb{I}	
	16427 Jun 12 20:10	0° \mathbb{E}		morning set	16428 May 20 01:36	4° \mathbb{I} 30'29	
				desc. node	16428 May 20 09:37	5° \mathbb{I} 04'37	
superior conj	16427 Jun 22 17:59	15° \mathbb{E} 47'33	-1°59'38				
minimum elong	16427 Jun 22 10:15	15° \mathbb{E} 17'05	1°59'45	superior conj	16428 Jun 01 21:26	25° \mathbb{I} 56'54	-1°30'05
max. Earth dist.	16427 Jun 25 17:48	20° \mathbb{E} 29'07	1.45862 AU	minimum elong	16428 Jun 01 13:25	25° \mathbb{I} 24'18	1°29'48
	16427 Jul 01 20:37	0° \mathbb{Q}			16428 Jun 04 09:37	0° \mathbb{E}	
evening rise	16427 Jul 08 21:04	10° \mathbb{Q} 49'39		max. Earth dist.	16428 Jun 07 13:14	5° \mathbb{E} 01'39	1.44993 AU
greatest brilliancy	16427 Jul 21 17:42	0° \mathbb{M} 21'03	-0.7m	evening rise	16428 Jun 17 07:37	20° \mathbb{E} 13'34	
	16427 Jul 21 12:00	0° \mathbb{M}			16428 Jun 23 18:26	0° \mathbb{Q}	
asc. node	16427 Jul 28 21:34	10° \mathbb{M} 24'10		asc. node	16428 Jul 14 18:22	28° \mathbb{Q} 48'09	
evening max el	16427 Aug 02 14:28	15° \mathbb{M} 51'33	19°24'51	evening max el	16428 Jul 15 17:04	29° \mathbb{Q} 46'32	20°24'38
retrograde	16427 Aug 09 16:56	19° \mathbb{M} 48'09			16428 Jul 15 22:32	0° \mathbb{M}	
evening set	16427 Aug 13 08:45	18° \mathbb{M} 30'35		retrograde	16428 Jul 23 16:00	4° \mathbb{M} 18'36	
inferior conj	16427 Aug 18 18:05	12° \mathbb{M} 37'53	2°49'57	evening set	16428 Jul 27 18:23	2° \mathbb{M} 43'01	
minimum elong	16427 Aug 18 19:43	12° \mathbb{M} 32'27	2°49'26		16428 Jul 30 11:01	30° \mathbb{R} \mathbb{Q}	

inferior conj	16428 Aug 02 00:27	26° Ω 38'27	3°04'39	retrograde	16429 Jul 07 14:41	18° Ω 56'19	
minimum elong	16428 Aug 02 01:14	26° Ω 35'45	3°04'12	evening set	16429 Jul 12 04:10	17° Ω 03'28	
min. Earth dist.	16428 Aug 02 18:19	25° Ω 37'10	0.68485 AU	inferior conj	16429 Jul 17 09:39	10° Ω 48'33	3°07'56
morning rise	16428 Aug 07 07:46	20° Ω 14'37		minimum elong	16429 Jul 17 09:29	10° Ω 49'09	3°07'25
direct	16428 Aug 12 18:18	17° Ω 52'31		min. Earth dist.	16429 Jul 17 14:13	10° Ω 32'38	0.69062 AU
desc. node	16428 Aug 16 08:05	18° Ω 43'27		morning rise	16429 Jul 22 14:36	4° Ω 30'28	
morning max el	16428 Aug 23 21:51	24° Ω 32'05	24°04'06	direct	16429 Jul 27 13:01	2° Ω 23'50	
	16428 Aug 28 19:52	0° \mathbb{M}		desc. node	16429 Aug 03 05:24	5° Ω 20'22	
	16428 Sep 19 01:57	0° $\underline{\Omega}$		morning max el	16429 Aug 06 10:12	8° Ω 14'04	22°35'05
morning set	16428 Sep 28 04:13	14° $\underline{\Omega}$ 55'45			16429 Aug 23 10:27	0° \mathbb{M}	
max. Earth dist.	16428 Oct 01 21:16	21° $\underline{\Omega}$ 23'55	1.38435 AU	morning set	16429 Sep 09 01:18	25° \mathbb{M} 29'53	
	16428 Oct 06 14:56	0° \mathbb{L}			16429 Sep 11 19:02	0° $\underline{\Omega}$	
				max. Earth dist.	16429 Sep 13 21:35	3° $\underline{\Omega}$ 31'37	1.40835 AU
superior conj	16428 Oct 09 07:29	5° \mathbb{M} 03'27	-0°13'18	superior conj	16429 Sep 21 18:48	17° $\underline{\Omega}$ 16'02	-0°49'55
minimum elong	16428 Oct 09 08:23	5° \mathbb{M} 07'46	0°12'49	minimum elong	16429 Sep 21 22:46	17° $\underline{\Omega}$ 33'56	0°49'08
behind sun begin	16428 Oct 09 04:06	4° \mathbb{M} 47'22		asc. node	16429 Sep 27 16:09	28° $\underline{\Omega}$ 05'00	
behind sun end	16428 Oct 09 12:41	5° \mathbb{M} 28'13			16429 Sep 28 16:41	0° \mathbb{L}	
asc. node	16428 Oct 10 19:24	7° \mathbb{M} 55'26		evening rise	16429 Oct 01 19:25	5° \mathbb{M} 52'02	
evening rise	16428 Oct 18 02:54	22° \mathbb{M} 16'09			16429 Oct 16 08:50	0° \mathbb{M}	
	16428 Oct 22 02:10	0° \mathbb{M}		evening max el	16429 Oct 17 17:06	1° \mathbb{M} 27'01	18°22'12
evening max el	16428 Nov 03 12:52	19° \mathbb{M} 09'19	19°01'34	retrograde	16429 Oct 25 08:16	5° \mathbb{M} 20'04	
retrograde	16428 Nov 12 10:08	23° \mathbb{M} 37'56		evening set	16429 Oct 27 08:34	5° \mathbb{M} 04'34	
desc. node	16428 Nov 12 05:34	23° \mathbb{M} 37'49		desc. node	16429 Oct 30 02:44	3° \mathbb{M} 57'28	
evening set	16428 Nov 14 07:32	23° \mathbb{M} 26'35		inferior conj	16429 Nov 04 00:49	0° \mathbb{M} 27'57	-1°35'17
inferior conj	16428 Nov 22 16:07	19° \mathbb{M} 10'57	-3°17'44	minimum elong	16429 Nov 03 21:09	0° \mathbb{M} 35'23	1°33'15
minimum elong	16428 Nov 22 08:05	19° \mathbb{M} 24'51	3°14'10		16429 Nov 04 14:33	30° \mathbb{M}	
min. Earth dist.	16428 Nov 25 12:29	17° \mathbb{M} 12'49	0.56287 AU	min. Earth dist.	16429 Nov 07 06:36	27° \mathbb{M} 51'21	0.58254 AU
morning rise	16428 Nov 30 05:58	14° \mathbb{M} 30'52		morning rise	16429 Nov 11 06:15	25° \mathbb{M} 11'04	
direct	16428 Dec 06 00:38	13° \mathbb{M} 12'37		direct	16429 Nov 17 14:49	23° \mathbb{M} 25'42	
morning max el	16428 Dec 20 03:41	20° \mathbb{M} 26'23	26°01'48		16429 Nov 30 19:29	0° \mathbb{M}	
	16428 Dec 28 08:48	0° \mathbb{M}		morning max el	16429 Dec 01 21:25	1° \mathbb{M} 01'09	27°17'07
asc. node	16429 Jan 06 19:08	14° \mathbb{M} 45'59			16429 Dec 22 13:24	0° \mathbb{M}	
	16429 Jan 14 16:28	0° \approx		asc. node	16429 Dec 24 16:16	3° \mathbb{M} 53'14	
morning set	16429 Jan 17 05:13	5° \approx 22'02		morning set	16430 Jan 01 13:53	19° \mathbb{M} 46'47	
					16430 Jan 06 05:49	0° \approx	
superior conj	16429 Jan 23 22:39	20° \approx 13'33	1°37'26	superior conj	16430 Jan 08 10:03	4° \approx 52'16	1°37'31
minimum elong	16429 Jan 23 23:12	20° \approx 16'34	1°37'52	minimum elong	16430 Jan 08 09:32	4° \approx 49'23	1°38'04
max. Earth dist.	16429 Jan 25 02:28	22° \approx 48'10	1.31420 AU	max. Earth dist.	16430 Jan 08 09:50	4° \approx 51'08	1.30986 AU
	16429 Jan 28 09:15	0° \mathbb{H}		evening rise	16430 Jan 15 04:59	19° \approx 51'17	
evening rise	16429 Jan 31 00:13	5° \mathbb{H} 35'07			16430 Jan 20 03:03	0° \mathbb{H}	
desc. node	16429 Feb 08 05:24	21° \mathbb{H} 42'41		desc. node	16430 Jan 26 02:09	11° \mathbb{H} 07'27	
	16429 Feb 12 23:21	0° \mathbb{Y}			16430 Feb 07 14:32	0° \mathbb{Y}	
evening max el	16429 Mar 04 03:46	25° \mathbb{Y} 33'56	27°31'05	evening max el	16430 Feb 14 06:55	7° \mathbb{Y} 24'45	26°53'39
	16429 Mar 09 14:30	0° \mathbb{B}		retrograde	16430 Feb 28 08:02	14° \mathbb{Y} 40'15	
retrograde	16429 Mar 18 03:49	3° \mathbb{B} 00'01		evening set	16430 Mar 06 20:17	12° \mathbb{Y} 53'03	
evening set	16429 Mar 24 22:38	0° \mathbb{B} 50'49		min. Earth dist.	16430 Mar 10 21:00	10° \mathbb{Y} 13'15	0.59170 AU
	16429 Mar 26 04:40	30° \mathbb{R} \mathbb{Y}		inferior conj	16430 Mar 14 02:21	7° \mathbb{Y} 40'38	-2°41'47
min. Earth dist.	16429 Mar 28 17:21	27° \mathbb{Y} 57'57	0.61438 AU	minimum elong	16430 Mar 14 08:34	7° \mathbb{Y} 28'19	2°39'27
inferior conj	16429 Mar 31 20:35	25° \mathbb{Y} 07'35	-1°13'51	morning rise	16430 Mar 22 00:28	3° \mathbb{Y} 02'32	
minimum elong	16429 Mar 31 23:13	25° \mathbb{Y} 01'36	1°13'00	asc. node	16430 Mar 22 13:59	2° \mathbb{Y} 55'34	
asc. node	16429 Apr 04 16:40	21° \mathbb{Y} 56'12		direct	16430 Mar 23 23:52	2° \mathbb{Y} 48'10	
morning rise	16429 Apr 08 03:06	20° \mathbb{Y} 09'10		morning max el	16430 Mar 31 16:50	6° \mathbb{Y} 37'43	18°12'25
direct	16429 Apr 10 07:16	19° \mathbb{Y} 48'41			16430 Apr 15 13:55	0° \mathbb{B}	
morning max el	16429 Apr 17 03:54	23° \mathbb{Y} 15'25	17°50'21	morning set	16430 Apr 16 08:09	1° \mathbb{B} 25'31	
	16429 Apr 22 12:34	0° \mathbb{B}		desc. node	16430 Apr 24 03:18	15° \mathbb{B} 56'45	
morning set	16429 May 02 21:03	17° \mathbb{B} 36'46					
desc. node	16429 May 07 06:29	25° \mathbb{B} 27'20		superior conj	16430 Apr 26 00:48	19° \mathbb{B} 22'51	-0°15'46
	16429 May 09 20:24	0° \mathbb{I}		minimum elong	16430 Apr 25 23:32	19° \mathbb{B} 17'07	0°16'00
superior conj	16429 May 13 23:53	7° \mathbb{I} 09'34	-0°53'13		16430 May 02 02:06	0° \mathbb{I}	
minimum elong	16429 May 13 19:06	6° \mathbb{I} 49'09	0°53'04	max. Earth dist.	16430 May 03 15:05	2° \mathbb{I} 37'04	1.41496 AU
max. Earth dist.	16429 May 21 04:39	19° \mathbb{I} 08'16	1.43482 AU	evening rise	16430 May 08 10:39	10° \mathbb{I} 34'56	
evening rise	16429 May 28 00:10	29° \mathbb{I} 59'06			16430 May 20 24:00	0° \mathbb{B}	
	16429 May 28 00:24	0° \mathbb{B}		evening max el	16430 Jun 11 05:49	27° \mathbb{B} 35'42	22°56'29
	16429 Jun 17 09:01	0° Ω			16430 Jun 13 20:36	0° Ω	
evening max el	16429 Jun 28 13:40	13° Ω 40'53	21°36'41	asc. node	16430 Jun 18 12:12	2° Ω 58'07	
asc. node	16429 Jul 01 15:15	16° Ω 24'34					

retrograde	16430 Jun 21 11:25	3°Ω35'43		evening max el	16431 May 24 19:48	11°Ω31'32	24°18'02
evening set	16430 Jun 26 12:26	1°Ω27'24		retrograde	16431 Jun 05 04:50	18°Ω10'45	
	16430 Jun 27 24:00	30°RΩ		asc. node	16431 Jun 05 09:14	18°Ω10'36	
inferior conj	16430 Jul 01 19:43	25°Ω04'08	3°00'37	evening set	16431 Jun 10 17:31	15°Ω49'45	
minimum elong	16430 Jul 01 18:39	25°Ω07'51	2°59'54	min. Earth dist.	16431 Jun 15 07:11	10°Ω33'32	0.68747 AU
min. Earth dist.	16430 Jul 01 11:14	25°Ω33'34	0.69151 AU	inferior conj	16431 Jun 16 04:41	9°Ω20'57	2°42'50
morning rise	16430 Jul 07 00:44	18°Ω53'45		minimum elong	16431 Jun 16 02:54	9°Ω26'59	2°41'51
direct	16430 Jul 11 11:06	17°Ω05'25		morning rise	16431 Jun 21 12:21	3°Ω19'44	
morning max el	16430 Jul 20 02:27	22°Ω04'32	21°11'11	direct	16431 Jun 25 11:03	1°Ω50'55	
desc. node	16430 Jul 21 02:40	23°Ω06'46		morning max el	16431 Jul 03 01:08	6°Ω05'29	19°58'25
	16430 Jul 26 21:40	0°Ω		desc. node	16431 Jul 07 23:51	11°Ω44'34	
	16430 Aug 16 16:19	0°R			16431 Jul 20 22:16	0°Ω	
morning set	16430 Aug 19 23:04	5°R05'23		morning set	16431 Jul 30 05:09	14°Ω03'41	
max. Earth dist.	16430 Aug 27 03:39	16°R33'06	1.43003 AU		16431 Aug 09 10:41	0°R	
				max. Earth dist.	16431 Aug 09 16:43	0°R23'55	1.44689 AU
superior conj	16430 Sep 03 09:28	28°R35'26	-1°26'20	superior conj	16431 Aug 15 00:47	8°R56'57	-1°56'34
minimum elong	16430 Sep 03 16:32	29°R05'30	1°25'31	minimum elong	16431 Aug 15 08:27	9°R27'58	1°56'16
	16430 Sep 04 05:19	0°Ω			16431 Aug 27 16:28	0°Ω	
evening rise	16430 Sep 14 23:06	18°Ω54'02		evening rise	16431 Aug 28 08:55	1°Ω09'57	
asc. node	16430 Sep 14 12:52	18°Ω08'07		asc. node	16431 Sep 01 09:35	8°Ω01'02	
	16430 Sep 21 05:21	0°R		evening max el	16431 Sep 14 19:26	27°Ω44'00	18°03'30
evening max el	16430 Oct 01 04:39	14°R21'49	18°03'21		16431 Sep 17 15:34	0°R	
retrograde	16430 Oct 07 23:57	17°R51'57		retrograde	16431 Sep 21 05:09	1°R04'45	
evening set	16430 Oct 10 07:09	17°R28'04		evening set	16431 Sep 23 20:37	0°R28'57	
inferior conj	16430 Oct 17 06:13	12°R30'45	-0°04'55		16431 Sep 24 19:02	30°RΩ	
minimum elong	16430 Oct 17 06:04	12°R31'07	0°04'28	inferior conj	16431 Sep 30 04:48	25°Ω13'10	1°06'42
transit middle	16430 Oct 17 06:04	12°R31'07	0°04'28	minimum elong	16431 Sep 30 06:32	25°Ω08'32	1°06'18
transit begin	16430 Oct 17 02:53	12°R38'32		min. Earth dist.	16431 Oct 02 22:59	22°Ω18'07	0.62793 AU
transit end	16430 Oct 17 09:14	12°R23'40		desc. node	16431 Oct 03 21:18	21°Ω22'37	
desc. node	16430 Oct 17 00:00	12°R45'16		morning rise	16431 Oct 06 14:09	19°Ω03'37	
min. Earth dist.	16430 Oct 20 09:48	9°R34'47	0.60518 AU	direct	16431 Oct 13 06:27	16°Ω37'01	
morning rise	16430 Oct 24 01:51	6°R42'57		morning max el	16431 Oct 27 06:41	24°Ω34'29	27°53'53
direct	16430 Oct 30 17:32	4°R33'31			16431 Nov 01 05:21	0°R	
morning max el	16430 Nov 13 23:02	12°R23'55	27°55'06		16431 Nov 21 08:16	0°R	
	16430 Nov 27 22:14	0°R		asc. node	16431 Nov 28 10:18	13°R15'22	
asc. node	16430 Dec 11 13:19	23°R25'18		morning set	16431 Nov 30 15:24	17°R41'29	
	16430 Dec 14 20:38	0°Ω		max. Earth dist.	16431 Dec 05 18:52	28°R30'02	1.31800 AU
morning set	16430 Dec 16 17:59	3°Ω54'47			16431 Dec 06 11:29	0°Ω	
max. Earth dist.	16430 Dec 22 16:32	16°Ω47'37	1.31107 AU				
superior conj	16430 Dec 23 20:59	19°Ω26'00	1°31'33	superior conj	16431 Dec 08 05:36	3°Ω50'05	1°19'28
minimum elong	16430 Dec 23 19:31	19°Ω17'47	1°32'05	minimum elong	16431 Dec 08 03:27	3°Ω38'14	1°19'52
	16430 Dec 28 14:51	0°Ω		evening rise	16431 Dec 15 00:02	18°Ω42'18	
evening rise	16430 Dec 30 13:32	4°Ω15'00			16431 Dec 20 10:19	0°Ω	
desc. node	16431 Jan 12 22:58	29°Ω56'58		desc. node	16431 Dec 30 19:50	17°Ω58'39	
	16431 Jan 12 23:43	0°R		evening max el	16432 Jan 08 13:39	28°Ω35'12	24°06'37
evening max el	16431 Jan 27 02:06	18°R22'38	25°42'30		16432 Jan 10 02:59	0°R	
retrograde	16431 Feb 10 00:25	25°R23'59		retrograde	16432 Jan 22 03:02	5°R19'10	
evening set	16431 Feb 15 22:16	24°R03'30		evening set	16432 Jan 27 01:49	4°R25'56	
min. Earth dist.	16431 Feb 20 15:04	21°R23'36	0.57067 AU	min. Earth dist.	16432 Feb 02 01:18	1°R29'07	0.55415 AU
inferior conj	16431 Feb 23 12:04	19°R25'47	-4°13'00	inferior conj	16432 Feb 04 00:33	0°R18'09	-5°28'48
minimum elong	16431 Feb 23 21:16	19°R10'03	4°10'00	minimum elong	16432 Feb 04 08:38	0°R05'59	5°26'58
morning rise	16431 Mar 03 23:14	15°R08'54			16432 Feb 04 12:38	30°RΩ	
direct	16431 Mar 05 22:56	14°R56'46		morning rise	16432 Feb 12 17:15	26°Ω20'24	
asc. node	16431 Mar 09 11:19	15°R36'56		direct	16432 Feb 15 02:25	26°Ω05'51	
morning max el	16431 Mar 14 21:30	19°R19'57	18°55'22	asc. node	16432 Feb 24 08:38	0°R04'05	
	16431 Mar 22 19:01	0°R			16432 Feb 24 06:43	0°R	
morning set	16431 Mar 31 06:03	15°R41'49		morning max el	16432 Feb 25 13:40	1°R10'42	20°01'14
	16431 Apr 07 13:51	0°Ω		morning set	16432 Mar 14 11:07	0°R15'09	
					16432 Mar 14 08:08	0°R	
superior conj	16431 Apr 08 20:16	2°R25'06	0°18'13	superior conj	16432 Mar 22 06:00	16°R04'50	0°46'43
minimum elong	16431 Apr 08 21:25	2°R30'33	0°17'44	minimum elong	16432 Mar 22 08:19	16°R16'23	0°46'13
desc. node	16431 Apr 11 00:03	6°R28'28		desc. node	16432 Mar 27 20:46	26°R58'59	
max. Earth dist.	16431 Apr 15 22:01	15°R24'22	1.39243 AU	max. Earth dist.	16432 Mar 28 04:41	27°R36'12	1.36961 AU
evening rise	16431 Apr 19 18:27	22°R06'02			16432 Mar 29 11:33	0°R	
	16431 Apr 24 12:22	0°R		evening rise	16432 Mar 31 21:57	4°R26'12	
	16431 May 14 22:28	0°Ω					

	16432 Apr 16 11:48	0°♊		evening rise	16433 Mar 14 17:49	17°♑26'19	
evening max el	16432 May 06 09:17	25°♊25'53	25°34'14	desc. node	16433 Mar 14 17:27	17°♑24'36	
	16432 May 11 19:24	0°♊			16433 Mar 21 16:44	0°♊	
retrograde	16432 May 18 17:55	2°♊34'36			16433 Apr 10 18:36	0°♊	
asc. node	16432 May 22 06:19	1°♊44'24		evening max el	16433 Apr 18 22:56	9°♊13'01	26°37'40
evening set	16432 May 24 17:43	0°♊04'56		retrograde	16433 May 02 01:51	16°♊39'51	
	16432 May 24 20:02	30°♊		evening set	16433 May 08 11:14	14°♊06'56	
min. Earth dist.	16432 May 28 23:55	25°♊25'41	0.67863 AU	asc. node	16433 May 09 03:26	13°♊32'33	
inferior conj	16432 May 30 10:35	23°♊34'24	2°14'07	min. Earth dist.	16433 May 12 11:27	10°♊02'49	0.66523 AU
minimum elong	16432 May 30 08:25	23°♊41'23	2°12'54	inferior conj	16433 May 14 11:16	7°♊39'52	1°33'29
morning rise	16432 Jun 04 23:36	17°♊43'38		minimum elong	16433 May 14 09:15	7°♊45'55	1°32'16
direct	16432 Jun 08 11:14	16°♊34'02		morning rise	16433 May 20 08:25	2°♊00'57	
morning max el	16432 Jun 15 07:05	20°♊15'42	19°00'15	direct	16433 May 23 09:48	1°♊08'54	
	16432 Jun 23 04:03	0°♊		morning max el	16433 May 29 19:22	4°♊30'51	18°18'24
desc. node	16432 Jun 23 20:57	1°♊00'03		desc. node	16433 Jun 10 17:59	20°♊43'26	
greatest brilliancy	16432 Jun 28 09:47	7°♊40'26	-0.7m		16433 Jun 16 14:57	0°♊	
morning set	16432 Jul 08 13:09	23°♊12'09		morning set	16433 Jun 18 17:11	3°♊19'48	
	16432 Jul 12 22:36	0°♊					
max. Earth dist.	16432 Jul 22 10:49	14°♊47'17	1.45726 AU	superior conj	16433 Jul 04 04:22	27°♊41'33	-2°10'10
				minimum elong	16433 Jul 03 23:31	27°♊22'41	2°10'36
superior conj	16432 Jul 24 19:10	18°♊28'02	-2°13'05	max. Earth dist.	16433 Jul 05 07:05	29°♊25'44	1.46025 AU
minimum elong	16432 Jul 24 22:04	18°♊39'25	2°13'30		16433 Jul 05 15:53	0°♊	
	16432 Aug 01 02:07	0°♊		evening rise	16433 Jul 20 05:18	22°♊40'19	
evening rise	16432 Aug 08 19:40	12°♊26'24			16433 Jul 24 22:10	0°♊	
asc. node	16432 Aug 18 06:18	27°♊38'08		greatest brilliancy	16433 Jul 30 07:46	8°♊19'52	-0.8m
	16432 Aug 19 18:55	0°♊		asc. node	16433 Aug 05 03:04	16°♊53'35	
evening max el	16432 Aug 28 09:50	11°♊23'22	18°21'39	evening max el	16433 Aug 11 21:05	25°♊13'04	18°57'02
retrograde	16432 Sep 03 19:28	14°♊48'12		retrograde	16433 Aug 18 15:15	28°♊54'47	
evening set	16432 Sep 06 19:51	13°♊57'41		evening set	16433 Aug 22 01:09	27°♊47'35	
inferior conj	16432 Sep 12 16:28	8°♊25'59	1°59'31	inferior conj	16433 Aug 27 13:41	22°♊02'06	2°35'40
minimum elong	16432 Sep 12 18:46	8°♊19'10	1°58'52	minimum elong	16433 Aug 27 15:43	21°♊55'37	2°35'06
min. Earth dist.	16432 Sep 14 21:55	5°♊49'00	0.64868 AU	min. Earth dist.	16433 Aug 29 05:21	19°♊55'57	0.66609 AU
morning rise	16432 Sep 18 16:14	2°♊03'52		morning rise	16433 Sep 02 05:25	15°♊35'05	
desc. node	16432 Sep 19 18:37	1°♊15'03		desc. node	16433 Sep 06 15:56	13°♊10'20	
	16432 Sep 22 04:35	30°♊		direct	16433 Sep 08 09:04	12°♊58'52	
direct	16432 Sep 25 03:59	29°♊28'17		morning max el	16433 Sep 21 05:13	20°♊36'28	26°14'56
	16432 Sep 28 07:22	0°♊			16433 Sep 29 08:07	0°♊	
morning max el	16432 Oct 08 17:33	7°♊22'42	27°17'53		16433 Oct 19 09:22	0°♊	
	16432 Oct 26 06:04	0°♊		morning set	16433 Oct 27 02:56	13°♊45'00	
	16432 Nov 12 15:02	0°♊		max. Earth dist.	16433 Oct 30 21:51	20°♊58'15	1.34845 AU
morning set	16432 Nov 13 03:27	1°♊00'30		asc. node	16433 Nov 01 04:04	23°♊26'26	
asc. node	16432 Nov 14 07:13	3°♊17'13			16433 Nov 04 10:23	0°♊	
max. Earth dist.	16432 Nov 17 13:17	9°♊52'25	1.33058 AU				
				superior conj	16433 Nov 05 06:53	1°♊44'57	0°36'42
superior conj	16432 Nov 21 09:44	17°♊58'17	1°01'11	minimum elong	16433 Nov 05 05:00	1°♊35'16	0°36'53
minimum elong	16432 Nov 21 07:21	17°♊45'36	1°01'25	evening rise	16433 Nov 12 19:24	17°♊28'08	
	16432 Nov 26 23:34	0°♊			16433 Nov 19 01:07	0°♊	
evening rise	16432 Nov 28 10:37	3°♊08'07		evening max el	16433 Dec 01 17:46	18°♊45'01	20°48'42
	16432 Dec 12 23:37	0°♊		desc. node	16433 Dec 03 13:46	20°♊25'27	
desc. node	16432 Dec 16 16:46	4°♊55'15		retrograde	16433 Dec 13 03:28	24°♊24'12	
evening max el	16432 Dec 19 23:30	8°♊29'25	22°22'52	evening set	16433 Dec 15 16:29	24°♊08'36	
retrograde	16433 Jan 01 17:40	14°♊47'54		inferior conj	16433 Dec 24 10:59	20°♊16'49	-5°34'53
evening set	16433 Jan 05 10:07	14°♊18'02		minimum elong	16433 Dec 24 02:58	20°♊28'19	5°32'54
inferior conj	16433 Jan 13 20:12	10°♊25'57	-6°02'18	min. Earth dist.	16433 Dec 25 12:27	19°♊40'16	0.54479 AU
minimum elong	16433 Jan 13 20:39	10°♊25'19	6°01'46	morning rise	16434 Jan 01 13:22	16°♊22'11	
min. Earth dist.	16433 Jan 13 07:05	10°♊44'21	0.54487 AU	direct	16434 Jan 05 21:17	15°♊41'48	
morning rise	16433 Jan 22 08:13	6°♊38'26		morning max el	16434 Jan 19 03:23	22°♊11'00	23°16'18
direct	16433 Jan 25 13:47	6°♊14'58			16434 Jan 25 20:46	0°♊	
morning max el	16433 Feb 06 14:51	12°♊04'22	21°30'09	asc. node	16434 Jan 28 03:08	3°♊14'43	
asc. node	16433 Feb 10 05:53	16°♊02'56		morning set	16434 Feb 11 08:12	29°♊40'53	
	16433 Feb 19 07:29	0°♊			16434 Feb 11 11:47	0°♊	
morning set	16433 Feb 26 20:36	14°♊57'13					
	16433 Mar 05 23:57	0°♊		superior conj	16434 Feb 18 05:37	14°♊35'50	1°24'56
				minimum elong	16434 Feb 18 07:37	14°♊46'38	1°24'57
superior conj	16433 Mar 06 02:11	0°♊11'37	1°09'00	max. Earth dist.	16434 Feb 21 09:00	21°♊17'08	1.33155 AU
minimum elong	16433 Mar 06 04:40	0°♊24'35	1°08'42		16434 Feb 25 15:07	0°♊	
max. Earth dist.	16433 Mar 10 15:19	9°♊28'03	1.34872 AU	evening rise	16434 Feb 26 02:33	0°♊56'50	

desc. node	16434 Mar 01 14:08	7° Υ 40'32		superior conj	16435 Feb 02 13:48	29° \approx 10'30	1°34'37
	16434 Mar 14 16:33	0° B		minimum elong	16435 Feb 02 14:56	29° \approx 16'46	1°34'56
evening max el	16434 Apr 01 12:14	22° B 43'04	27°20'55		16435 Feb 02 22:47	0° H	
	16434 Apr 12 19:31	0° II		max. Earth dist.	16435 Feb 04 10:06	3° H 13'52	1.31911 AU
retrograde	16434 Apr 15 03:39	0° II 16'31		evening rise	16435 Feb 09 21:07	14° H 50'19	
	16434 Apr 17 09:50	30° R B		desc. node	16435 Feb 16 10:53	27° H 42'01	
evening set	16434 Apr 21 19:54	27° B 47'08			16435 Feb 17 16:59	0° Υ	
min. Earth dist.	16434 Apr 25 15:54	24° B 14'51	0.64779 AU		16435 Mar 09 15:24	0° B	
asc. node	16434 Apr 26 00:37	23° B 51'35		evening max el	16435 Mar 14 23:45	5° B 44'37	27°36'44
inferior conj	16434 Apr 28 04:10	21° B 30'25	0°39'41	retrograde	16435 Mar 28 22:04	13° B 14'49	
minimum elong	16434 Apr 28 03:05	21° B 33'22	0°38'50	evening set	16435 Apr 04 17:17	10° B 56'30	
morning rise	16434 May 04 12:17	16° B 05'04		min. Earth dist.	16435 Apr 08 11:32	7° B 51'01	0.62719 AU
direct	16434 May 07 04:22	15° B 27'54		inferior conj	16435 Apr 11 10:16	4° B 58'29	-0°28'18
morning max el	16434 May 13 11:43	18° B 42'41	17°53'33	minimum elong	16435 Apr 11 11:12	4° B 56'11	0°28'14
	16434 May 21 23:44	0° II		asc. node	16435 Apr 12 21:51	3° B 33'06	
desc. node	16434 May 28 14:56	10° II 46'33			16435 Apr 17 20:57	30° R Υ	
morning set	16434 May 31 00:23	14° II 44'50		morning rise	16435 Apr 18 08:00	29° Υ 49'07	
	16434 Jun 09 07:20	0° E		direct	16435 Apr 20 16:03	29° Υ 23'30	
					16435 Apr 23 10:19	0° B	
superior conj	16434 Jun 13 21:12	7° E 20'39	-1°48'32	morning max el	16435 Apr 27 05:20	2° B 42'44	17°46'13
minimum elong	16434 Jun 13 12:40	6° E 46'42	1°48'25	morning set	16435 May 13 08:18	27° B 19'30	
max. Earth dist.	16434 Jun 18 02:53	14° E 02'28	1.45575 AU		16435 May 14 21:12	0° II	
	16434 Jun 28 09:57	0° Ω		desc. node	16435 May 15 11:51	1° II 03'40	
evening rise	16434 Jun 29 19:55	2° Ω 10'06					
greatest brilliancy	16434 Jul 14 07:17	23° Ω 53'46	-0.6m	superior conj	16435 May 25 10:02	17° II 55'55	-1°14'53
	16434 Jul 18 14:58	0° P		minimum elong	16435 May 25 03:11	17° II 27'30	1°14'36
asc. node	16434 Jul 22 23:51	5° P 39'09		max. Earth dist.	16435 May 31 20:33	28° II 24'39	1.44426 AU
evening max el	16434 Jul 26 03:09	9° P 07'06	19°48'36		16435 Jun 01 20:27	0° E	
retrograde	16434 Aug 02 13:42	13° P 17'50		evening rise	16435 Jun 09 07:03	11° E 38'23	
evening set	16434 Aug 06 09:49	11° P 52'49			16435 Jun 21 12:43	0° Ω	
inferior conj	16434 Aug 11 17:26	5° P 55'01	2°57'38	evening max el	16435 Jul 09 03:13	23° Ω 02'14	20°54'06
minimum elong	16434 Aug 11 18:44	5° P 50'38	2°57'10	asc. node	16435 Jul 09 20:41	23° Ω 44'36	
min. Earth dist.	16434 Aug 12 19:15	4° P 28'19	0.67933 AU	retrograde	16435 Jul 17 12:40	27° Ω 51'43	
	16434 Aug 16 13:44	30° R Ω		evening set	16435 Jul 21 19:43	26° Ω 08'46	
morning rise	16434 Aug 17 03:10	29° Ω 28'52		inferior conj	16435 Jul 27 01:15	19° Ω 59'53	3°07'22
direct	16434 Aug 22 20:26	26° Ω 59'34		minimum elong	16435 Jul 27 01:38	19° Ω 58'33	3°06'54
desc. node	16434 Aug 24 13:15	27° Ω 11'06		min. Earth dist.	16435 Jul 27 13:30	19° Ω 17'30	0.68794 AU
	16434 Aug 30 02:20	0° P		morning rise	16435 Aug 01 07:17	13° Ω 38'16	
morning max el	16434 Sep 03 16:16	4° P 04'25	24°54'28	direct	16435 Aug 06 12:49	11° Ω 22'03	
	16434 Sep 23 14:33	0° E		desc. node	16435 Aug 11 10:34	12° Ω 57'53	
morning set	16434 Oct 09 09:59	25° E 46'09		morning max el	16435 Aug 17 03:22	17° Ω 40'58	23°25'59
	16434 Oct 11 18:44	0° M			16435 Aug 27 10:15	0° P	
max. Earth dist.	16434 Oct 12 22:25	2° M 06'08	1.37051 AU		16435 Sep 16 15:47	0° E	
asc. node	16434 Oct 19 00:52	13° M 39'01		morning set	16435 Sep 20 20:20	6° E 53'29	
				max. Earth dist.	16435 Sep 24 21:13	13° E 46'16	1.39468 AU
superior conj	16434 Oct 19 18:00	15° M 02'45	0°06'25				
minimum elong	16434 Oct 19 17:34	15° M 00'38	0°06'44	superior conj	16435 Oct 02 15:15	27° E 41'57	-0°28'34
behind sun begin	16434 Oct 19 11:34	14° M 31'15		minimum elong	16435 Oct 02 17:22	27° E 51'48	0°27'57
behind sun end	16434 Oct 19 23:34	15° M 30'06			16435 Oct 03 20:49	0° M	
	16434 Oct 27 04:58	0° J		asc. node	16435 Oct 05 21:38	3° M 50'42	
evening rise	16434 Oct 28 00:09	1° J 37'01		evening rise	16435 Oct 11 22:05	15° M 27'11	
evening max el	16434 Nov 14 02:23	29° J 47'33	19°34'19		16435 Oct 19 17:18	0° J	
	16434 Nov 14 07:24	0° B		evening max el	16435 Oct 28 00:30	11° J 39'20	18°42'15
desc. node	16434 Nov 20 10:51	4° B 05'29		retrograde	16435 Nov 05 07:30	15° J 51'05	
retrograde	16434 Nov 23 20:42	4° B 40'30		evening set	16435 Nov 07 05:35	15° J 38'23	
evening set	16434 Nov 25 20:07	4° B 29'25		desc. node	16435 Nov 07 08:01	15° J 37'02	
inferior conj	16434 Dec 04 11:36	0° B 25'16	-4°15'39	inferior conj	16435 Nov 15 07:37	11° J 13'56	-2°33'38
minimum elong	16434 Dec 04 01:51	0° B 40'46	4°11'57	minimum elong	16435 Nov 15 01:24	11° J 25'25	2°30'36
	16434 Dec 05 03:24	30° R J		min. Earth dist.	16435 Nov 18 09:40	8° J 57'39	0.57071 AU
min. Earth dist.	16434 Dec 06 20:25	28° J 54'59	0.55402 AU	morning rise	16435 Nov 22 18:07	6° J 18'25	
morning rise	16434 Dec 12 05:47	26° J 05'28		direct	16435 Nov 28 19:45	4° J 48'33	
direct	16434 Dec 17 13:47	25° J 01'49		morning max el	16435 Dec 13 00:30	12° J 11'26	26°37'55
	16434 Dec 29 04:56	0° B			16435 Dec 26 21:36	0° B	
morning max el	16434 Dec 31 11:39	2° B 01'22	25°05'17	asc. node	16436 Jan 01 21:30	10° B 10'45	
asc. node	16435 Jan 15 00:20	21° B 22'14		morning set	16436 Jan 11 06:26	28° B 52'34	
	16435 Jan 19 19:28	0° \approx			16436 Jan 11 18:56	0° \approx	
morning set	16435 Jan 26 20:06	14° \approx 21'10					

superior conj	16436 Jan 18 00:34	13° \approx 48'50	1°38'12	minimum elong	16437 Jan 01 11:01	28° \approx 20'15	1°36'17
minimum elong	16436 Jan 18 00:39	13° \approx 49'21	1°38'42	max. Earth dist.	16437 Jan 01 00:02	27° \approx 18'43	1.30972 AU
max. Earth dist.	16436 Jan 18 16:20	15° \approx 16'57	1.31176 AU		16437 Jan 02 04:49	0° \approx	
evening rise	16436 Jan 24 22:48	28° \approx 59'30		evening rise	16437 Jan 08 05:24	13° \approx 19'03	
	16436 Jan 25 10:17	0° \approx			16437 Jan 16 12:10	0° \approx	
desc. node	16436 Feb 03 07:38	17° \approx 22'18		desc. node	16437 Jan 20 04:25	6° \approx 33'21	
	16436 Feb 10 21:51	0° \approx		evening max el	16437 Feb 06 06:42	29° \approx 32'04	26°27'05
evening max el	16436 Feb 25 06:52	18° \approx 04'20	27°19'30		16437 Feb 06 18:38	0° \approx	
retrograde	16436 Mar 10 07:33	25° \approx 25'23		retrograde	16437 Feb 20 06:39	6° \approx 41'36	
evening set	16436 Mar 17 00:28	23° \approx 25'04		evening set	16437 Feb 26 14:09	5° \approx 05'07	
min. Earth dist.	16436 Mar 20 21:00	20° \approx 39'02	0.60476 AU	min. Earth dist.	16437 Mar 02 20:06	2° \approx 27'27	0.58243 AU
inferior conj	16436 Mar 24 02:00	17° \approx 54'24	-1°49'58	inferior conj	16437 Mar 05 23:33	0° \approx 07'43	-3°20'55
minimum elong	16436 Mar 24 06:05	17° \approx 45'37	1°48'29	minimum elong	16437 Mar 06 07:16	29° \approx 53'23	3°18'06
asc. node	16436 Mar 29 19:08	13° \approx 46'45			16437 Mar 06 03:42	30° \approx	
morning rise	16436 Mar 31 15:10	13° \approx 04'00		morning rise	16437 Mar 14 03:49	25° \approx 38'53	
direct	16436 Apr 02 17:01	12° \approx 46'28		direct	16437 Mar 16 02:41	25° \approx 25'53	
morning max el	16436 Apr 09 20:59	16° \approx 21'26	17°57'17	asc. node	16437 Mar 16 16:27	25° \approx 27'03	
	16436 Apr 19 11:03	0° \approx		morning max el	16437 Mar 24 06:54	29° \approx 27'58	18°28'04
morning set	16436 Apr 25 11:05	10° \approx 46'11			16437 Mar 24 19:35	0° \approx	
desc. node	16436 May 01 08:43	21° \approx 29'56		morning set	16437 Apr 09 03:16	24° \approx 48'04	
					16437 Apr 11 20:23	0° \approx	
superior conj	16436 May 05 22:23	29° \approx 35'21	-0°37'06	superior conj	16437 Apr 18 07:44	12° \approx 11'05	-0°00'48
minimum elong	16436 May 05 19:10	29° \approx 21'21	0°37'07	minimum elong	16437 Apr 18 07:39	12° \approx 10'42	0°01'09
	16436 May 06 04:02	0° \approx		behind sun begin	16437 Apr 18 00:29	11° \approx 37'43	
max. Earth dist.	16436 May 13 10:27	12° \approx 18'40	1.42690 AU	behind sun end	16437 Apr 18 14:48	12° \approx 43'36	
evening rise	16436 May 19 06:23	21° \approx 43'54		desc. node	16437 Apr 18 05:30	12° \approx 00'47	
	16436 May 24 13:50	0° \approx		max. Earth dist.	16437 Apr 25 19:24	25° \approx 30'56	1.40554 AU
evening max el	16436 Jun 14 18:44	0° \approx			16437 Apr 28 10:43	0° \approx	
asc. node	16436 Jun 20 21:48	6° \approx 57'24	22°10'01	evening rise	16437 Apr 30 01:49	2° \approx 42'59	
retrograde	16436 Jun 25 17:35	10° \approx 56'52			16437 May 17 20:26	0° \approx	
evening set	16436 Jun 30 10:36	12° \approx 31'26		evening max el	16437 Jun 03 12:36	20° \approx 52'07	23°31'18
inferior conj	16436 Jul 05 05:04	10° \approx 31'33		asc. node	16437 Jun 12 14:34	26° \approx 58'27	
minimum elong	16436 Jul 10 11:03	4° \approx 12'58	3°06'06	retrograde	16437 Jun 14 06:06	27° \approx 10'00	
min. Earth dist.	16436 Jul 10 10:30	4° \approx 14'56	3°05'30	evening set	16437 Jun 19 12:12	24° \approx 55'35	
	16436 Jul 10 10:01	4° \approx 16'36	0.69165 AU	inferior conj	16437 Jun 24 20:52	18° \approx 29'27	2°54'22
	16436 Jul 13 15:51	30° \approx		minimum elong	16437 Jun 24 19:28	18° \approx 34'16	2°53'32
morning rise	16436 Jul 15 15:45	27° \approx 58'14		min. Earth dist.	16437 Jun 24 06:45	19° \approx 17'58	0.69038 AU
direct	16436 Jul 20 09:05	25° \approx 59'10		morning rise	16437 Jun 30 02:43	12° \approx 23'00	
desc. node	16436 Jul 28 07:50	0° \approx 07'10		direct	16437 Jul 04 07:58	10° \approx 43'10	
	16436 Jul 28 04:41	0° \approx		morning max el	16437 Jul 12 11:57	15° \approx 22'09	20°38'40
morning max el	16436 Jul 29 17:03	1° \approx 26'42	21°58'24	desc. node	16437 Jul 15 05:02	18° \approx 17'20	
	16436 Aug 20 06:20	0° \approx			16437 Jul 24 04:31	0° \approx	
morning set	16436 Aug 31 07:16	17° \approx 02'01		morning set	16437 Aug 10 20:49	26° \approx 17'47	
max. Earth dist.	16436 Sep 06 00:19	26° \approx 19'35	1.41807 AU		16437 Aug 13 06:01	0° \approx	
	16436 Sep 08 05:02	0° \approx		max. Earth dist.	16437 Aug 19 09:32	9° \approx 43'54	1.43791 AU
superior conj	16436 Sep 13 18:19	9° \approx 33'16	-1°05'41	superior conj	16437 Aug 25 23:06	20° \approx 27'33	-1°40'20
minimum elong	16436 Sep 13 23:43	9° \approx 56'57	1°04'49	minimum elong	16437 Aug 26 06:56	21° \approx 00'08	1°39'40
asc. node	16436 Sep 21 18:24	23° \approx 58'22			16437 Aug 31 14:39	0° \approx	
evening rise	16436 Sep 24 09:45	28° \approx 50'29		evening rise	16437 Sep 07 06:29	11° \approx 34'39	
	16436 Sep 25 00:48	0° \approx		asc. node	16437 Sep 08 15:07	13° \approx 57'42	
evening max el	16436 Oct 10 08:19	24° \approx 13'43	18°11'41		16437 Sep 18 04:15	0° \approx	
retrograde	16436 Oct 17 13:43	27° \approx 55'34		evening max el	16437 Sep 23 21:35	7° \approx 20'41	18°01'05
evening set	16436 Oct 19 16:41	27° \approx 36'56		retrograde	16437 Sep 30 11:48	10° \approx 45'34	
desc. node	16436 Oct 24 05:13	25° \approx 10'26		evening set	16437 Oct 02 22:17	10° \approx 17'09	
inferior conj	16436 Oct 27 01:26	22° \approx 15'53	-0°54'50	inferior conj	16437 Oct 09 14:38	5° \approx 11'36	0°27'51
minimum elong	16436 Oct 26 23:27	22° \approx 55'11	0°53'33	minimum elong	16437 Oct 09 15:29	5° \approx 09'30	0°27'50
min. Earth dist.	16436 Oct 30 07:15	20° \approx 03'50	0.59201 AU	desc. node	16437 Oct 11 02:28	3° \approx 42'10	
morning rise	16436 Nov 03 02:50	17° \approx 19'49		min. Earth dist.	16437 Oct 12 14:49	2° \approx 13'29	0.61496 AU
direct	16436 Nov 09 15:06	15° \approx 23'59			16437 Oct 15 04:07	30° \approx	
morning max el	16436 Nov 23 21:50	23° \approx 06'02	27°38'15	morning rise	16437 Oct 16 05:51	29° \approx 12'58	
	16436 Nov 30 02:21	0° \approx		direct	16437 Oct 22 22:19	26° \approx 55'17	
asc. node	16436 Dec 18 18:37	29° \approx 29'27			16437 Oct 31 08:37	0° \approx	
	16436 Dec 19 01:02	0° \approx		morning max el	16437 Nov 06 02:34	4° \approx 50'32	27°59'17
morning set	16436 Dec 25 13:25	13° \approx 10'33			16437 Nov 24 23:00	0° \approx	
superior conj	16437 Jan 01 11:58	28° \approx 25'32	1°35'43	asc. node	16437 Dec 05 15:40	19° \approx 09'58	

morning set	16437 Dec 09 14:59	27°♄10'17		asc. node	16438 Nov 22 12:36	9°♄05'31	
	16437 Dec 10 23:26	0°♄		morning set	16438 Nov 23 08:43	10°♄45'43	
max. Earth dist.	16437 Dec 15 05:20	9°♄10'00	1.31325 AU	max. Earth dist.	16438 Nov 28 04:22	20°♄42'34	1.32259 AU
superior conj	16437 Dec 16 22:09	12°♄55'38	1°27'11	superior conj	16438 Dec 01 05:07	27°♄13'30	1°12'29
minimum elong	16437 Dec 16 20:21	12°♄45'37	1°27'40	minimum elong	16438 Dec 01 02:48	27°♄00'53	1°12'48
evening rise	16437 Dec 23 14:59	27°♄44'30			16438 Dec 02 11:40	0°♄	
	16437 Dec 24 16:09	0°♄		evening rise	16438 Dec 08 01:42	12°♄11'12	
desc. node	16438 Jan 07 01:15	25°♄04'28			16438 Dec 16 22:52	0°♄	
	16438 Jan 10 08:43	0°♄		desc. node	16438 Dec 24 22:09	12°♄40'40	
evening max el	16438 Jan 18 22:05	10°♄08'01	25°03'53	evening max el	16438 Dec 31 07:51	20°♄08'20	23°22'26
retrograde	16438 Feb 01 17:49	17°♄03'35		retrograde	16439 Jan 13 15:07	26°♄43'03	
evening set	16438 Feb 07 06:54	15°♄54'40		evening set	16439 Jan 18 01:07	26°♄00'52	
min. Earth dist.	16438 Feb 12 10:27	13°♄09'53	0.56283 AU	min. Earth dist.	16439 Jan 24 18:43	22°♄50'35	0.54908 AU
inferior conj	16438 Feb 15 00:08	11°♄30'32	-4°48'36	inferior conj	16439 Jan 26 04:28	22°♄01'45	-5°49'48
minimum elong	16438 Feb 15 09:36	11°♄15'15	4°45'51	minimum elong	16439 Jan 26 10:00	21°♄53'44	5°48'44
morning rise	16438 Feb 23 14:56	7°♄22'47		morning rise	16439 Feb 03 20:15	18°♄09'33	
direct	16438 Feb 25 17:07	7°♄10'25		direct	16439 Feb 06 12:38	17°♄52'12	
asc. node	16438 Mar 03 13:46	8°♄54'39		morning max el	16439 Feb 17 16:48	23°♄16'55	20°36'24
morning max el	16438 Mar 07 06:53	11°♄50'33	19°20'34	asc. node	16439 Feb 18 11:03	24°♄02'32	
	16438 Mar 19 11:10	0°♄			16439 Feb 23 07:34	0°♄	
morning set	16438 Mar 24 04:37	9°♄13'03		morning set	16439 Mar 08 11:51	23°♄50'30	
					16439 Mar 11 11:07	0°♄	
superior conj	16438 Apr 01 09:51	25°♄31'26	0°31'01	superior conj	16439 Mar 16 00:25	9°♄23'28	0°56'56
minimum elong	16438 Apr 01 11:38	25°♄40'06	0°30'29	minimum elong	16439 Mar 16 02:55	9°♄36'08	0°56'29
	16438 Apr 03 17:48	0°♄		max. Earth dist.	16439 Mar 21 08:53	20°♄00'08	1.36035 AU
desc. node	16438 Apr 05 02:14	2°♄32'54		desc. node	16439 Mar 22 22:57	23°♄01'41	
max. Earth dist.	16438 Apr 08 01:21	8°♄00'38	1.38256 AU	evening rise	16439 Mar 25 05:18	27°♄14'53	
evening rise	16438 Apr 11 18:23	14°♄36'30			16439 Mar 26 17:36	0°♄	
	16438 Apr 21 01:07	0°♄			16439 Apr 14 10:11	0°♄	
	16438 May 12 15:16	0°♄		evening max el	16439 Apr 29 15:40	18°♄39'46	26°03'16
evening max el	16438 May 17 02:02	4°♄47'21	24°51'27	retrograde	16439 May 12 09:02	25°♄57'47	
retrograde	16438 May 28 21:58	11°♄41'16		asc. node	16439 May 17 08:41	24°♄19'37	
asc. node	16438 May 30 11:35	11°♄31'01		evening set	16439 May 18 13:00	23°♄26'16	
evening set	16438 Jun 03 15:25	9°♄15'55		min. Earth dist.	16439 May 22 16:33	19°♄01'56	0.67346 AU
min. Earth dist.	16438 Jun 08 01:39	4°♄15'28	0.68428 AU	inferior conj	16439 May 24 08:45	16°♄56'19	1°58'25
inferior conj	16438 Jun 09 04:47	2°♄45'32	2°32'02	minimum elong	16439 May 24 06:34	17°♄03'10	1°57'11
minimum elong	16438 Jun 09 02:47	2°♄52'10	2°30'57	morning rise	16439 May 30 00:51	11°♄10'07	
	16438 Jun 11 08:27	30°♄		direct	16439 Jun 02 08:00	10°♄08'12	
morning rise	16438 Jun 14 14:23	26°♄48'31		morning max el	16439 Jun 08 22:32	13°♄40'06	18°40'17
direct	16438 Jun 18 08:11	25°♄28'10		desc. node	16439 Jun 18 23:15	26°♄40'52	
morning max el	16438 Jun 25 13:46	29°♄27'35	19°31'39		16439 Jun 21 04:11	0°♄	
	16438 Jun 26 02:42	0°♄		morning set	16439 Jun 30 15:52	14°♄41'48	
desc. node	16438 Jul 02 02:11	7°♄12'34			16439 Jul 10 11:24	0°♄	
greatest brilliancy	16438 Jul 08 07:24	15°♄59'54	-0.6m	max. Earth dist.	16439 Jul 15 19:28	8°♄18'52	1.45949 AU
	16438 Jul 17 15:13	0°♄					
morning set	16438 Jul 21 01:03	5°♄12'56		superior conj	16439 Jul 16 17:15	9°♄43'49	-2°14'22
max. Earth dist.	16438 Aug 02 00:24	23°♄48'09	1.45216 AU	minimum elong	16439 Jul 16 16:48	9°♄42'03	2°14'53
	16438 Aug 05 22:23	0°♄			16439 Jul 29 14:43	0°♄	
superior conj	16438 Aug 06 04:39	0°♄24'57	-2°05'42	evening rise	16439 Aug 01 06:52	4°♄14'54	
minimum elong	16438 Aug 06 10:59	0°♄50'13	2°05'44	greatest brilliancy	16439 Aug 07 20:17	14°♄40'34	-0.9m
evening rise	16438 Aug 20 06:59	23°♄26'02		asc. node	16439 Aug 13 08:32	23°♄13'05	
	16438 Aug 24 05:33	0°♄			16439 Aug 18 03:07	0°♄	
asc. node	16438 Aug 26 11:49	3°♄44'21		evening max el	16439 Aug 22 02:02	4°♄36'07	18°34'44
evening max el	16438 Sep 07 12:34	20°♄50'57	18°09'05	retrograde	16439 Aug 28 14:10	8°♄06'13	
retrograde	16438 Sep 13 21:15	24°♄11'52		evening set	16439 Aug 31 18:35	7°♄08'45	
evening set	16438 Sep 16 16:23	23°♄30'14		inferior conj	16439 Sep 06 11:22	1°♄31'11	2°16'42
inferior conj	16438 Sep 22 19:15	18°♄07'41	1°31'16	minimum elong	16439 Sep 06 13:39	1°♄24'15	2°16'05
minimum elong	16438 Sep 22 21:21	18°♄01'47	1°30'43		16439 Sep 07 17:10	30°♄	
min. Earth dist.	16438 Sep 25 08:24	15°♄18'06	0.63712 AU	min. Earth dist.	16439 Sep 08 11:04	29°♄06'00	0.65661 AU
desc. node	16438 Sep 27 23:44	12°♄42'11		morning rise	16439 Sep 12 07:31	25°♄06'26	
morning rise	16438 Sep 29 00:22	11°♄51'36		desc. node	16439 Sep 14 21:02	23°♄24'17	
direct	16438 Oct 05 15:21	9°♄19'44		direct	16439 Sep 18 16:22	22°♄29'24	
morning max el	16438 Oct 19 11:50	17°♄18'09	27°42'18		16439 Oct 01 15:50	0°♄	
	16438 Oct 30 02:40	0°♄		morning max el	16439 Oct 01 23:02	0°♄18'02	26°53'47
	16438 Nov 17 18:42	0°♄			16439 Oct 24 02:06	0°♄	

morning set	16439 Nov 06 15:50	23° \mathbb{M} 51'00		morning max el	16440 Sep 13 10:29	13° \mathbb{M} 38'36	25°42'17
asc. node	16439 Nov 09 09:29	29° \mathbb{M} 11'10			16440 Sep 26 17:59	0° \mathbb{A}	
	16439 Nov 09 19:18	0° \mathbb{A}			16440 Oct 15 20:13	0° \mathbb{M}	
max. Earth dist.	16439 Nov 10 18:30	1° \mathbb{A} 56'12	1.33760 AU	morning set	16440 Oct 19 08:47	6° \mathbb{M} 17'35	
				max. Earth dist.	16440 Oct 22 23:30	13° \mathbb{M} 01'00	1.35751 AU
superior conj	16439 Nov 15 06:38	11° \mathbb{A} 13'46	0°51'33	asc. node	16440 Oct 26 06:19	19° \mathbb{M} 21'59	
minimum elong	16439 Nov 15 04:22	11° \mathbb{A} 01'50	0°51'45				
evening rise	16439 Nov 22 11:47	26° \mathbb{A} 35'24		superior conj	16440 Oct 28 23:55	24° \mathbb{M} 48'47	0°24'31
	16439 Nov 24 02:43	0° \mathbb{B}		minimum elong	16440 Oct 28 22:31	24° \mathbb{M} 41'45	0°24'44
desc. node	16439 Dec 11 19:06	29° \mathbb{B} 03'26			16440 Oct 31 13:02	0° \mathbb{A}	
	16439 Dec 12 17:09	0° \mathbb{A}		evening rise	16440 Nov 05 19:08	10° \mathbb{A} 51'17	
evening max el	16439 Dec 12 20:18	0° \mathbb{A} 07'46	21°40'51		16440 Nov 15 20:30	0° \mathbb{B}	
retrograde	16439 Dec 25 01:44	6° \mathbb{A} 10'14		evening max el	16440 Nov 23 20:16	10° \mathbb{B} 40'40	20°14'14
evening set	16439 Dec 28 05:32	5° \mathbb{A} 47'42		desc. node	16440 Nov 27 16:08	13° \mathbb{B} 49'14	
inferior conj	16440 Jan 05 20:14	1° \mathbb{A} 57'57	-5°58'15	retrograde	16440 Dec 04 13:07	16° \mathbb{B} 00'24	
minimum elong	16440 Jan 05 16:35	2° \mathbb{A} 03'03	5°57'25	evening set	16440 Dec 06 18:43	15° \mathbb{B} 47'34	
min. Earth dist.	16440 Jan 05 23:52	1° \mathbb{A} 52'52	0.54372 AU	inferior conj	16440 Dec 15 13:28	11° \mathbb{B} 51'27	-5°06'02
	16440 Jan 09 11:48	30° \mathbb{R} \mathbb{B}		minimum elong	16440 Dec 15 03:46	12° \mathbb{B} 05'51	5°03'04
morning rise	16440 Jan 14 04:13	28° \mathbb{B} 09'44		min. Earth dist.	16440 Dec 17 05:32	10° \mathbb{B} 51'53	0.54770 AU
direct	16440 Jan 17 21:09	27° \mathbb{B} 39'46		morning rise	16440 Dec 23 12:10	7° \mathbb{B} 48'26	
	16440 Jan 25 15:29	0° \mathbb{A}		direct	16440 Dec 28 07:01	6° \mathbb{B} 58'55	
morning max el	16440 Jan 30 11:42	3° \mathbb{A} 46'58	22°13'48	morning max el	16441 Jan 10 21:06	13° \mathbb{B} 41'15	24°03'34
asc. node	16440 Feb 05 08:19	10° \mathbb{A} 34'13		asc. node	16441 Jan 22 05:33	28° \mathbb{B} 11'10	
	16440 Feb 16 18:51	0° \mathbb{H}			16441 Jan 23 08:28	0° \mathbb{A}	
morning set	16440 Feb 20 22:29	8° \mathbb{H} 33'30		morning set	16441 Feb 04 10:27	23° \mathbb{A} 16'17	
					16441 Feb 07 12:48	0° \mathbb{H}	
superior conj	16440 Feb 27 24:00	23° \mathbb{H} 37'51	1°16'32				
minimum elong	16440 Feb 28 02:21	23° \mathbb{H} 50'16	1°16'22	superior conj	16441 Feb 11 05:44	8° \mathbb{H} 06'58	1°29'48
	16440 Mar 02 01:10	0° \mathbb{Y}		minimum elong	16441 Feb 11 07:24	8° \mathbb{H} 16'03	1°29'57
max. Earth dist.	16440 Mar 02 22:29	1° \mathbb{Y} 49'15	1.34095 AU	max. Earth dist.	16441 Feb 13 19:44	13° \mathbb{H} 41'57	1.32565 AU
evening rise	16440 Mar 07 07:04	10° \mathbb{Y} 28'31		evening rise	16441 Feb 18 20:19	24° \mathbb{H} 09'12	
desc. node	16440 Mar 08 19:40	13° \mathbb{Y} 23'22			16441 Feb 21 19:27	0° \mathbb{Y}	
	16440 Mar 18 04:58	0° \mathbb{B}		desc. node	16441 Feb 23 16:24	3° \mathbb{Y} 33'40	
	16440 Apr 08 22:07	0° \mathbb{I}			16441 Mar 11 18:42	0° \mathbb{B}	
evening max el	16440 Apr 11 05:32	2° \mathbb{I} 21'19	26°59'02	evening max el	16441 Mar 24 18:20	15° \mathbb{B} 40'37	27°31'23
retrograde	16440 Apr 24 14:18	9° \mathbb{I} 51'24		retrograde	16441 Apr 07 12:56	23° \mathbb{B} 13'15	
evening set	16440 May 01 03:00	7° \mathbb{I} 19'24		evening set	16441 Apr 14 07:12	20° \mathbb{B} 47'30	
asc. node	16440 May 03 05:50	5° \mathbb{I} 25'21		min. Earth dist.	16441 Apr 18 02:03	17° \mathbb{B} 27'40	0.63935 AU
min. Earth dist.	16440 May 05 01:18	3° \mathbb{I} 29'13	0.65828 AU	asc. node	16441 Apr 20 03:02	15° \mathbb{B} 20'28	
inferior conj	16440 May 07 06:28	0° \mathbb{I} 56'01	1°12'22	inferior conj	16441 Apr 20 19:12	14° \mathbb{B} 38'00	0°12'38
minimum elong	16440 May 07 04:44	1° \mathbb{I} 01'02	1°11'14	minimum elong	16441 Apr 20 18:50	14° \mathbb{B} 38'57	0°12'06
	16440 May 08 02:00	30° \mathbb{R} \mathbb{B}		transit middle	16441 Apr 20 18:50	14° \mathbb{B} 38'57	0°12'06
morning rise	16440 May 13 07:54	25° \mathbb{B} 22'25		transit begin	16441 Apr 20 16:47	14° \mathbb{B} 44'19	
direct	16440 May 16 05:18	24° \mathbb{B} 36'54		transit end	16441 Apr 20 20:52	14° \mathbb{B} 33'36	
morning max el	16440 May 22 12:47	27° \mathbb{B} 54'07	18°05'42	morning rise	16441 Apr 27 08:49	9° \mathbb{B} 19'19	
	16440 May 24 11:50	0° \mathbb{I}		direct	16441 Apr 29 21:25	8° \mathbb{B} 47'23	
desc. node	16440 Jun 04 20:17	16° \mathbb{I} 33'16		morning max el	16441 May 06 06:07	12° \mathbb{B} 02'19	17°48'22
morning set	16440 Jun 10 07:24	25° \mathbb{I} 22'22			16441 May 18 17:43	0° \mathbb{I}	
	16440 Jun 13 04:10	0° \mathbb{B}		desc. node	16441 May 22 17:15	6° \mathbb{I} 43'04	
				morning set	16441 May 23 01:49	7° \mathbb{I} 19'19	
superior conj	16440 Jun 25 03:39	19° \mathbb{B} 02'37	-2°02'57				
minimum elong	16440 Jun 24 20:28	18° \mathbb{B} 34'28	2°03'10	superior conj	16441 Jun 05 04:07	29° \mathbb{I} 03'47	-1°35'14
max. Earth dist.	16440 Jun 27 16:22	23° \mathbb{B} 00'14	1.45928 AU	minimum elong	16441 Jun 04 19:50	28° \mathbb{I} 30'16	1°34'59
	16440 Jul 02 04:14	0° \mathbb{Q}			16441 Jun 05 18:04	0° \mathbb{B}	
evening rise	16440 Jul 11 07:05	14° \mathbb{Q} 06'18		max. Earth dist.	16441 Jun 10 12:04	7° \mathbb{B} 34'41	1.45164 AU
	16440 Jul 21 16:23	0° \mathbb{M}		evening rise	16441 Jun 20 18:13	23° \mathbb{B} 30'32	
greatest brilliancy	16440 Jul 23 11:23	2° \mathbb{M} 40'59	-0.7m		16441 Jun 25 00:42	0° \mathbb{Q}	
asc. node	16440 Jul 30 05:18	12° \mathbb{M} 16'43			16441 Jul 16 09:24	0° \mathbb{M}	
evening max el	16440 Aug 04 11:20	18° \mathbb{M} 28'21	19°17'06	asc. node	16441 Jul 17 02:07	0° \mathbb{M} 46'49	
retrograde	16440 Aug 11 11:21	22° \mathbb{M} 20'41		evening max el	16441 Jul 18 14:51	2° \mathbb{M} 23'08	20°14'49
evening set	16440 Aug 15 01:38	21° \mathbb{M} 05'46		retrograde	16441 Jul 26 10:25	6° \mathbb{M} 49'30	
inferior conj	16440 Aug 20 11:42	15° \mathbb{M} 14'49	2°46'36	evening set	16441 Jul 30 11:07	5° \mathbb{M} 16'40	
minimum elong	16440 Aug 20 13:28	15° \mathbb{M} 09'03	2°46'04		16441 Aug 04 03:54	30° \mathbb{R} \mathbb{Q}	
min. Earth dist.	16440 Aug 21 21:22	13° \mathbb{M} 24'57	0.67231 AU	inferior conj	16441 Aug 04 17:30	29° \mathbb{Q} 13'41	3°03'11
morning rise	16440 Aug 26 00:38	8° \mathbb{M} 47'50		minimum elong	16441 Aug 04 18:26	29° \mathbb{Q} 10'32	3°02'43
desc. node	16440 Aug 31 18:23	6° \mathbb{M} 14'11		min. Earth dist.	16441 Aug 05 13:24	28° \mathbb{Q} 05'45	0.68359 AU
direct	16440 Sep 01 00:05	6° \mathbb{M} 13'57		morning rise	16441 Aug 10 01:23	22° \mathbb{Q} 49'04	




























































































































direct	16441 Aug 15 13:38	20° Ω 25'01		min. Earth dist.	16442 Jul 20 09:00	12° Ω 59'41	0.69008 AU
desc. node	16441 Aug 18 15:42	21° Ω 03'00		morning rise	16442 Jul 25 07:35	7° Ω 03'26	
morning max el	16441 Aug 26 21:39	27° Ω 11'40	24°17'15	direct	16442 Jul 30 07:50	4° Ω 54'09	
	16441 Aug 29 12:43	0° Π		desc. node	16442 Aug 05 12:59	7° Ω 27'16	
	16441 Sep 20 08:38	0° Ω		morning max el	16442 Aug 09 09:34	10° Ω 52'07	22°48'07
morning set	16441 Oct 01 07:33	17° Ω 56'58			16442 Aug 24 14:08	0° Π	
max. Earth dist.	16441 Oct 04 22:46	24° Ω 20'09	1.38075 AU	morning set	16442 Sep 12 08:13	28° Π 40'13	
	16441 Oct 08 01:34	0° Π			16442 Sep 13 03:38	0° Ω	
				max. Earth dist.	16442 Sep 16 22:24	6° Ω 19'51	1.40486 AU
superior conj	16441 Oct 12 05:37	7° Π 50'52	-0°08'00				
minimum elong	16441 Oct 12 06:08	7° Π 53'22	0°07'34	superior conj	16442 Sep 24 19:43	20° Ω 11'01	-0°44'16
behind sun begin	16441 Oct 12 00:01	7° Π 24'03		minimum elong	16442 Sep 24 23:11	20° Ω 26'47	0°43'31
behind sun end	16441 Oct 12 12:15	8° Π 22'45		asc. node	16442 Sep 29 23:54	29° Ω 44'53	
asc. node	16441 Oct 13 03:08	9° Π 34'24			16442 Sep 30 03:07	0° Π	
evening rise	16441 Oct 20 21:23	24° Π 53'06		evening rise	16442 Oct 04 15:28	8° Π 33'12	
	16441 Oct 23 11:39	0° Σ			16442 Oct 17 00:18	0° Σ	
evening max el	16441 Nov 06 10:53	22° Σ 03'51	19°09'19	evening max el	16442 Oct 20 13:44	4° Σ 15'33	18°26'43
desc. node	16441 Nov 14 13:15	26° Σ 35'22		retrograde	16442 Oct 28 08:38	8° Σ 12'57	
retrograde	16441 Nov 15 13:30	26° Σ 38'38		evening set	16442 Oct 30 08:14	7° Σ 58'18	
evening set	16441 Nov 17 10:59	26° Σ 27'33		desc. node	16442 Nov 01 10:24	7° Σ 13'27	
inferior conj	16441 Nov 25 21:38	22° Σ 15'06	-3°33'17	inferior conj	16442 Nov 07 03:05	3° Σ 24'57	-1°50'16
minimum elong	16441 Nov 25 13:03	22° Σ 29'38	3°29'37	minimum elong	16442 Nov 06 22:46	3° Σ 33'29	1°47'58
min. Earth dist.	16441 Nov 28 15:30	20° Σ 23'46	0.56034 AU	min. Earth dist.	16442 Nov 10 08:23	0° Σ 52'57	0.57937 AU
morning rise	16441 Dec 03 12:35	17° Σ 40'22			16442 Nov 11 13:20	30° Σ Π	
direct	16441 Dec 09 04:39	16° Σ 25'56		morning rise	16442 Nov 14 09:52	28° Π 13'30	
morning max el	16441 Dec 23 06:44	23° Σ 36'30	25°47'57	direct	16442 Nov 20 16:56	26° Π 31'57	
	16441 Dec 29 01:23	0° Σ			16442 Nov 30 02:30	0° Σ	
asc. node	16442 Jan 09 02:45	16° Σ 37'19		morning max el	16442 Dec 04 23:08	4° Σ 04'24	27°08'05
	16442 Jan 16 03:50	0° \approx			16442 Dec 23 20:21	0° Σ	
morning set	16442 Jan 19 21:53	7° \approx 53'13		asc. node	16442 Dec 26 23:54	5° Σ 39'57	
				morning set	16443 Jan 04 07:02	22° Σ 19'45	
					16443 Jan 07 19:19	0° \approx	
superior conj	16442 Jan 26 15:15	22° \approx 43'44	1°36'52				
minimum elong	16442 Jan 26 15:57	22° \approx 47'38	1°37'18	superior conj	16443 Jan 11 02:33	7° \approx 22'30	1°37'53
max. Earth dist.	16442 Jan 27 23:17	25° \approx 41'14	1.31526 AU	minimum elong	16443 Jan 11 02:11	7° \approx 20'31	1°38'26
	16442 Jan 29 22:25	0° Σ		max. Earth dist.	16443 Jan 11 06:25	7° \approx 44'12	1.31017 AU
evening rise	16442 Feb 02 18:09	8° Σ 09'32		evening rise	16443 Jan 17 22:12	22° \approx 24'03	
desc. node	16442 Feb 10 13:08	23° Σ 26'41			16443 Jan 21 13:59	0° Σ	
	16442 Feb 14 05:51	0° Υ		desc. node	16443 Jan 28 09:54	12° Σ 55'40	
evening max el	16442 Mar 07 04:02	28° Υ 24'41	27°33'41		16443 Feb 08 08:54	0° Υ	
	16442 Mar 08 21:43	0° Σ		evening max el	16443 Feb 17 08:19	10° Υ 23'06	27°01'29
retrograde	16442 Mar 21 03:53	5° Σ 52'24		retrograde	16443 Mar 03 09:32	17° Υ 40'06	
evening set	16442 Mar 27 22:58	3° Σ 40'32		evening set	16443 Mar 09 23:08	15° Υ 49'26	
min. Earth dist.	16442 Mar 31 17:21	0° Σ 44'42	0.61770 AU	min. Earth dist.	16443 Mar 13 22:33	13° Υ 08'18	0.59505 AU
	16442 Apr 01 13:08	30° Σ Υ		inferior conj	16443 Mar 17 04:03	10° Υ 32'01	-2°27'58
inferior conj	16442 Apr 03 19:37	27° Υ 53'05	-1°01'25	minimum elong	16443 Mar 17 09:42	10° Υ 20'34	2°25'50
minimum elong	16442 Apr 03 21:46	27° Υ 48'06	1°00'47	morning rise	16443 Mar 24 23:53	5° Υ 50'34	
asc. node	16442 Apr 07 00:19	25° Υ 06'45		asc. node	16443 Mar 24 21:35	5° Υ 52'02	
morning rise	16442 Apr 10 23:49	22° Υ 51'50		direct	16443 Mar 26 23:45	5° Υ 35'31	
direct	16442 Apr 13 04:54	22° Υ 30'11		morning max el	16443 Apr 03 13:06	9° Υ 21'03	18°07'49
morning max el	16442 Apr 19 23:24	25° Υ 54'41	17°48'42		16443 Apr 16 23:41	0° Σ	
	16442 Apr 23 11:20	0° Σ		morning set	16443 Apr 19 03:29	4° Σ 00'32	
morning set	16442 May 05 18:26	20° Σ 17'37		desc. node	16443 Apr 26 10:58	17° Σ 32'35	
desc. node	16442 May 09 14:08	27° Σ 04'14					
	16442 May 11 06:08	0° Π		superior conj	16443 Apr 29 00:42	22° Σ 10'36	-0°21'18
superior conj	16442 May 17 03:01	10° Π 06'33	-0°59'00	minimum elong	16443 Apr 28 22:57	22° Σ 02'47	0°21'27
minimum elong	16442 May 16 21:39	9° Π 43'53	0°58'47		16443 May 03 11:51	0° Π	
max. Earth dist.	16442 May 24 03:51	21° Π 44'39	1.43742 AU	max. Earth dist.	16443 May 06 15:03	5° Π 19'21	1.41816 AU
	16442 May 29 08:11	0° Σ		evening rise	16443 May 11 16:13	13° Π 37'10	
evening rise	16442 May 31 08:52	3° Σ 10'07			16443 May 22 05:48	0° Σ	
	16442 Jun 18 11:14	0° Ω		evening max el	16443 Jun 14 05:02	0° Ω 12'09	22°44'24
evening max el	16442 Jul 01 12:18	16° Ω 17'32	21°25'21		16443 Jun 14 00:11	0° Ω	
asc. node	16442 Jul 03 23:00	18° Ω 31'16		asc. node	16443 Jun 20 19:56	5° Ω 15'11	
retrograde	16442 Jul 10 09:15	21° Ω 26'16		retrograde	16443 Jun 24 06:16	6° Ω 05'25	
evening set	16442 Jul 14 21:01	19° Ω 36'00		evening set	16443 Jun 29 05:35	3° Ω 59'16	
inferior conj	16442 Jul 20 02:26	13° Ω 22'36	3°08'08		16443 Jul 02 18:49	30° Σ Σ	
minimum elong	16442 Jul 20 02:25	13° Ω 22'41	3°07'37	min. Earth dist.	16443 Jul 04 05:56	27° Σ 59'55	0.69169 AU

inferior conj	16443 Jul 04 12:28	27°☿37'14	3°02'24	inferior conj	16444 Jun 17 21:41	11°☿53'59	2°46'13
minimum elong	16443 Jul 04 11:31	27°☿40'30	3°01'43	minimum elong	16444 Jun 17 20:00	11°☿59'45	2°45'17
morning rise	16443 Jul 09 17:19	21°☿25'39		morning rise	16444 Jun 23 04:48	5°☿51'27	
direct	16443 Jul 14 05:30	19°☿34'23		direct	16444 Jun 27 05:12	4°☿19'44	
morning max el	16443 Jul 23 00:59	24°☿40'40	21°23'06	morning max el	16444 Jul 04 22:37	8°☿40'06	20°08'27
desc. node	16443 Jul 23 10:13	25°☿04'00		desc. node	16444 Jul 09 07:24	13°☿34'53	
	16443 Jul 27 18:47	0°♊			16444 Jul 21 03:28	0°♊	
	16443 Aug 17 23:11	0°♊		morning set	16444 Aug 01 16:45	17°♊25'02	
morning set	16443 Aug 23 09:13	8°♊23'38			16444 Aug 09 18:44	0°♊	
max. Earth dist.	16443 Aug 30 03:41	19°♊14'13	1.42707 AU	max. Earth dist.	16444 Aug 11 15:59	2°♊59'16	1.44476 AU
	16443 Sep 05 14:33	0°♊					
superior conj	16443 Sep 06 13:44	1°♊39'00	-1°21'02	superior conj	16444 Aug 17 08:30	12°♊08'42	-1°52'41
minimum elong	16443 Sep 06 20:25	2°♊07'39	1°20'11	minimum elong	16444 Aug 17 16:22	12°♊40'48	1°52'16
asc. node	16443 Sep 16 20:38	19°♊49'18			16444 Aug 28 01:01	0°♊	
evening rise	16443 Sep 17 21:22	21°♊41'03		evening rise	16444 Aug 30 10:11	4°♊04'39	
	16443 Sep 22 12:30	0°♊		asc. node	16444 Sep 02 17:21	9°♊43'59	
evening max el	16443 Oct 04 00:28	17°♊05'30	18°04'52		16444 Sep 16 05:33	0°♊	
retrograde	16443 Oct 10 21:58	20°♊38'05		evening max el	16444 Sep 16 14:57	0°♊23'46	18°02'15
evening set	16443 Oct 13 04:03	20°♊15'39		retrograde	16444 Sep 23 01:31	3°♊45'15	
desc. node	16443 Oct 19 07:37	16°♊11'00		evening set	16444 Sep 25 15:40	3°♊11'26	
inferior conj	16443 Oct 20 05:35	15°♊21'09	-0°17'28		16444 Sep 30 01:33	30°♊	
minimum elong	16443 Oct 20 05:00	15°♊22'29	0°16'49	inferior conj	16444 Oct 02 01:51	27°♊58'05	0°57'02
min. Earth dist.	16443 Oct 23 09:58	12°♊26'56	0.60178 AU	minimum elong	16444 Oct 02 03:24	27°♊54'01	0°56'43
morning rise	16443 Oct 27 02:44	9°♊37'31		min. Earth dist.	16444 Oct 04 21:39	25°♊01'47	0.62464 AU
direct	16443 Nov 02 17:49	7°♊31'27		desc. node	16444 Oct 05 04:52	24°♊43'53	
morning max el	16443 Nov 16 23:38	15°♊19'34	27°51'59	morning rise	16444 Oct 08 12:43	21°♊51'03	
	16443 Nov 28 22:49	0°♊		direct	16444 Oct 15 05:11	19°♊26'36	
asc. node	16443 Dec 13 20:58	25°♊08'42		morning max el	16444 Oct 29 06:38	27°♊23'33	27°56'25
	16443 Dec 16 08:07	0°♊			16444 Oct 31 18:23	0°♊	
morning set	16443 Dec 19 11:57	6°♊30'16			16444 Nov 21 16:15	0°♊	
max. Earth dist.	16443 Dec 25 13:31	19°♊42'17	1.31058 AU	asc. node	16444 Nov 29 17:59	14°♊56'22	
				morning set	16444 Dec 02 10:30	20°♊20'12	
superior conj	16443 Dec 26 13:40	21°♊57'01	1°32'52		16444 Dec 07 00:40	0°♊	
minimum elong	16443 Dec 26 12:19	21°♊49'32	1°33'23	max. Earth dist.	16444 Dec 07 16:47	1°♊27'14	1.31663 AU
	16443 Dec 30 04:10	0°♊					
evening rise	16444 Jan 02 06:18	6°♊46'46		superior conj	16444 Dec 09 22:44	6°♊22'24	1°21'43
	16444 Jan 14 04:16	0°♊		minimum elong	16444 Dec 09 20:39	6°♊10'58	1°22'07
desc. node	16444 Jan 15 06:41	1°♊50'55		evening rise	16444 Dec 16 16:37	21°♊13'26	
evening max el	16444 Jan 30 04:46	21°♊28'33	25°54'55		16444 Dec 20 20:43	0°♊	
retrograde	16444 Feb 13 03:32	28°♊31'45		desc. node	16445 Jan 01 03:31	20°♊00'29	
evening set	16444 Feb 19 04:12	27°♊07'08			16445 Jan 08 23:05	0°♊	
min. Earth dist.	16444 Feb 23 17:50	24°♊28'18	0.57361 AU	evening max el	16445 Jan 10 17:06	1°♊45'53	24°21'46
inferior conj	16444 Feb 26 16:52	22°♊24'30	-3°59'40	retrograde	16445 Jan 24 08:18	8°♊33'05	
minimum elong	16444 Feb 27 01:46	22°♊08'57	3°56'38	evening set	16445 Jan 29 11:08	7°♊35'48	
morning rise	16444 Mar 06 02:27	18°♊04'28		min. Earth dist.	16445 Feb 04 04:53	4°♊42'46	0.55619 AU
direct	16444 Mar 08 01:44	17°♊52'12		inferior conj	16445 Feb 06 08:22	3°♊24'12	-5°19'26
asc. node	16444 Mar 10 18:52	18°♊16'40		minimum elong	16445 Feb 06 17:02	3°♊10'57	5°17'20
morning max el	16444 Mar 16 19:12	22°♊09'34	18°47'35		16445 Feb 12 21:43	30°♊	
	16444 Mar 22 22:08	0°♊		morning rise	16445 Feb 15 00:57	29°♊24'14	
morning set	16444 Apr 02 00:00	18°♊13'27		direct	16445 Feb 17 07:57	29°♊10'26	
	16444 Apr 08 01:19	0°♊			16445 Feb 21 12:54	0°♊	
superior conj	16444 Apr 10 17:41	5°♊06'14	0°13'24	asc. node	16445 Feb 25 16:11	2°♊28'17	
minimum elong	16444 Apr 10 18:33	5°♊10'19	0°12'55	morning max el	16445 Feb 27 13:30	4°♊08'36	19°50'00
behind sun begin	16444 Apr 10 14:30	4°♊51'17			16445 Mar 15 19:29	0°♊	
behind sun end	16444 Apr 10 22:35	5°♊29'18		morning set	16445 Mar 17 04:12	2°♊44'46	
desc. node	16444 Apr 12 07:45	8°♊04'13					
max. Earth dist.	16444 Apr 17 22:33	18°♊13'33	1.39585 AU	superior conj	16445 Mar 25 01:33	18°♊41'12	0°42'47
evening rise	16444 Apr 21 20:51	25°♊00'07		minimum elong	16445 Mar 25 03:46	18°♊52'09	0°42'15
	16444 Apr 24 20:49	0°♊		desc. node	16445 Mar 30 04:27	28°♊35'08	
	16444 May 14 22:52	0°♊			16445 Mar 30 22:34	0°♊	
evening max el	16444 May 26 19:10	14°☿07'48	24°06'05	max. Earth dist.	16445 Mar 31 04:57	0°♊29'42	1.37288 AU
asc. node	16444 Jun 06 16:53	20°☿41'11		evening rise	16445 Apr 03 21:36	7°♊13'24	
retrograde	16444 Jun 07 00:11	20°☿41'34			16445 Apr 17 17:18	0°♊	
evening set	16444 Jun 12 11:14	18°☿22'06		evening max el	16445 May 09 08:32	28°♊02'08	25°23'30
min. Earth dist.	16444 Jun 17 02:06	13°☿00'26	0.68837 AU		16445 May 11 10:56	0°☿	
				retrograde	16445 May 21 14:01	5°☿07'28	
				asc. node	16445 May 24 13:55	4°☿30'43	

evening set	16445 May 27 12:15	2°☿38'37		asc. node	16446 May 11 11:02	16°♊34'30	
	16445 May 30 02:28	30°♊♊		min. Earth dist.	16446 May 15 07:54	12°♊33'45	0.66752 AU
min. Earth dist.	16445 May 31 19:23	27°♊54'03	0.68023 AU	inferior conj	16446 May 17 05:46	10°♊14'54	1°40'30
inferior conj	16445 Jun 02 04:09	26°♊07'57	2°19'12	minimum elong	16446 May 17 03:41	10°♊21'14	1°39'15
minimum elong	16445 Jun 02 02:01	26°♊14'54	2°18'03	morning rise	16446 May 23 01:32	4°♊34'02	
morning rise	16445 Jun 07 16:12	20°♊15'39		direct	16446 May 26 04:20	3°♊39'34	
direct	16445 Jun 11 05:25	19°♊03'21		morning max el	16446 Jun 01 15:00	7°♊03'48	18°23'30
morning max el	16445 Jun 18 03:33	22°♊49'10	19°07'54	desc. node	16446 Jun 13 01:37	22°♊24'47	
	16445 Jun 24 04:35	0°☿			16446 Jun 17 22:07	0°☿	
desc. node	16445 Jun 26 04:32	2°☿45'10		morning set	16446 Jun 21 23:19	6°☿24'12	
greatest brilliancy	16445 Jul 01 00:39	9°☿47'47	-0.7m		16446 Jul 06 23:56	0°♊	
morning set	16445 Jul 11 23:05	26°☿28'00					
	16445 Jul 14 06:03	0°♊		superior conj	16446 Jul 07 14:55	0°♊58'21	-2°11'55
max. Earth dist.	16445 Jul 25 09:20	17°♊18'00	1.45615 AU	minimum elong	16446 Jul 07 11:08	0°♊43'36	2°12'24
				max. Earth dist.	16446 Jul 08 05:06	1°♊53'38	1.46030 AU
superior conj	16445 Jul 28 05:24	21°♊45'11	-2°11'46	evening rise	16446 Jul 23 13:44	25°♊52'02	
minimum elong	16445 Jul 28 09:22	22°♊00'47	2°12'05		16446 Jul 26 05:02	0°♊	
	16445 Aug 02 10:17	0°♊		greatest brilliancy	16446 Aug 01 21:27	10°♊24'16	-0.8m
evening rise	16445 Aug 12 00:34	15°♊30'03		asc. node	16446 Aug 07 10:46	18°♊42'19	
asc. node	16445 Aug 20 14:03	29°♊23'31		evening max el	16446 Aug 14 17:26	27°♊48'50	18°50'48
	16445 Aug 20 23:15	0°♊			16446 Aug 17 07:52	0°♊	
evening max el	16445 Aug 31 05:34	14°♊00'36	18°17'51	retrograde	16446 Aug 21 09:51	1°♊27'14	
retrograde	16445 Sep 06 14:44	17°♊24'09		evening set	16446 Aug 24 18:17	0°♊22'40	
evening set	16445 Sep 09 13:42	16°♊36'03			16446 Aug 25 07:27	30°♊♊	
inferior conj	16445 Sep 15 11:49	11°♊06'37	1°52'34	inferior conj	16446 Aug 30 07:49	24°♊39'15	2°31'08
minimum elong	16445 Sep 15 14:07	10°♊59'57	1°51'57	minimum elong	16446 Aug 30 09:56	24°♊32'35	2°30'33
min. Earth dist.	16445 Sep 17 19:19	8°♊25'52	0.64575 AU	min. Earth dist.	16446 Sep 01 01:36	22°♊27'45	0.66373 AU
morning rise	16445 Sep 21 12:55	4°♊45'41		morning rise	16446 Sep 05 00:37	18°♊12'35	
desc. node	16445 Sep 22 02:09	4°♊20'22		desc. node	16446 Sep 08 23:29	15°♊55'36	
direct	16445 Sep 28 01:35	2°♊10'49		direct	16446 Sep 11 05:43	15°♊35'47	
morning max el	16445 Oct 11 17:17	10°♊06'59	27°25'10	morning max el	16446 Sep 24 04:51	23°♊17'02	26°25'38
	16445 Oct 27 09:39	0°♊			16446 Sep 30 04:26	0°♊	
	16445 Nov 14 02:03	0°♊			16446 Oct 20 17:32	0°♊	
morning set	16445 Nov 16 00:10	3°♊43'57		morning set	16446 Oct 30 01:45	16°♊33'56	
asc. node	16445 Nov 16 14:55	4°♊56'53		max. Earth dist.	16446 Nov 02 22:24	23°♊59'06	1.34543 AU
max. Earth dist.	16445 Nov 20 12:33	12°♊52'38	1.32831 AU	asc. node	16446 Nov 03 11:48	25°♊05'11	
					16446 Nov 05 22:37	0°♊	
superior conj	16445 Nov 24 03:41	20°♊33'28	1°04'23	superior conj	16446 Nov 08 02:04	4°♊23'44	0°40'49
minimum elong	16445 Nov 24 01:18	20°♊20'42	1°04'38	minimum elong	16446 Nov 08 00:03	4°♊13'19	0°41'00
	16445 Nov 28 12:21	0°♊		evening rise	16446 Nov 15 12:30	20°♊00'47	
evening rise	16445 Dec 01 03:19	5°♊39'47			16446 Nov 20 10:02	0°♊	
	16445 Dec 13 22:46	0°♊		evening max el	16446 Dec 04 19:13	21°♊51'30	21°01'44
desc. node	16445 Dec 19 00:26	7°♊08'27		desc. node	16446 Dec 05 21:26	22°♊53'18	
evening max el	16445 Dec 23 02:38	11°♊40'52	22°38'08	retrograde	16446 Dec 16 10:24	27°♊36'58	
retrograde	16446 Jan 05 00:46	18°♊04'13		evening set	16446 Dec 19 02:48	27°♊19'56	
evening set	16446 Jan 08 21:45	17°♊31'25		inferior conj	16446 Dec 27 20:40	23°♊29'13	-5°42'58
min. Earth dist.	16446 Jan 16 11:19	14°♊04'21	0.54566 AU	minimum elong	16446 Dec 27 13:35	23°♊39'17	5°41'19
inferior conj	16446 Jan 17 06:03	13°♊37'55	-6°00'57	min. Earth dist.	16446 Dec 28 16:41	23°♊00'46	0.54420 AU
minimum elong	16446 Jan 17 07:57	13°♊35'13	6°00'23	morning rise	16447 Jan 05 00:26	19°♊36'46	
morning rise	16446 Jan 25 19:17	9°♊49'40		direct	16447 Jan 09 04:30	18°♊59'15	
direct	16446 Jan 28 21:03	9°♊28'06		morning max el	16447 Jan 22 07:01	25°♊23'15	22°59'46
morning max el	16446 Feb 09 17:03	15°♊11'19	21°15'34		16447 Jan 26 12:34	0°♊	
asc. node	16446 Feb 12 13:29	18°♊14'44		asc. node	16447 Jan 30 10:46	5°♊16'37	
	16446 Feb 20 13:52	0°♊			16447 Feb 13 00:11	0°♊	
morning set	16446 Mar 01 13:12	17°♊26'05		morning set	16447 Feb 14 00:39	2°♊09'43	
	16446 Mar 07 12:44	0°♊					
superior conj	16446 Mar 08 20:27	2°♊44'52	1°06'00	superior conj	16447 Feb 20 23:00	17°♊06'46	1°22'54
minimum elong	16446 Mar 08 22:58	2°♊57'53	1°05'40	minimum elong	16447 Feb 21 01:06	17°♊18'05	1°22'53
max. Earth dist.	16446 Mar 13 14:37	12°♊22'49	1.35163 AU	max. Earth dist.	16447 Feb 24 07:10	24°♊11'09	1.33389 AU
desc. node	16446 Mar 17 01:11	19°♊01'51			16447 Feb 27 03:13	0°♊	
evening rise	16446 Mar 17 15:20	20°♊08'32		evening rise	16447 Feb 28 22:25	3°♊35'05	
	16446 Mar 23 01:55	0°♊		desc. node	16447 Mar 03 21:54	9°♊19'25	
	16446 Apr 11 16:40	0°♊			16447 Mar 15 21:41	0°♊	
evening max el	16446 Apr 21 22:08	11°♊50'40	26°29'16	evening max el	16447 Apr 04 11:43	25°♊24'10	27°16'01
retrograde	16446 May 04 22:52	19°♊15'52			16447 Apr 10 00:32	0°♊	
evening set	16446 May 11 06:54	16°♊43'02		retrograde	16447 Apr 18 01:41	2°♊57'05	

evening set	16447 Apr 24 17:03	0° Π 26'56		evening rise	16448 Feb 12 15:40	17° X 25'10	
	16447 Apr 25 06:42	30° R 8		desc. node	16448 Feb 18 18:37	29° X 23'07	
asc. node	16447 Apr 28 08:13	27° B 04'26			16448 Feb 19 02:34	0° Y	
min. Earth dist.	16447 Apr 28 13:37	26° B 50'00	0.65063 AU		16448 Mar 09 08:53	0° B	
inferior conj	16447 May 01 00:03	24° B 08'08	0°48'48	evening max el	16448 Mar 16 23:44	8° B 30'51	27°36'21
minimum elong	16447 Apr 30 22:46	24° B 11'42	0°47'50	retrograde	16448 Mar 30 21:09	16° B 01'33	
morning rise	16447 May 07 06:20	18° B 40'29		evening set	16448 Apr 06 16:17	13° B 41'10	
direct	16447 May 09 23:46	18° B 01'14		min. Earth dist.	16448 Apr 10 10:38	10° B 32'09	0.63043 AU
morning max el	16447 May 16 06:54	21° B 16'21	17°56'07	inferior conj	16448 Apr 13 08:00	7° B 39'59	-0°17'01
	16447 May 23 03:20	0° Π		minimum elong	16448 Apr 13 08:33	7° B 38'36	0°17'09
desc. node	16447 May 30 22:38	12° B 25'22		asc. node	16448 Apr 14 05:29	6° B 46'57	
morning set	16447 Jun 03 02:34	17° B 38'07		morning rise	16448 Apr 20 03:32	2° B 28'00	
	16447 Jun 10 15:59	0° B		direct	16448 Apr 22 12:45	2° B 00'50	
				morning max el	16448 Apr 29 00:32	5° B 18'32	17°46'11
superior conj	16447 Jun 17 05:42	10° B 31'20	-1°52'45	morning set	16448 May 15 07:10	0° Π 03'32	
minimum elong	16447 Jun 16 21:19	9° B 58'08	1°52'44		16448 May 15 06:21	0° Π	
max. Earth dist.	16447 Jun 21 01:14	16° B 31'55	1.45691 AU	desc. node	16448 May 16 19:33	2° Π 40'38	
	16447 Jun 29 17:27	0° Ω					
evening rise	16447 Jul 03 06:28	5° Ω 26'26		superior conj	16448 May 27 15:09	20° Π 57'09	-1°20'25
greatest brilliancy	16447 Jul 17 06:09	26° Ω 30'37	-0.6m	minimum elong	16448 May 27 07:49	20° Π 27'02	1°20'07
	16447 Jul 19 16:21	0° P			16448 Jun 02 05:03	0° B	
asc. node	16447 Jul 25 07:33	7° P 33'02		max. Earth dist.	16448 Jun 02 19:43	0° B 58'34	1.44638 AU
evening max el	16447 Jul 29 00:26	11° P 42'53	19°40'00	evening rise	16448 Jun 11 17:03	14° B 52'21	
retrograde	16447 Aug 05 08:00	15° P 48'19			16448 Jun 21 18:04	0° Ω	
evening set	16447 Aug 09 02:36	14° P 25'57		evening max el	16448 Jul 11 01:25	25° Ω 38'06	20°43'32
inferior conj	16447 Aug 14 10:46	8° P 30'00	2°55'08	asc. node	16448 Jul 11 04:22	25° Ω 45'26	
minimum elong	16447 Aug 14 12:12	8° P 25'12	2°54'38		16448 Jul 17 05:46	0° P	
min. Earth dist.	16447 Aug 15 14:38	6° P 57'02	0.67766 AU	retrograde	16448 Jul 19 07:01	0° P 21'12	
morning rise	16447 Aug 19 21:16	2° P 03'32			16448 Jul 21 06:09	30° R 8	
	16447 Aug 23 03:57	30° R 8		evening set	16448 Jul 23 12:27	28° Ω 40'46	
direct	16447 Aug 25 16:14	29° Ω 32'47		inferior conj	16448 Jul 28 18:08	22° Ω 33'23	3°06'37
desc. node	16447 Aug 26 20:50	29° Ω 38'26		minimum elong	16448 Jul 28 18:39	22° Ω 31'34	3°06'09
	16447 Aug 28 08:10	0° P		min. Earth dist.	16448 Jul 29 08:19	21° Ω 44'24	0.68700 AU
morning max el	16447 Sep 06 15:55	6° P 43'03	25°07'10	morning rise	16448 Aug 03 00:34	16° Ω 11'01	
	16447 Sep 24 19:23	0° B		direct	16448 Aug 08 07:53	13° Ω 52'41	
morning set	16447 Oct 12 11:29	28° B 41'44		desc. node	16448 Aug 12 18:09	15° Ω 10'49	
	16447 Oct 13 04:59	0° M		morning max el	16448 Aug 19 02:58	20° Ω 18'47	23°39'19
max. Earth dist.	16447 Oct 15 23:54	5° M 04'54	1.36704 AU		16448 Aug 27 10:00	0° P	
asc. node	16447 Oct 21 08:37	15° M 17'19			16448 Sep 16 23:42	0° B	
				morning set	16448 Sep 23 01:08	9° B 57'22	
superior conj	16447 Oct 22 14:55	17° M 46'11	0°11'21	max. Earth dist.	16448 Sep 26 22:45	16° B 39'22	1.39111 AU
minimum elong	16447 Oct 22 14:12	17° M 42'37	0°11'39		16448 Oct 04 07:45	0° M	
behind sun begin	16447 Oct 22 09:42	17° M 20'23					
behind sun end	16447 Oct 22 18:42	18° M 04'53		superior conj	16448 Oct 04 14:29	0° M 31'27	-0°23'04
	16447 Oct 28 16:36	0° X		minimum elong	16448 Oct 04 16:09	0° M 39'16	0°22'29
evening rise	16447 Oct 30 18:01	4° X 11'27		asc. node	16448 Oct 07 05:23	5° M 29'10	
	16447 Nov 14 14:16	0° B		evening rise	16448 Oct 13 17:09	18° M 04'45	
evening max el	16447 Nov 17 01:35	2° B 45'49	19°43'59		16448 Oct 19 23:47	0° X	
desc. node	16447 Nov 22 18:29	6° B 51'05		evening max el	16448 Oct 29 21:48	14° X 29'51	18°48'32
retrograde	16447 Nov 27 01:34	7° B 45'29		retrograde	16448 Nov 07 09:34	18° X 47'17	
evening set	16447 Nov 29 02:14	7° B 34'06		desc. node	16448 Nov 08 15:37	18° X 41'59	
inferior conj	16447 Dec 07 18:56	3° B 32'22	-4°29'50	evening set	16448 Nov 09 07:17	18° X 35'07	
minimum elong	16447 Dec 07 08:59	3° B 47'53	4°26'15	inferior conj	16448 Nov 17 11:41	14° X 13'43	-2°49'15
min. Earth dist.	16447 Dec 09 23:52	2° B 09'54	0.55213 AU	minimum elong	16448 Nov 17 04:49	14° X 26'09	2°46'02
	16447 Dec 13 21:57	30° R 8		min. Earth dist.	16448 Nov 20 12:01	12° X 03'32	0.56785 AU
morning rise	16447 Dec 15 14:15	29° X 17'28		morning rise	16448 Nov 24 23:22	9° X 23'40	
direct	16447 Dec 20 19:08	28° X 17'33		direct	16448 Nov 30 22:44	7° X 57'56	
	16447 Dec 27 12:39	0° B		morning max el	16448 Dec 15 03:00	15° X 17'35	26°26'02
morning max el	16448 Jan 03 15:09	5° B 12'41	24°49'39		16448 Dec 26 23:05	0° B	
asc. node	16448 Jan 17 08:01	23° B 16'26		asc. node	16449 Jan 03 05:12	11° B 59'16	
	16448 Jan 21 04:01	0° \approx			16449 Jan 12 07:45	0° \approx	
morning set	16448 Jan 29 12:37	16° \approx 50'28		morning set	16449 Jan 12 23:19	1° \approx 23'28	
	16448 Feb 04 12:29	0° X					
				superior conj	16449 Jan 19 17:05	16° \approx 17'47	1°38'02
superior conj	16448 Feb 05 06:36	1° X 39'49	1°33'31	minimum elong	16449 Jan 19 17:20	16° \approx 19'12	1°38'32
minimum elong	16448 Feb 05 07:53	1° X 46'52	1°33'49	max. Earth dist.	16449 Jan 20 13:06	18° \approx 09'26	1.31245 AU
max. Earth dist.	16448 Feb 07 07:24	6° X 06'52	1.32068 AU		16449 Jan 25 23:00	0° X	

evening rise	16449 Jan 26 16:24	1° H 32'09		max. Earth dist.	16450 Jan 03 20:42	0° \approx 11'16	1.30959 AU
desc. node	16449 Feb 04 15:21	19° H 07'06		evening rise	16450 Jan 10 22:21	15° \approx 50'07	
	16449 Feb 11 01:14	0° Y			16450 Jan 17 21:22	0° H	
evening max el	16449 Feb 27 07:36	20° Y 57'33	27°24'22	desc. node	16450 Jan 22 12:07	8° H 22'59	
retrograde	16449 Mar 13 08:03	28° Y 20'23			16450 Feb 06 20:13	0° Y	
evening set	16449 Mar 20 01:50	26° Y 16'48		evening max el	16450 Feb 09 08:32	2° Y 32'53	26°37'09
min. Earth dist.	16449 Mar 23 21:35	23° Y 28'41	0.60814 AU	retrograde	16450 Feb 23 09:01	9° Y 44'50	
inferior conj	16449 Mar 27 02:09	20° Y 41'38	-1°36'49	evening set	16450 Mar 01 18:21	8° Y 04'26	
minimum elong	16449 Mar 27 05:42	20° Y 33'50	1°35'32	min. Earth dist.	16450 Mar 05 22:09	5° Y 26'25	0.58558 AU
asc. node	16449 Apr 01 02:46	16° Y 51'48		inferior conj	16450 Mar 09 02:35	3° Y 01'43	-3°06'59
morning rise	16449 Apr 03 12:58	15° Y 48'25		minimum elong	16450 Mar 09 09:47	2° Y 48'01	3°04'18
direct	16449 Apr 05 15:37	15° Y 29'53			16450 Mar 13 12:13	30° R H	
morning max el	16449 Apr 12 16:44	19° Y 01'35	17°54'25	morning rise	16450 Mar 17 04:47	28° H 29'44	
	16449 Apr 20 17:18	0° B		direct	16450 Mar 19 03:41	28° H 16'21	
morning set	16449 Apr 28 07:30	13° B 23'44		asc. node	16450 Mar 19 00:04	28° H 16'26	
desc. node	16449 May 03 16:24	23° B 05'54			16450 Mar 24 10:32	0° Y	
	16449 May 07 14:05	0° II		morning max el	16450 Mar 27 03:47	2° Y 13'48	18°22'10
				morning set	16450 Apr 11 21:58	27° Y 21'09	
superior conj	16449 May 09 00:05	2° II 27'40	-0°42'52		16450 Apr 13 07:21	0° B	
minimum elong	16449 May 08 20:19	2° II 11'23	0°42'48	desc. node	16450 Apr 20 13:11	13° B 36'19	
max. Earth dist.	16449 May 16 10:15	14° II 57'47	1.42980 AU				
evening rise	16449 May 22 13:49	24° II 50'38		superior conj	16450 Apr 21 06:34	14° B 55'50	-0°06'05
	16449 May 25 21:11	0° B		minimum elong	16450 Apr 21 06:04	14° B 53'37	0°06'24
	16449 Jun 15 17:07	0° Ω		behind sun begin	16450 Apr 20 23:20	14° B 22'48	
evening max el	16449 Jun 23 20:39	9° Ω 33'00	21°58'08	behind sun end	16450 Apr 21 12:49	15° B 24'21	
asc. node	16449 Jun 28 01:16	13° Ω 06'48		max. Earth dist.	16450 Apr 28 19:39	28° B 15'48	1.40889 AU
retrograde	16449 Jul 03 05:16	15° Ω 00'31			16450 Apr 29 20:10	0° II	
evening set	16449 Jul 07 22:00	13° Ω 02'59		evening rise	16450 May 03 06:03	5° II 41'27	
inferior conj	16449 Jul 13 03:46	6° Ω 45'35	3°06'57		16450 May 19 00:45	0° B	
minimum elong	16449 Jul 13 03:20	6° Ω 47'04	3°06'23	evening max el	16450 Jun 06 11:50	23° B 27'32	23°19'03
min. Earth dist.	16449 Jul 13 04:40	6° Ω 42'27	0.69144 AU	asc. node	16450 Jun 14 22:13	29° B 20'10	
morning rise	16449 Jul 18 08:30	0° Ω 29'41		retrograde	16450 Jun 17 01:14	29° B 39'26	
	16449 Jul 18 23:17	30° R B		evening set	16450 Jun 22 05:33	27° B 27'04	
direct	16449 Jul 23 03:35	28° B 28'00		min. Earth dist.	16450 Jun 27 01:32	21° B 43'44	0.69091 AU
	16449 Jul 27 18:37	0° Ω		inferior conj	16450 Jun 27 13:41	21° B 01'48	2°56'47
desc. node	16449 Jul 30 15:24	2° Ω 08'59		minimum elong	16450 Jun 27 12:24	21° B 06'14	2°56'01
morning max el	16449 Aug 01 16:09	4° Ω 03'23	22°11'03	morning rise	16450 Jul 02 19:12	14° B 53'54	
	16449 Aug 21 11:57	0° H		direct	16450 Jul 07 02:11	13° B 11'08	
morning set	16449 Sep 03 15:35	20° H 14'49		morning max el	16450 Jul 15 10:06	17° B 57'06	20°49'44
max. Earth dist.	16449 Sep 09 00:52	29° H 03'56	1.41478 AU	desc. node	16450 Jul 17 12:37	20° B 10'53	
	16449 Sep 09 14:16	0° Ω			16450 Jul 25 06:45	0° Ω	
				morning set	16450 Aug 14 07:49	29° Ω 37'10	
superior conj	16449 Sep 16 20:29	12° Ω 30'16	-1°00'04		16450 Aug 14 13:42	0° H	
minimum elong	16449 Sep 17 01:23	12° Ω 51'57	0°59'15	max. Earth dist.	16450 Aug 22 08:54	12° H 20'19	1.43526 AU
asc. node	16449 Sep 24 02:07	25° Ω 37'33					
	16449 Sep 26 10:40	0° H		superior conj	16450 Aug 29 04:47	23° H 33'37	-1°35'31
evening rise	16449 Sep 27 06:35	1° H 32'43		minimum elong	16450 Aug 29 12:25	24° H 05'36	1°34'47
evening max el	16449 Oct 13 04:24	26° H 58'15	18°14'53		16450 Sep 02 00:00	0° Ω	
	16449 Oct 17 07:30	0° H		evening rise	16450 Sep 10 05:53	14° Ω 23'42	
retrograde	16449 Oct 20 13:02	0° H 43'51		asc. node	16450 Sep 10 22:50	15° Ω 38'35	
evening set	16449 Oct 22 14:58	0° H 26'26			16450 Sep 19 07:04	0° H	
	16449 Oct 23 21:05	30° R H		evening max el	16450 Sep 26 17:10	10° H 01'39	18°01'28
desc. node	16449 Oct 26 12:47	28° H 30'45		retrograde	16450 Oct 03 08:58	13° H 28'06	
inferior conj	16449 Oct 30 02:20	25° H 43'35	-1°08'53	evening set	16450 Oct 05 18:15	13° H 01'23	
minimum elong	16449 Oct 29 23:46	25° H 48'59	1°07'21	inferior conj	16450 Oct 12 12:55	7° H 58'45	0°16'30
min. Earth dist.	16449 Nov 02 08:20	22° H 59'42	0.58866 AU	minimum elong	16450 Oct 12 13:26	7° H 57'29	0°16'39
morning rise	16449 Nov 06 05:08	20° H 17'15		desc. node	16450 Oct 13 10:00	7° H 07'09	
direct	16449 Nov 12 16:12	18° H 24'57		min. Earth dist.	16450 Oct 15 14:26	5° H 00'54	0.61156 AU
morning max el	16449 Nov 26 23:05	26° H 04'56	27°31'45	morning rise	16450 Oct 19 05:39	2° H 03'40	
	16449 Nov 30 15:46	0° H			16450 Oct 23 23:01	30° R Ω	
	16449 Dec 20 10:35	0° B		direct	16450 Oct 25 22:00	29° Ω 48'37	
asc. node	16449 Dec 21 02:17	1° B 13'50			16450 Oct 27 22:02	0° H	
morning set	16449 Dec 28 06:52	15° B 43'35		morning max el	16450 Nov 09 02:49	7° H 42'33	27°58'36
	16450 Jan 03 18:41	0° \approx			16450 Nov 26 03:48	0° H	
				asc. node	16450 Dec 07 23:19	20° H 51'43	
superior conj	16450 Jan 04 04:29	0° \approx 54'53	1°36'31	morning set	16450 Dec 12 09:21	29° H 46'29	
minimum elong	16450 Jan 04 03:41	0° \approx 50'27	1°37'03		16450 Dec 12 11:57	0° B	

max. Earth dist.	16450 Dec 18 02:30	12°  04'28	1.31236 AU	max. Earth dist.	16451 Dec 01 02:43	23°  40'27	1.32089 AU
superior conj	16450 Dec 19 14:58	15°  26'36	1°28'54	superior conj	16451 Dec 03 22:33	29°  46'49	1°15'08
minimum elong	16450 Dec 19 13:17	15°  17'11	1°29'22	minimum elong	16451 Dec 03 20:17	29°  34'25	1°15'28
evening rise	16450 Dec 26 07:36	0°  15'10			16451 Dec 04 00:58	0°  3	
	16450 Dec 26 04:48	0°  15		evening rise	16451 Dec 10 18:17	14°  34'21'14	
desc. node	16451 Jan 09 08:55	27°  00'50			16451 Dec 18 06:30	0°  15	
	16451 Jan 11 07:13	0°  15		desc. node	16451 Dec 27 05:47	14°  46'23	
evening max el	16451 Jan 22 01:09	13°  15'56	25°17'51	evening max el	16452 Jan 03 11:25	23°  19'57	23°37'56
retrograde	16451 Feb 04 22:01	20°  13'43		retrograde	16452 Jan 16 21:03	29°  57'54	
evening set	16451 Feb 10 14:17	19°  00'48		evening set	16452 Jan 21 11:38	29°  12'02	
min. Earth dist.	16451 Feb 15 13:47	16°  18'01	0.56543 AU	min. Earth dist.	16452 Jan 27 22:43	26°  06'48	0.55069 AU
inferior conj	16451 Feb 18 06:17	14°  31'59	-4°36'24	inferior conj	16452 Jan 29 13:19	25°  10'17	-5°43'22
minimum elong	16451 Feb 18 15:45	14°  16'23	4°33'32	minimum elong	16452 Jan 29 19:54	25°  00'38	5°42'04
morning rise	16451 Feb 26 20:00	10°  21'07		morning rise	16452 Feb 07 05:38	21°  16'16	
direct	16451 Feb 28 21:02	10°  08'58		direct	16452 Feb 09 19:18	21°  00'01	
asc. node	16451 Mar 05 21:21	11°  27'02		morning max el	16452 Feb 20 17:34	26°  17'55	20°23'41
morning max el	16451 Mar 10 05:27	14°  43'09	19°11'20	asc. node	16452 Feb 20 18:39	26°  20'32	
	16451 Mar 20 19:37	0°  15			16452 Feb 24 01:33	0°  15	
morning set	16451 Mar 26 22:10	11°  04'30'00		morning set	16452 Mar 10 04:43	26°  19'10	
					16452 Mar 11 23:34	0°  15	
superior conj	16451 Apr 04 06:25	28°  09'49	0°26'33	superior conj	16452 Mar 17 19:22	11°  57'39	0°53'24
minimum elong	16451 Apr 04 08:00	28°  17'26	0°26'01	minimum elong	16452 Mar 17 21:49	12°  10'01	0°52'56
	16451 Apr 05 05:24	0°  15		max. Earth dist.	16452 Mar 23 08:49	22°  53'58	1.36350 AU
desc. node	16451 Apr 07 09:58	4°  08'19		desc. node	16452 Mar 24 06:42	24°  37'52	
max. Earth dist.	16451 Apr 11 01:41	10°  50'36	1.38599 AU	evening rise	16452 Mar 27 04:00	29°  59'24	
evening rise	16451 Apr 14 19:35	17°  27'07			16452 Mar 27 04:08	0°  15	
	16451 Apr 22 08:46	0°  15			16452 Apr 14 13:40	0°  15	
	16451 May 13 10:22	0°  15		evening max el	16452 May 01 15:03	21°  16'49	25°53'28
evening max el	16451 May 20 01:24	7°  23'02	24°39'55	retrograde	16452 May 14 05:28	28°  13'42	
retrograde	16451 May 31 17:40	14°  12'06		asc. node	16452 May 18 16:17	27°  12'41	
asc. node	16451 Jun 01 19:13	14°  07'21		evening set	16452 May 20 08:01	26°  10'04'47	
evening set	16451 Jun 06 09:27	11°  08'14		min. Earth dist.	16452 May 24 12:28	21°  31'17	0.67534 AU
min. Earth dist.	16451 Jun 10 20:52	6°  42'11	0.68550 AU	inferior conj	16452 May 26 02:44	19°  30'35	2°04'21
inferior conj	16451 Jun 11 22:00	5°  18'17	2°36'08	minimum elong	16452 May 26 00:32	19°  37'31	2°03'07
minimum elong	16451 Jun 11 20:04	5°  24'44	2°35'06	morning rise	16452 May 31 17:41	13°  12'42'42	
	16451 Jun 16 10:52	30°  12'11		direct	16452 Jun 04 02:25	12°  38'05	
morning rise	16451 Jun 17 06:52	29°  19'42		morning max el	16452 Jun 10 18:36	16°  13'05	18°46'58
direct	16451 Jun 21 02:22	27°  15'6'22		desc. node	16452 Jun 20 06:56	28°  12'43'1	
	16451 Jun 26 03:29	0°  15			16452 Jun 21 08:46	0°  15	
morning max el	16451 Jun 28 10:47	2°  00'54	19°40'40	greatest brilliancy	16452 Jun 24 15:07	4°  55'36	-0.8m
desc. node	16451 Jul 04 09:48	9°  00'10		morning set	16452 Jul 03 00:29	17°  53'48	
greatest brilliancy	16451 Jul 11 13:10	19°  00'56	-0.6m		16452 Jul 10 19:17	0°  15	
	16451 Jul 18 21:51	0°  15		max. Earth dist.	16452 Jul 17 18:03	10°  49'21	1.45889 AU
morning set	16451 Jul 24 12:17	8°  32'14		superior conj	16452 Jul 19 04:04	13°  02'11	-2°14'20
max. Earth dist.	16451 Aug 04 23:03	26°  01'9'44	1.45047 AU	minimum elong	16452 Jul 19 04:51	13°  05'13	2°14'50
	16451 Aug 07 06:42	0°  15			16452 Jul 29 22:30	0°  15	
superior conj	16451 Aug 09 13:39	3°  19'11	-2°02'48	evening rise	16452 Aug 03 13:29	7°  12'22'48	
minimum elong	16451 Aug 09 20:35	4°  06'58	2°02'41	asc. node	16452 Aug 14 16:15	24°  09'38	
evening rise	16451 Aug 23 09:43	26°  19'23'46			16452 Aug 18 01:35	0°  15	
	16451 Aug 25 13:13	0°  15		evening max el	16452 Aug 23 22:04	7°  13'01	18°29'47
asc. node	16451 Aug 28 19:32	5°  27'32		retrograde	16452 Aug 30 09:05	10°  40'55	
evening max el	16451 Sep 10 08:10	23°  29'21	18°06'47	evening set	16452 Sep 02 12:07	9°  45'52	
retrograde	16451 Sep 16 17:00	26°  49'53		inferior conj	16452 Sep 08 06:11	4°  10'18	2°10'51
evening set	16451 Sep 19 10:51	26°  10'22		minimum elong	16452 Sep 08 08:29	4°  03'22	2°10'12
inferior conj	16451 Sep 25 15:30	20°  45'0'10	1°22'50	min. Earth dist.	16452 Sep 10 07:54	1°  40'50	0.65395 AU
minimum elong	16451 Sep 25 17:31	20°  44'39	1°22'19		16452 Sep 11 19:38	30°  19'19	
min. Earth dist.	16451 Sep 28 06:29	17°  45'8'21	0.63397 AU	morning rise	16452 Sep 14 03:35	27°  19'46'22	
desc. node	16451 Sep 30 07:18	15°  45'7'28		desc. node	16452 Sep 16 04:37	26°  19'21'25	
morning rise	16451 Oct 01 22:06	14°  36'17		direct	16452 Sep 20 13:30	25°  19'09'46	
direct	16451 Oct 08 13:42	12°  40'06'01			16452 Sep 30 17:01	0°  15	
morning max el	16451 Oct 22 11:30	20°  04'14	27°47'00	morning max el	16452 Oct 03 22:40	3°  00'26	27°02'40
	16451 Oct 31 00:31	0°  15			16452 Oct 24 08:05	0°  15	
	16451 Nov 19 04:20	0° 15		morning set	16452 Nov 08 13:20	26° 13'36'10	
asc. node	16451 Nov 24 20:17	10° 45'32			16452 Nov 10 07:06	0° 15	
morning set	16451 Nov 26 04:26	13° 45'25'59					

asc. node	16452 Nov 10 17:13	0°♄50'04		max. Earth dist.	16453 Oct 26 00:42	16°♍02'24	1.35426 AU
max. Earth dist.	16452 Nov 12 18:27	4°♄57'20	1.33507 AU	asc. node	16453 Oct 28 14:04	21°♍00'36	
superior conj	16452 Nov 17 01:03	13°♄50'04	0°55'08	superior conj	16453 Oct 31 19:47	27°♍29'33	0°28'59
minimum elong	16452 Nov 16 22:44	13°♄37'47	0°55'21	minimum elong	16453 Oct 31 18:11	27°♍21'27	0°29'13
evening rise	16452 Nov 24 04:36	29°♄07'13			16453 Nov 02 01:16	0°♄	
	16452 Nov 24 14:34	0°♄		evening rise	16453 Nov 08 12:32	13°♄24'59	
	16452 Dec 11 22:28	0°♄			16453 Nov 17 00:48	0°♄	
desc. node	16452 Dec 13 02:44	1°♄21'41		evening max el	16453 Nov 26 20:42	13°♄43'43	20°25'52
evening max el	16452 Dec 14 22:48	3°♄16'55	21°55'14	desc. node	16453 Nov 29 23:45	16°♄24'13	
retrograde	16452 Dec 27 08:50	9°♄25'09		retrograde	16453 Dec 07 19:35	19°♄10'31	
evening set	16452 Dec 30 17:01	9°♄00'13		evening set	16453 Dec 10 03:27	18°♄56'53	
inferior conj	16453 Jan 08 06:12	5°♄10'00	-6°01'01	inferior conj	16453 Dec 18 22:21	15°♄02'28	-5°17'17
minimum elong	16453 Jan 08 03:58	5°♄13'06	6°00'22	minimum elong	16453 Dec 18 13:05	15°♄16'03	5°14'39
min. Earth dist.	16453 Jan 08 03:56	5°♄13'09	0.54394 AU	min. Earth dist.	16453 Dec 20 09:28	14°♄10'59	0.54648 AU
morning rise	16453 Jan 16 15:40	1°♄22'28		morning rise	16453 Dec 26 22:17	11°♄02'47	
direct	16453 Jan 20 04:36	0°♄54'56		direct	16453 Dec 31 13:20	10°♄16'39	
morning max el	16453 Feb 01 14:35	6°♄55'56	21°58'15	morning max el	16454 Jan 14 00:58	16°♄54'34	23°47'03
asc. node	16453 Feb 06 15:57	12°♄41'04			16454 Jan 24 10:41	0°♄	
	16453 Feb 17 04:48	0°♄		asc. node	16454 Jan 24 13:14	0°♄09'55	
morning set	16453 Feb 22 14:59	11°♄02'03		morning set	16454 Feb 07 02:54	25°♄45'49	
					16454 Feb 09 01:57	0°♄	
superior conj	16453 Mar 01 17:49	26°♄09'33	1°13'57	superior conj	16454 Feb 13 22:49	10°♄37'38	1°28'10
minimum elong	16453 Mar 01 20:13	26°♄22'13	1°13'45	minimum elong	16454 Feb 14 00:37	10°♄47'22	1°28'17
	16453 Mar 03 13:56	0°♄		max. Earth dist.	16454 Feb 16 17:30	16°♄36'06	1.32762 AU
max. Earth dist.	16453 Mar 05 21:27	4°♄44'17	1.34357 AU	evening rise	16454 Feb 21 15:32	26°♄46'10	
evening rise	16453 Mar 10 03:46	13°♄08'27			16454 Feb 23 06:41	0°♄	
desc. node	16453 Mar 11 03:24	15°♄00'59		desc. node	16454 Feb 26 00:06	5°♄13'34	
	16453 Mar 19 12:49	0°♄			16454 Mar 12 20:28	0°♄	
	16453 Apr 09 12:12	0°♄		evening max el	16454 Mar 27 17:51	18°♄23'43	27°28'16
evening max el	16453 Apr 14 04:53	5°♄00'32	26°52'04	retrograde	16454 Apr 10 11:25	25°♄56'58	
retrograde	16453 Apr 27 11:40	12°♄29'38		evening set	16454 Apr 17 05:06	23°♄29'43	
evening set	16453 May 03 23:18	9°♄57'07		min. Earth dist.	16454 Apr 21 00:16	20°♄05'42	0.64237 AU
asc. node	16453 May 05 13:28	8°♄33'00		asc. node	16454 Apr 22 10:40	18°♄35'18	
min. Earth dist.	16453 May 07 22:13	6°♄02'13	0.66078 AU	inferior conj	16454 Apr 23 15:47	17°♄17'28	0°22'39
inferior conj	16453 May 10 01:32	3°♄32'24	1°20'16	minimum elong	16454 Apr 23 15:08	17°♄19'11	0°21'58
minimum elong	16453 May 09 23:41	3°♄37'50	1°19'05	morning rise	16454 Apr 30 03:26	11°♄56'30	
	16453 May 13 07:51	30°♄		direct	16454 May 02 17:13	11°♄22'50	
morning rise	16453 May 16 01:25	27°♄56'57		morning max el	16454 May 09 01:17	14°♄37'25	17°49'49
direct	16453 May 19 00:13	27°♄09'09			16454 May 20 00:44	0°♄	
	16453 May 24 20:26	0°♄		desc. node	16454 May 25 00:57	8°♄21'24	
morning max el	16453 May 25 08:14	0°♄27'42	18°09'51	morning set	16454 May 26 02:27	10°♄08'32	
desc. node	16453 Jun 07 03:59	18°♄13'53			16454 Jun 07 02:42	0°♄	
morning set	16453 Jun 13 11:55	28°♄22'47					
	16453 Jun 14 12:07	0°♄		superior conj	16454 Jun 08 11:16	2°♄11'06	-1°40'11
superior conj	16453 Jun 28 13:42	22°♄18'17	-2°05'54	minimum elong	16454 Jun 08 02:47	1°♄37'03	1°39'58
minimum elong	16453 Jun 28 07:14	21°♄52'59	2°06'11	max. Earth dist.	16454 Jun 13 10:34	10°♄05'36	1.45321 AU
max. Earth dist.	16453 Jun 30 14:57	25°♄30'41	1.45978 AU	evening rise	16454 Jun 24 04:49	26°♄46'52	
	16453 Jul 03 12:07	0°♄			16454 Jun 26 07:29	0°♄	
evening rise	16453 Jul 14 16:52	17°♄21'53			16454 Jul 17 03:06	0°♄	
	16453 Jul 22 21:42	0°♄		asc. node	16454 Jul 19 09:49	2°♄43'38	
greatest brilliancy	16453 Jul 26 04:04	4°♄56'51	-0.7m	evening max el	16454 Jul 21 12:29	4°♄59'03	20°05'20
asc. node	16453 Aug 01 13:01	14°♄07'48		retrograde	16454 Jul 29 04:48	9°♄19'52	
evening max el	16453 Aug 07 08:06	21°♄04'38	19°09'43	evening set	16454 Aug 02 03:52	7°♄49'47	
retrograde	16453 Aug 14 05:55	24°♄53'01		inferior conj	16454 Aug 07 10:37	1°♄48'35	3°01'25
evening set	16453 Aug 17 18:38	23°♄40'48		minimum elong	16454 Aug 07 11:41	1°♄44'57	3°00'57
inferior conj	16453 Aug 23 05:30	17°♄51'37	2°42'56	min. Earth dist.	16454 Aug 08 08:35	0°♄33'57	0.68219 AU
minimum elong	16453 Aug 23 07:22	17°♄45'34	2°42'23		16454 Aug 08 18:41	30°♄	
min. Earth dist.	16453 Aug 24 17:14	15°♄55'59	0.67025 AU	morning rise	16454 Aug 12 19:06	25°♄23'14	
morning rise	16453 Aug 28 19:23	11°♄24'31		direct	16454 Aug 18 09:05	22°♄57'15	
desc. node	16453 Sep 03 01:58	8°♄52'03		desc. node	16454 Aug 20 23:19	23°♄24'06	
direct	16453 Sep 03 20:19	8°♄49'46		morning max el	16454 Aug 29 21:23	29°♄50'41	24°30'22
morning max el	16453 Sep 16 10:17	16°♄19'13	25°53'59		16454 Sep 30 01:04	0°♄	
	16453 Sep 27 19:06	0°♄			16454 Sep 21 14:57	0°♄	
	16453 Oct 17 05:22	0°♄		morning set	16454 Oct 04 10:27	20°♄56'51	
morning set	16453 Oct 22 08:41	9°♄09'30		max. Earth dist.	16454 Oct 08 00:14	27°♄16'53	1.37713 AU

	16454 Oct 09 12:08	0°♌		morning set	16455 Sep 15 14:35	1°♌49'07	
				max. Earth dist.	16455 Sep 19 23:26	9°♌09'41	1.40133 AU
superior conj	16454 Oct 15 03:28	10°♌37'21	-0°02'46				
minimum elong	16454 Oct 15 03:37	10°♌38'06	0°02'22	superior conj	16455 Sep 27 20:10	23°♌04'51	-0°38'37
behind sun begin	16454 Oct 14 20:56	10°♌05'46		minimum elong	16455 Sep 27 23:09	23°♌18'28	0°37'55
behind sun end	16454 Oct 15 10:19	11°♌10'31			16455 Oct 01 13:41	0°♌	
asc. node	16454 Oct 15 10:52	11°♌13'09		asc. node	16455 Oct 02 07:36	1°♌24'19	
evening rise	16454 Oct 23 15:43	27°♌29'25		evening rise	16455 Oct 07 11:14	11°♌13'34	
	16454 Oct 24 21:57	0°♌			16455 Oct 17 22:40	0°♌	
evening max el	16454 Nov 09 09:13	24°♌59'31	19°17'35	evening max el	16455 Oct 23 10:31	7°♌04'50	18°31'40
desc. node	16454 Nov 16 20:50	29°♌29'49		retrograde	16455 Oct 31 09:23	11°♌06'51	
retrograde	16454 Nov 18 17:15	29°♌40'33		evening set	16455 Nov 02 08:22	10°♌52'57	
evening set	16454 Nov 20 15:08	29°♌29'36		desc. node	16455 Nov 03 17:59	10°♌26'56	
inferior conj	16454 Nov 29 03:40	25°♌20'16	-3°48'38	inferior conj	16455 Nov 10 05:47	6°♌22'47	-2°05'32
minimum elong	16454 Nov 28 18:35	25°♌35'18	3°44'55	minimum elong	16455 Nov 10 00:48	6°♌32'24	2°02'58
min. Earth dist.	16454 Dec 01 18:44	23°♌35'59	0.55797 AU	min. Earth dist.	16455 Nov 13 10:16	3°♌55'54	0.57630 AU
morning rise	16454 Dec 06 19:42	20°♌50'52		morning rise	16455 Nov 17 13:54	1°♌16'53	
direct	16454 Dec 12 09:05	19°♌40'13			16455 Nov 20 22:52	30°♌	
morning max el	16454 Dec 26 09:56	26°♌47'18	25°33'29	direct	16455 Nov 23 19:18	29°♌39'17	
	16454 Dec 29 12:10	0°♌			16455 Nov 26 16:34	0°♌	
asc. node	16455 Jan 11 10:27	18°♌29'42		morning max el	16455 Dec 08 01:00	7°♌08'27	26°58'14
	16455 Jan 17 14:35	0°♌			16455 Dec 25 02:06	0°♌	
morning set	16455 Jan 22 14:31	10°♌23'58		asc. node	16455 Dec 29 07:35	7°♌27'30	
				morning set	16456 Jan 07 00:05	24°♌52'07	
superior conj	16455 Jan 29 07:54	25°♌13'49	1°36'11		16456 Jan 09 08:41	0°♌	
minimum elong	16455 Jan 29 08:46	25°♌18'35	1°36'34				
max. Earth dist.	16455 Jan 30 20:10	28°♌34'13	1.31648 AU	superior conj	16456 Jan 13 19:01	9°♌52'24	1°38'08
	16455 Jan 31 11:47	0°♌		minimum elong	16456 Jan 13 18:50	9°♌51'18	1°38'39
evening rise	16455 Feb 05 12:15	10°♌44'11		max. Earth dist.	16456 Jan 14 03:00	10°♌37'03	1.31061 AU
desc. node	16455 Feb 12 20:47	25°♌09'35		evening rise	16456 Jan 20 15:29	24°♌56'52	
	16455 Feb 15 13:23	0°♌			16456 Jan 23 01:27	0°♌	
	16455 Mar 08 22:09	0°♌		desc. node	16456 Jan 30 17:31	14°♌42'35	
evening max el	16455 Mar 10 04:10	1°♌14'04	27°35'27		16456 Feb 09 06:37	0°♌	
retrograde	16455 Mar 24 03:41	8°♌42'57		evening max el	16456 Feb 20 09:31	13°♌20'12	27°08'33
evening set	16455 Mar 30 22:52	6°♌28'40		retrograde	16456 Mar 05 10:39	20°♌38'37	
min. Earth dist.	16455 Apr 03 17:06	3°♌29'36	0.62106 AU	evening set	16456 Mar 12 01:32	18°♌44'35	
inferior conj	16455 Apr 06 18:15	0°♌37'15	-0°49'18	min. Earth dist.	16456 Mar 15 23:50	16°♌01'55	0.59842 AU
minimum elong	16455 Apr 06 19:56	0°♌33'15	0°48'53	inferior conj	16456 Mar 19 05:18	13°♌22'24	-2°14'18
	16455 Apr 07 10:05	30°♌		minimum elong	16456 Mar 19 10:23	13°♌11'51	2°12'22
asc. node	16455 Apr 09 07:56	28°♌18'07		asc. node	16456 Mar 26 05:14	8°♌50'57	
morning rise	16455 Apr 13 20:09	25°♌33'06		morning rise	16456 Mar 26 22:49	8°♌37'42	
direct	16455 Apr 16 02:12	25°♌10'10		direct	16456 Mar 28 23:17	8°♌21'52	
morning max el	16455 Apr 22 18:44	28°♌32'41	17°47'25	morning max el	16456 Apr 05 09:09	12°♌03'30	18°03'40
	16455 Apr 24 03:50	0°♌			16456 Apr 17 08:44	0°♌	
morning set	16455 May 08 16:05	22°♌58'46		morning set	16456 Apr 20 23:02	6°♌36'20	
desc. node	16455 May 11 21:50	28°♌41'08		desc. node	16456 Apr 27 18:37	19°♌08'42	
	16455 May 12 15:50	0°♌					
superior conj	16455 May 20 06:33	13°♌04'06	-1°04'42	superior conj	16456 May 01 00:59	24°♌59'34	-0°26'52
minimum elong	16455 May 20 00:39	12°♌39'17	1°04'28	minimum elong	16456 Apr 30 22:44	24°♌49'36	0°26'59
max. Earth dist.	16455 May 27 02:52	24°♌19'32	1.43990 AU		16456 May 03 21:39	0°♌	
	16455 May 30 16:14	0°♌		max. Earth dist.	16456 May 08 15:00	8°♌01'13	1.42129 AU
evening rise	16455 Jun 03 17:51	6°♌21'35		evening rise	16456 May 13 22:14	16°♌40'47	
	16455 Jun 19 14:34	0°♌			16456 May 22 11:59	0°♌	
evening max el	16455 Jul 04 10:49	18°♌53'57	21°14'15		16456 Jun 13 12:34	0°♌	
asc. node	16455 Jul 06 06:39	20°♌36'07		evening max el	16456 Jun 16 04:08	2°♌48'42	22°32'21
retrograde	16455 Jul 13 03:43	23°♌55'53		asc. node	16456 Jun 22 03:33	7°♌30'32	
evening set	16455 Jul 17 13:47	22°♌08'14		retrograde	16456 Jun 26 00:59	8°♌35'11	
inferior conj	16455 Jul 22 19:12	15°♌56'24	3°08'04	evening set	16456 Jun 30 22:38	6°♌31'11	
minimum elong	16455 Jul 22 19:19	15°♌55'59	3°07'35	inferior conj	16456 Jul 06 05:09	0°♌10'24	3°03'55
min. Earth dist.	16455 Jul 23 03:46	15°♌26'35	0.68941 AU	minimum elong	16456 Jul 06 04:21	0°♌13'13	3°03'17
morning rise	16455 Jul 28 00:35	9°♌36'18		min. Earth dist.	16456 Jul 06 00:34	0°♌26'23	0.69177 AU
direct	16455 Aug 02 02:43	7°♌24'27			16456 Jul 06 08:08	30°♌	
desc. node	16455 Aug 07 20:36	9°♌35'40		morning rise	16456 Jul 11 09:54	23°♌57'43	
morning max el	16455 Aug 12 08:57	13°♌29'59	23°01'20	direct	16456 Jul 15 23:54	22°♌03'38	
	16455 Aug 25 16:56	0°♌		desc. node	16456 Jul 24 17:51	27°♌02'51	
	16455 Sep 14 12:01	0°♌		morning max el	16456 Jul 24 23:37	27°♌17'09	21°35'16
					16456 Jul 27 12:29	0°♌	

	16456 Aug 18 05:39	0°♍		desc. node	16457 Jul 11 15:02	15°♊26'41	
morning set	16456 Aug 25 18:55	11°♍40'51			16457 Jul 22 07:59	0°♊	
max. Earth dist.	16456 Sep 01 03:55	21°♍56'48	1.42401 AU	morning set	16457 Aug 05 04:11	20°♊46'15	
	16456 Sep 05 23:43	0°♊			16457 Aug 11 02:37	0°♍	
				max. Earth dist.	16457 Aug 14 15:16	5°♍35'09	1.44251 AU
superior conj	16456 Sep 08 17:24	4°♊41'08	-1°15'37				
minimum elong	16456 Sep 08 23:39	5°♊08'09	1°14'46	superior conj	16457 Aug 20 15:37	15°♍19'01	-1°48'32
asc. node	16456 Sep 18 04:17	21°♊29'58		minimum elong	16457 Aug 20 23:34	15°♍51'42	1°48'00
evening rise	16456 Sep 19 19:13	24°♊27'02			16457 Aug 29 09:45	0°♊	
	16456 Sep 22 20:33	0°♌		evening rise	16457 Sep 02 10:53	6°♊57'56	
evening max el	16456 Oct 05 20:19	19°♌49'41	18°06'50	asc. node	16457 Sep 05 01:00	11°♊26'20	
retrograde	16456 Oct 12 20:19	23°♌25'12			16457 Sep 16 17:56	0°♌	
evening set	16456 Oct 15 01:19	23°♌04'08		evening max el	16457 Sep 19 10:26	3°♌03'58	18°01'28
desc. node	16456 Oct 20 15:13	19°♌36'10		retrograde	16457 Sep 25 22:06	6°♌26'28	
inferior conj	16456 Oct 22 05:19	18°♌12'27	-0°30'27	evening set	16457 Sep 28 10:57	5°♌54'37	
minimum elong	16456 Oct 22 04:16	18°♌14'49	0°29'35	inferior conj	16457 Oct 04 23:13	0°♌43'51	0°47'00
min. Earth dist.	16456 Oct 25 10:20	15°♌20'26	0.59838 AU	minimum elong	16457 Oct 05 00:33	0°♌40'25	0°46'46
morning rise	16456 Oct 29 03:59	12°♌33'07			16457 Oct 05 16:12	30°♋♊	
direct	16456 Nov 04 18:15	10°♌30'32		desc. node	16457 Oct 07 12:29	28°♊06'42	
morning max el	16456 Nov 19 00:23	18°♌16'21	27°47'59	min. Earth dist.	16457 Oct 07 20:36	27°♊46'35	0.62127 AU
	16456 Nov 28 21:15	0°♋		morning rise	16457 Oct 11 11:35	24°♊39'31	
asc. node	16456 Dec 15 04:38	26°♋52'50		direct	16457 Oct 18 04:06	22°♊17'20	
	16456 Dec 16 19:05	0°♋			16457 Nov 01 01:04	0°♌	
morning set	16456 Dec 21 05:45	9°♋05'23		morning max el	16457 Nov 01 06:42	0°♌13'53	27°58'12
max. Earth dist.	16456 Dec 27 10:25	22°♋36'50	1.31017 AU		16457 Nov 22 23:23	0°♋	
				asc. node	16457 Dec 02 01:38	16°♋38'04	
superior conj	16456 Dec 28 06:17	24°♋27'51	1°34'02	morning set	16457 Dec 05 05:26	22°♋59'00	
minimum elong	16456 Dec 28 05:05	24°♋21'08	1°34'33		16457 Dec 08 13:37	0°♋	
	16456 Dec 30 17:39	0°♌		max. Earth dist.	16457 Dec 10 14:33	4°♋24'37	1.31533 AU
evening rise	16457 Jan 03 23:07	9°♌18'43					
	16457 Jan 14 10:18	0°♋		superior conj	16457 Dec 12 15:47	8°♋55'02	1°23'49
desc. node	16457 Jan 16 14:19	3°♋43'52		minimum elong	16457 Dec 12 13:48	8°♋44'03	1°24'14
evening max el	16457 Feb 01 07:15	24°♋33'48	26°06'50	evening rise	16457 Dec 19 09:14	23°♋45'09	
	16457 Feb 08 17:42	0°♍			16457 Dec 22 07:48	0°♌	
retrograde	16457 Feb 15 06:28	1°♍39'09		desc. node	16458 Jan 03 11:10	22°♌01'33	
evening set	16457 Feb 21 09:42	0°♍10'23			16458 Jan 09 07:06	0°♋	
	16457 Feb 21 18:21	30°♋♋		evening max el	16458 Jan 13 20:32	4°♋57'00	24°36'46
min. Earth dist.	16457 Feb 25 20:23	27°♋32'20	0.57660 AU	retrograde	16458 Jan 27 13:28	11°♋47'20	
inferior conj	16457 Feb 28 21:15	25°♋22'42	-3°46'00	evening set	16458 Feb 01 20:05	10°♋45'57	
minimum elong	16457 Mar 01 05:47	25°♋07'28	3°43'02	min. Earth dist.	16458 Feb 07 08:28	7°♋56'13	0.55836 AU
morning rise	16457 Mar 09 05:05	20°♋59'36		inferior conj	16458 Feb 09 15:51	6°♋30'12	-5°09'10
direct	16457 Mar 11 04:07	20°♋47'09		minimum elong	16458 Feb 10 00:57	6°♋16'03	5°06'49
asc. node	16457 Mar 13 02:32	20°♋59'50		morning rise	16458 Feb 18 08:03	2°♋27'44	
morning max el	16457 Mar 19 16:42	24°♋58'56	18°40'18	direct	16458 Feb 20 13:06	2°♋14'35	
	16457 Mar 23 21:25	0°♍		asc. node	16458 Feb 27 23:51	4°♋55'50	
morning set	16457 Apr 04 18:11	20°♍46'16		morning max el	16458 Mar 02 13:04	7°♋06'16	19°39'17
	16457 Apr 09 12:35	0°♋			16458 Mar 17 06:09	0°♍	
				morning set	16458 Mar 19 21:28	5°♍15'30	
superior conj	16457 Apr 13 15:28	7°♋49'06	0°08'25				
minimum elong	16457 Apr 13 16:01	7°♋51'41	0°07'59	superior conj	16458 Mar 27 21:27	21°♍19'16	0°38'40
behind sun begin	16457 Apr 13 09:57	7°♋23'18		minimum elong	16458 Mar 27 23:32	21°♍29'29	0°38'09
behind sun end	16457 Apr 13 22:05	8°♋19'59			16458 Apr 01 09:39	0°♋	
desc. node	16457 Apr 14 15:24	9°♋40'25		desc. node	16458 Apr 01 12:09	0°♋11'45	
max. Earth dist.	16457 Apr 20 23:10	21°♋02'54	1.39928 AU	max. Earth dist.	16458 Apr 03 05:20	3°♋23'29	1.37623 AU
evening rise	16457 Apr 24 23:45	27°♋56'05		evening rise	16458 Apr 06 21:44	10°♋02'36	
	16457 Apr 26 05:27	0°♌			16458 Apr 18 23:19	0°♌	
	16457 May 16 00:26	0°♎			16458 May 11 16:16	0°♎	
evening max el	16457 May 29 18:30	16°♎44'19	23°53'55	evening max el	16458 May 12 07:49	0°♎38'55	25°12'26
asc. node	16457 Jun 09 00:32	23°♎09'54		retrograde	16458 May 24 10:04	7°♎40'37	
retrograde	16457 Jun 09 19:28	23°♎12'33		asc. node	16458 May 26 21:36	7°♎15'14	
evening set	16457 Jun 15 04:50	20°♎54'41		evening set	16458 May 30 06:41	5°♎12'48	
min. Earth dist.	16457 Jun 19 20:56	15°♎27'31	0.68922 AU	min. Earth dist.	16458 Jun 03 14:50	0°♎22'44	0.68178 AU
inferior conj	16457 Jun 20 14:37	14°♎27'14	2°49'21		16458 Jun 03 21:51	30°♋♌	
minimum elong	16457 Jun 20 13:02	14°♎32'40	2°48'28	inferior conj	16458 Jun 04 21:39	28°♌42'05	2°24'04
morning rise	16457 Jun 25 21:15	8°♎23'22		minimum elong	16458 Jun 04 19:33	28°♌48'58	2°22'56
direct	16457 Jun 29 23:21	6°♎48'49		morning rise	16458 Jun 10 08:49	22°♌48'09	
morning max el	16457 Jul 07 20:18	11°♎15'21	20°18'42	direct	16458 Jun 13 23:35	21°♌33'07	

morning max el	16458 Jun 21 00:12	25° Π 23'27	19°15'52	desc. node	16459 Jun 15 09:17	24° Π 07'33	
	16458 Jun 25 02:08	0° \mathfrak{G}			16459 Jun 19 04:35	0° \mathfrak{G}	
desc. node	16458 Jun 28 12:12	4° \mathfrak{G} 31'52		morning set	16459 Jun 25 06:09	9° \mathfrak{G} 31'29	
greatest brilliancy	16458 Jul 03 18:01	12° \mathfrak{G} 04'50	-0.7m		16459 Jul 08 07:47	0° Ω	
morning set	16458 Jul 15 09:25	29° \mathfrak{G} 45'29					
	16458 Jul 15 13:12	0° Ω		superior conj	16459 Jul 11 01:40	4° Ω 16'44	-2°13'12
max. Earth dist.	16458 Jul 28 07:45	19° Ω 48'57	1.45490 AU	minimum elong	16459 Jul 10 23:01	4° Ω 06'25	2°13'43
				max. Earth dist.	16459 Jul 11 03:13	4° Ω 22'44	1.46017 AU
superior conj	16458 Jul 31 15:23	25° Ω 02'20	-2°10'00	evening rise	16459 Jul 26 21:48	29° Ω 03'50	
minimum elong	16458 Jul 31 20:18	25° Ω 21'48	2°10'13		16459 Jul 27 12:04	0° \mathfrak{P}	
	16458 Aug 03 18:23	0° \mathfrak{P}		greatest brilliancy	16459 Aug 04 09:28	12° \mathfrak{P} 23'04	-0.8m
evening rise	16458 Aug 15 04:55	18° \mathfrak{P} 32'42		asc. node	16459 Aug 09 18:28	20° \mathfrak{P} 31'13	
	16458 Aug 22 04:41	0° \mathfrak{A}			16459 Aug 17 03:28	0° \mathfrak{A}	
asc. node	16458 Aug 22 21:44	1° \mathfrak{A} 08'43		evening max el	16459 Aug 17 13:43	0° \mathfrak{A} 25'51	18°44'51
evening max el	16458 Sep 03 01:14	16° \mathfrak{A} 38'40	18°14'28	retrograde	16459 Aug 24 04:29	4° \mathfrak{A} 01'05	
retrograde	16458 Sep 09 10:07	20° \mathfrak{A} 01'09		evening set	16459 Aug 27 11:29	2° \mathfrak{A} 59'03	
evening set	16458 Sep 12 07:41	19° \mathfrak{A} 15'26			16459 Aug 30 19:51	30° \mathfrak{R} \mathfrak{P}	
inferior conj	16458 Sep 18 07:25	13° \mathfrak{A} 48'23	1°45'18	inferior conj	16459 Sep 02 02:06	27° \mathfrak{P} 17'44	2°26'15
minimum elong	16458 Sep 18 09:39	13° \mathfrak{A} 41'56	1°44'41	minimum elong	16459 Sep 02 04:17	27° \mathfrak{P} 10'55	2°25'39
min. Earth dist.	16458 Sep 20 16:55	11° \mathfrak{A} 04'12	0.64274 AU	min. Earth dist.	16459 Sep 03 22:00	25° \mathfrak{P} 01'09	0.66132 AU
morning rise	16458 Sep 24 09:53	7° \mathfrak{A} 28'55		morning rise	16459 Sep 07 20:03	20° \mathfrak{P} 51'37	
desc. node	16458 Sep 24 09:47	7° \mathfrak{A} 29'06		desc. node	16459 Sep 11 07:08	18° \mathfrak{P} 44'52	
direct	16458 Sep 30 23:24	4° \mathfrak{A} 54'54		direct	16459 Sep 14 02:31	18° \mathfrak{P} 14'28	
morning max el	16458 Oct 14 17:00	12° \mathfrak{A} 52'25	27°31'49	morning max el	16459 Sep 27 04:25	25° \mathfrak{P} 58'42	26°35'53
	16458 Oct 28 11:51	0° \mathfrak{M}			16459 Sep 30 21:34	0° \mathfrak{A}	
	16458 Nov 15 12:36	0° \mathfrak{X}			16459 Oct 22 01:01	0° \mathfrak{M}	
morning set	16458 Nov 18 20:38	6° \mathfrak{X} 27'27		morning set	16459 Nov 02 00:11	19° \mathfrak{M} 22'33	
asc. node	16458 Nov 18 22:36	6° \mathfrak{X} 37'10		asc. node	16459 Nov 05 19:28	26° \mathfrak{M} 44'22	
max. Earth dist.	16458 Nov 23 11:33	15° \mathfrak{X} 52'52	1.32617 AU	max. Earth dist.	16459 Nov 05 22:45	27° \mathfrak{M} 00'42	1.34256 AU
					16459 Nov 07 10:37	0° \mathfrak{X}	
superior conj	16458 Nov 26 21:32	23° \mathfrak{X} 09'00	1°07'25				
minimum elong	16458 Nov 26 19:10	22° \mathfrak{X} 56'13	1°07'42	superior conj	16459 Nov 10 21:03	7° \mathfrak{X} 02'35	0°44'48
	16458 Nov 30 01:16	0° \mathfrak{Z}		minimum elong	16459 Nov 10 18:55	6° \mathfrak{X} 51'31	0°44'59
evening rise	16458 Dec 03 20:00	8° \mathfrak{Z} 12'01		evening rise	16459 Nov 18 05:30	22° \mathfrak{X} 33'49	
	16458 Dec 15 00:59	0° \approx			16459 Nov 21 19:55	0° \mathfrak{Z}	
desc. node	16458 Dec 21 08:06	9° \approx 20'21		evening max el	16459 Dec 07 20:57	24° \mathfrak{Z} 59'21	21°15'07
evening max el	16458 Dec 26 05:57	14° \approx 53'21	22°53'33	desc. node	16459 Dec 08 05:05	25° \mathfrak{Z} 19'08	
retrograde	16459 Jan 08 07:38	21° \approx 21'01			16459 Dec 15 04:35	0° \approx	
evening set	16459 Jan 12 09:11	20° \approx 45'06		retrograde	16459 Dec 19 17:19	0° \approx 50'50	
min. Earth dist.	16459 Jan 19 15:35	17° \approx 24'12	0.54669 AU	evening set	16459 Dec 22 13:29	0° \approx 32'07	
inferior conj	16459 Jan 20 15:43	16° \approx 49'53	-5°58'14		16459 Dec 24 11:28	30° \mathfrak{R} \mathfrak{Z}	
minimum elong	16459 Jan 20 19:00	16° \approx 45'12	5°57'32	inferior conj	16459 Dec 31 06:26	26° \mathfrak{Z} 42'09	-5°49'38
morning rise	16459 Jan 29 06:02	13° \approx 00'27		minimum elong	16459 Dec 31 00:27	26° \mathfrak{Z} 50'36	5°48'19
direct	16459 Feb 01 04:14	12° \approx 40'35		min. Earth dist.	16459 Dec 31 20:51	26° \mathfrak{Z} 21'49	0.54383 AU
morning max el	16459 Feb 12 18:55	18° \approx 17'28	21°01'25	morning rise	16460 Jan 08 11:40	22° \mathfrak{Z} 51'32	
asc. node	16459 Feb 14 21:09	20° \approx 28'59		direct	16460 Jan 12 11:54	22° \mathfrak{Z} 16'45	
	16459 Feb 21 18:02	0° \mathfrak{H}		morning max el	16460 Jan 25 10:27	28° \mathfrak{Z} 35'11	22°43'27
morning set	16459 Mar 04 05:53	19° \mathfrak{H} 55'25			16460 Jan 26 20:19	0° \approx	
	16459 Mar 09 01:26	0° \mathfrak{Y}		asc. node	16460 Feb 01 18:26	7° \approx 20'25	
					16460 Feb 14 11:58	0° \mathfrak{H}	
superior conj	16459 Mar 11 14:54	5° \mathfrak{Y} 18'54	1°02'52	morning set	16460 Feb 16 17:05	4° \mathfrak{H} 38'52	
minimum elong	16459 Mar 11 17:25	5° \mathfrak{Y} 31'52	1°02'30				
max. Earth dist.	16459 Mar 16 14:01	15° \mathfrak{Y} 17'28	1.35462 AU	superior conj	16460 Feb 23 16:27	19° \mathfrak{H} 38'15	1°20'44
desc. node	16459 Mar 19 08:53	20° \mathfrak{Y} 39'10		minimum elong	16460 Feb 23 18:39	19° \mathfrak{H} 50'01	1°20'39
evening rise	16459 Mar 20 13:10	22° \mathfrak{Y} 51'54		max. Earth dist.	16460 Feb 27 05:31	27° \mathfrak{H} 05'54	1.33628 AU
	16459 Mar 24 11:25	0° \mathfrak{B}			16460 Feb 28 15:27	0° \mathfrak{Y}	
	16459 Apr 12 16:28	0° Π		evening rise	16460 Mar 02 18:26	6° \mathfrak{Y} 14'09	
evening max el	16459 Apr 24 21:25	14° Π 28'45	26°20'33	desc. node	16460 Mar 05 05:35	10° \mathfrak{Y} 58'19	
retrograde	16459 May 07 19:48	21° Π 51'54			16460 Mar 16 03:34	0° \mathfrak{B}	
asc. node	16459 May 13 18:44	19° Π 34'48		evening max el	16460 Apr 06 11:13	28° \mathfrak{B} 05'38	27°10'39
evening set	16459 May 14 02:25	19° Π 19'24			16460 Apr 08 12:50	0° Π	
min. Earth dist.	16459 May 18 04:16	15° Π 04'53	0.66967 AU	retrograde	16460 Apr 19 23:31	5° Π 37'41	
inferior conj	16459 May 20 00:10	12° Π 50'26	1°47'13	evening set	16460 Apr 26 13:58	3° Π 06'50	
minimum elong	16459 May 19 22:01	12° Π 56'59	1°45'58	asc. node	16460 Apr 29 15:55	0° Π 16'48	
morning rise	16459 May 25 18:35	7° Π 07'38			16460 Apr 29 22:16	30° \mathfrak{R} \mathfrak{B}	
direct	16459 May 28 22:52	6° Π 10'38		min. Earth dist.	16460 Apr 30 11:08	29° \mathfrak{B} 25'18	0.65336 AU
morning max el	16459 Jun 04 10:46	9° Π 37'23	18°29'00	inferior conj	16460 May 02 19:43	26° \mathfrak{B} 46'15	0°57'34

minimum elong	16460 May 02 18:15	26° ♁ 50'23	0°56'32	transit begin	16461 Apr 16 02:42	10° ♁ 28'42	
morning rise	16460 May 09 00:14	21° ♁ 16'24		transit end	16461 Apr 16 08:31	10° ♁ 13'55	
direct	16460 May 11 19:02	20° ♁ 35'00		asc. node	16461 Apr 16 13:09	10° ♁ 02'12	
morning max el	16460 May 18 02:08	23° ♁ 50'38	17°59'06	morning rise	16461 Apr 22 22:49	5° ♁ 07'23	
	16460 May 23 04:20	0° ♁		direct	16461 Apr 25 09:13	4° ♁ 38'34	
desc. node	16460 Jun 01 06:17	14° ♁ 05'24		morning max el	16461 May 01 19:41	7° ♁ 54'57	17°46'34
morning set	16460 Jun 05 05:21	20° ♁ 34'04			16461 May 16 14:53	0° ♁	
	16460 Jun 11 00:18	0° ♁		morning set	16461 May 18 06:27	2° ♁ 49'40	
				desc. node	16461 May 19 03:12	4° ♁ 18'37	
superior conj	16460 Jun 19 14:38	13° ♁ 44'15	-1°56'43				
minimum elong	16460 Jun 19 06:33	13° ♁ 12'21	1°56'45	superior conj	16461 May 30 20:46	24° ♁ 00'48	-1°25'50
max. Earth dist.	16460 Jun 22 23:46	19° ♁ 03'00	1.45790 AU	minimum elong	16461 May 30 13:02	23° ♁ 29'13	1°25'32
	16460 Jun 30 00:50	0° ♁			16461 Jun 03 13:29	0° ♁	
evening rise	16460 Jul 05 16:55	8° ♁ 43'47		max. Earth dist.	16461 Jun 05 18:46	3° ♁ 32'46	1.44837 AU
greatest brilliancy	16460 Jul 19 02:34	28° ♁ 59'56	-0.7m	evening rise	16461 Jun 15 03:17	18° ♁ 07'57	
	16460 Jul 19 19:00	0° ♁			16461 Jun 22 23:41	0° ♁	
asc. node	16460 Jul 26 15:16	9° ♁ 27'01		asc. node	16461 Jul 13 12:05	27° ♁ 45'56	
evening max el	16460 Jul 30 21:37	14° ♁ 19'44	19°31'38	evening max el	16461 Jul 13 23:27	28° ♁ 14'42	20°33'12
retrograde	16460 Aug 07 02:19	18° ♁ 20'10			16461 Jul 15 21:15	0° ♁	
evening set	16460 Aug 10 19:25	17° ♁ 00'24		retrograde	16461 Jul 22 01:23	2° ♁ 51'44	
inferior conj	16460 Aug 16 04:11	11° ♁ 06'12	2°52'16	evening set	16461 Jul 26 05:10	1° ♁ 13'51	
minimum elong	16460 Aug 16 05:45	11° ♁ 01'03	2°51'47		16461 Jul 27 13:38	30° ♁	
min. Earth dist.	16460 Aug 17 10:05	9° ♁ 27'15	0.67594 AU	inferior conj	16461 Jul 31 11:02	25° ♁ 07'59	3°05'33
morning rise	16460 Aug 21 15:31	4° ♁ 39'31		minimum elong	16461 Jul 31 11:42	25° ♁ 05'40	3°05'07
direct	16460 Aug 27 12:07	2° ♁ 07'33		min. Earth dist.	16461 Aug 01 03:12	24° ♁ 12'23	0.68593 AU
desc. node	16460 Aug 28 04:27	2° ♁ 09'23		morning rise	16461 Aug 05 17:56	18° ♁ 44'48	
morning max el	16460 Sep 08 15:34	9° ♁ 22'55	25°19'36	direct	16461 Aug 11 02:59	16° ♁ 24'26	
	16460 Sep 24 23:10	0° ♁		desc. node	16461 Aug 15 01:45	17° ♁ 26'37	
	16460 Oct 13 14:50	0° ♁		morning max el	16461 Aug 22 02:38	22° ♁ 57'45	23°52'37
morning set	16460 Oct 14 12:29	1° ♁ 36'41			16461 Aug 28 07:33	0° ♁	
max. Earth dist.	16460 Oct 18 01:19	8° ♁ 05'08	1.36368 AU		16461 Sep 18 07:01	0° ♁	
asc. node	16460 Oct 22 16:17	16° ♁ 55'58		morning set	16461 Sep 26 05:24	13° ♁ 00'52	
				max. Earth dist.	16461 Sep 30 00:18	19° ♁ 34'15	1.38751 AU
					16461 Oct 05 18:29	0° ♁	
superior conj	16460 Oct 24 11:30	20° ♁ 29'19	0°16'10				
minimum elong	16460 Oct 24 10:31	20° ♁ 24'25	0°16'26	superior conj	16461 Oct 07 13:18	3° ♁ 20'45	-0°17'36
	16460 Oct 29 04:21	0° ♁		minimum elong	16461 Oct 07 14:32	3° ♁ 26'35	0°17'05
evening rise	16460 Nov 01 11:41	6° ♁ 46'06		asc. node	16461 Oct 09 13:04	7° ♁ 08'09	
	16460 Nov 14 07:20	0° ♁		evening rise	16461 Oct 16 12:00	20° ♁ 42'42	
evening max el	16460 Nov 19 01:01	5° ♁ 45'28	19°54'05		16461 Oct 21 07:33	0° ♁	
desc. node	16460 Nov 24 02:07	9° ♁ 34'06		evening max el	16461 Nov 01 19:17	17° ♁ 22'11	18°55'18
retrograde	16460 Nov 29 06:47	10° ♁ 52'02		retrograde	16461 Nov 10 12:05	21° ♁ 45'36	
evening set	16460 Dec 01 08:57	10° ♁ 40'16		desc. node	16461 Nov 10 23:13	21° ♁ 44'53	
inferior conj	16460 Dec 10 02:36	6° ♁ 40'40	-4°43'20	evening set	16461 Nov 12 09:33	21° ♁ 33'55	
minimum elong	16460 Dec 09 16:36	6° ♁ 55'59	4°39'56	inferior conj	16461 Nov 20 16:14	17° ♁ 15'37	-3°05'00
min. Earth dist.	16460 Dec 12 03:18	5° ♁ 26'09	0.55040 AU	minimum elong	16461 Nov 20 08:43	17° ♁ 28'54	3°01'34
morning rise	16460 Dec 17 23:03	2° ♁ 30'21		min. Earth dist.	16461 Nov 23 14:35	15° ♁ 11'46	0.56509 AU
direct	16460 Dec 23 00:38	1° ♁ 34'09		morning rise	16461 Nov 28 05:04	12° ♁ 31'00	
morning max el	16461 Jan 05 18:42	8° ♁ 24'49	24°33'48	direct	16461 Dec 04 01:58	11° ♁ 09'17	
asc. node	16461 Jan 18 15:39	25° ♁ 12'09		morning max el	16461 Dec 18 05:40	18° ♁ 25'51	26°13'24
	16461 Jan 21 11:06	0° ♁			16461 Dec 27 21:45	0° ♁	
morning set	16461 Jan 31 05:04	19° ♁ 20'21		asc. node	16462 Jan 05 12:48	13° ♁ 49'16	
	16461 Feb 05 02:00	0° ♁			16462 Jan 13 19:56	0° ♁	
				morning set	16462 Jan 15 16:04	3° ♁ 55'00	
superior conj	16461 Feb 06 23:25	4° ♁ 09'53	1°32'19				
minimum elong	16461 Feb 07 00:51	4° ♁ 17'42	1°32'33	superior conj	16462 Jan 22 09:36	18° ♁ 47'39	1°37'46
max. Earth dist.	16461 Feb 09 04:49	9° ♁ 00'54	1.32231 AU	minimum elong	16462 Jan 22 10:01	18° ♁ 49'58	1°38'13
evening rise	16461 Feb 14 10:19	20° ♁ 01'02		max. Earth dist.	16462 Jan 23 09:51	21° ♁ 02'40	1.31329 AU
	16461 Feb 19 12:32	0° ♁			16462 Jan 27 11:52	0° ♁	
desc. node	16461 Feb 20 02:17	1° ♁ 04'25		evening rise	16462 Jan 29 10:05	4° ♁ 05'51	
	16461 Mar 10 05:14	0° ♁		desc. node	16462 Feb 06 22:59	20° ♁ 51'45	
evening max el	16461 Mar 19 23:34	11° ♁ 17'04	27°35'18		16462 Feb 12 05:52	0° ♁	
retrograde	16461 Apr 02 20:01	18° ♁ 48'24		evening max el	16462 Mar 02 08:05	23° ♁ 50'02	27°28'21
evening set	16461 Apr 09 14:59	16° ♁ 26'02			16462 Mar 10 22:23	0° ♁	
min. Earth dist.	16461 Apr 13 09:28	13° ♁ 13'22	0.63361 AU	retrograde	16462 Mar 16 08:20	1° ♁ 14'41	
inferior conj	16461 Apr 16 05:24	10° ♁ 21'48	-0°06'07		16462 Mar 21 12:50	30° ♁	
minimum elong	16461 Apr 16 05:36	10° ♁ 21'18	0°06'23	evening set	16462 Mar 23 02:45	29° ♁ 07'59	
transit middle	16461 Apr 16 05:36	10° ♁ 21'18	0°06'23				

min. Earth dist.	16462 Mar 26 21:51	26° Υ 17'29	0.61152 AU	min. Earth dist.	16463 Mar 09 00:01	8° Υ 24'02	0.58883 AU
inferior conj	16462 Mar 30 01:49	23° Υ 28'22	-1°23'54	inferior conj	16463 Mar 12 05:05	5° Υ 54'52	-2°53'00
minimum elong	16462 Mar 30 04:51	23° Υ 21'35	1°22'52	minimum elong	16463 Mar 12 11:45	5° Υ 41'55	2°50'31
asc. node	16462 Apr 03 10:24	19° Υ 59'03		morning rise	16463 Mar 20 05:08	1° Υ 19'37	
morning rise	16462 Apr 06 10:19	18° Υ 32'22		asc. node	16463 Mar 21 07:41	1° Υ 08'27	
direct	16462 Apr 08 13:47	18° Υ 12'47		direct	16463 Mar 22 04:13	1° Υ 05'46	
morning max el	16462 Apr 15 12:21	21° Υ 41'37	17°52'01	morning max el	16463 Mar 30 00:25	4° Υ 58'52	18°16'44
	16462 Apr 21 21:26	0° X		morning set	16463 Apr 14 16:53	29° Υ 54'59	
morning set	16462 May 01 04:12	16° X 02'31			16463 Apr 14 17:57	0° X	
desc. node	16462 May 06 00:03	24° X 42'27		desc. node	16463 Apr 22 20:51	15° X 12'01	
	16462 May 08 23:59	0° II					
superior conj	16462 May 12 02:14	5° II 21'45	-0°48'37	superior conj	16463 Apr 24 05:45	17° X 41'44	-0°11'27
minimum elong	16462 May 11 21:54	5° II 03'10	0°48'30	minimum elong	16463 Apr 24 04:50	17° X 37'36	0°11'43
max. Earth dist.	16462 May 19 09:47	17° II 35'55	1.43259 AU	behind sun begin	16463 Apr 23 23:45	17° X 14'32	
evening rise	16462 May 25 21:39	27° II 58'53		behind sun end	16463 Apr 24 09:55	18° X 00'38	
	16462 May 27 04:41	0° X			16463 May 01 05:42	0° II	
	16462 Jun 16 17:13	0° Ω		max. Earth dist.	16463 May 01 19:40	0° II 59'21	1.41218 AU
evening max el	16462 Jun 26 19:22	12° Ω 08'55	21°46'29	evening rise	16463 May 06 10:45	8° II 41'20	
asc. node	16462 Jun 30 08:57	15° Ω 15'32			16463 May 20 05:40	0° X	
retrograde	16462 Jul 05 23:52	17° Ω 29'53		evening max el	16463 Jun 09 11:02	26° X 03'33	23°06'55
evening set	16462 Jul 10 14:52	15° Ω 34'50			16463 Jun 14 01:59	0° Ω	
inferior conj	16462 Jul 15 20:27	9° Ω 18'42	3°07'34	asc. node	16463 Jun 17 05:54	1° Ω 40'21	
minimum elong	16462 Jul 15 20:10	9° Ω 19'41	3°07'02	retrograde	16463 Jun 19 20:17	2° Ω 09'11	
min. Earth dist.	16462 Jul 15 23:19	9° Ω 08'43	0.69107 AU	evening set	16463 Jun 24 22:50	29° X 58'56	
morning rise	16462 Jul 21 01:17	3° Ω 01'35			16463 Jun 24 22:21	30° R X	
direct	16462 Jul 25 22:08	0° Ω 57'17		inferior conj	16463 Jun 30 06:29	23° X 34'43	2°59'03
desc. node	16462 Aug 01 23:02	4° Ω 12'47		minimum elong	16463 Jun 30 05:19	23° X 38'45	2°58'18
morning max el	16462 Aug 04 15:21	6° Ω 40'40	22°23'52	min. Earth dist.	16463 Jun 29 20:19	24° X 09'56	0.69127 AU
	16462 Aug 22 16:52	0° II		morning rise	16463 Jul 05 11:42	17° X 25'26	
morning set	16462 Sep 06 23:25	23° II 27'08		direct	16463 Jul 09 20:30	15° X 39'39	
	16462 Sep 10 23:12	0° Ω		morning max el	16463 Jul 18 08:23	20° X 32'44	21°01'09
max. Earth dist.	16462 Sep 12 01:29	1° Ω 49'55	1.41136 AU	desc. node	16463 Jul 19 20:16	22° X 06'11	
					16463 Jul 26 07:22	0° Ω	
superior conj	16462 Sep 19 22:12	15° Ω 26'53	-0°54'28		16463 Aug 15 21:03	0° II	
minimum elong	16462 Sep 20 02:35	15° Ω 46'30	0°53'39	morning set	16463 Aug 17 18:35	2° II 56'35	
asc. node	16462 Sep 26 09:48	27° Ω 17'09		max. Earth dist.	16463 Aug 25 08:26	14° II 58'24	1.43249 AU
	16462 Sep 27 20:42	0° II					
evening rise	16462 Sep 30 03:08	4° II 14'58		superior conj	16463 Sep 01 09:58	26° II 39'05	-1°30'30
evening max el	16462 Oct 16 00:39	29° II 44'47	18°18'35	minimum elong	16463 Sep 01 17:19	27° II 10'08	1°29'42
	16462 Oct 16 06:50	0° X			16463 Sep 03 09:17	0° Ω	
retrograde	16462 Oct 23 12:43	3° X 34'19		evening rise	16463 Sep 13 04:52	17° Ω 12'12	
evening set	16462 Oct 25 13:43	3° X 17'58		asc. node	16463 Sep 13 06:31	17° Ω 19'31	
desc. node	16462 Oct 28 20:24	1° X 50'23			16463 Sep 20 11:57	0° II	
	16462 Oct 31 11:18	30° R II		evening max el	16463 Sep 29 12:51	12° II 43'57	18°02'18
inferior conj	16462 Nov 02 03:43	28° II 38'28	-1°23'21	retrograde	16463 Oct 06 06:27	16° II 12'15	
minimum elong	16462 Nov 02 00:33	28° II 45'00	1°21'33	evening set	16463 Oct 08 14:35	15° II 47'06	
min. Earth dist.	16462 Nov 05 09:43	25° II 58'16	0.58535 AU	inferior conj	16463 Oct 15 11:37	10° II 47'20	0°04'46
morning rise	16462 Nov 09 07:54	23° II 17'07		minimum elong	16463 Oct 15 11:47	10° II 46'57	0°05'03
direct	16462 Nov 15 17:42	21° II 28'28		transit middle	16463 Oct 15 11:47	10° II 46'57	0°05'03
morning max el	16462 Nov 30 00:32	29° II 06'11	27°24'18	transit begin	16463 Oct 15 08:40	10° II 54'21	
	16462 Nov 30 22:11	0° X		transit end	16463 Oct 15 14:53	10° II 39'31	
	16462 Dec 21 19:10	0° X		desc. node	16463 Oct 15 17:40	10° II 32'53	
asc. node	16462 Dec 23 09:55	2° X 59'28		min. Earth dist.	16463 Oct 18 14:18	7° II 50'20	0.60815 AU
morning set	16462 Dec 31 00:12	18° X 17'08		morning rise	16463 Oct 22 05:54	4° II 56'06	
	16463 Jan 05 08:21	0° \approx		direct	16463 Oct 28 21:59	2° II 43'56	
				morning max el	16463 Nov 12 03:10	10° II 36'01	27°57'02
superior conj	16463 Jan 06 20:59	3° \approx 25'07	1°37'08		16463 Nov 27 07:10	0° X	
minimum elong	16463 Jan 06 20:21	3° \approx 21'33	1°37'41	asc. node	16463 Dec 10 06:58	22° X 34'08	
max. Earth dist.	16463 Jan 06 17:18	3° \approx 04'31	1.30965 AU		16463 Dec 14 00:05	0° X	
evening rise	16463 Jan 13 15:23	18° \approx 22'17		morning set	16463 Dec 15 03:36	2° X 22'39	
	16463 Jan 19 07:16	0° X		max. Earth dist.	16463 Dec 20 23:35	14° X 59'05	1.31163 AU
desc. node	16463 Jan 24 19:45	10° X 12'10					
	16463 Feb 07 06:22	0° Υ		superior conj	16463 Dec 22 07:45	17° X 57'50	1°30'27
evening max el	16463 Feb 12 10:09	5° Υ 32'58	26°46'23	minimum elong	16463 Dec 22 06:11	17° X 49'05	1°30'57
retrograde	16463 Feb 26 11:03	12° Υ 46'59			16463 Dec 27 17:44	0° \approx	
evening set	16463 Mar 04 21:59	11° Υ 02'53		evening rise	16463 Dec 29 00:18	2° \approx 46'28	
				desc. node	16464 Jan 11 16:35	28° \approx 56'16	

	16464 Jan 12 08:30	0° H		retrograde	16465 Jan 19 02:50	3° H 13'01	
evening max el	16464 Jan 25 04:08	16° H 23'28 25°31'19		evening set	16465 Jan 23 21:53	2° H 23'16	
retrograde	16464 Feb 08 01:52	23° H 23'14			16465 Jan 29 00:46	30° R \approx	
evening set	16464 Feb 13 21:11	22° H 06'18		min. Earth dist.	16465 Jan 30 02:36	29° \approx 22'45	0.55244 AU
min. Earth dist.	16464 Feb 18 17:00	19° H 25'09 0.56817 AU		inferior conj	16465 Jan 31 21:56	28° \approx 18'29	-5°35'52
inferior conj	16464 Feb 21 12:00	17° H 32'45 -4°23'43		minimum elong	16465 Feb 01 05:25	28° \approx 07'23	5°34'16
minimum elong	16464 Feb 21 21:22	17° H 17'00 4°20'45		morning rise	16465 Feb 09 14:35	24° \approx 22'34	
morning rise	16464 Mar 01 00:26	13° H 18'39		direct	16465 Feb 12 01:43	24° \approx 07'17	
direct	16464 Mar 03 00:38	13° H 06'34		asc. node	16465 Feb 22 02:18	28° \approx 41'07	
asc. node	16464 Mar 07 04:59	14° H 02'12		morning max el	16465 Feb 22 18:04	29° \approx 18'17	20°11'27
morning max el	16464 Mar 12 03:43	17° H 34'51 19°02'34			16465 Feb 23 10:44	0° H	
	16464 Mar 21 02:28	0° Y		morning set	16465 Mar 12 21:41	28° H 48'33	
morning set	16464 Mar 28 15:52	14° Y 13'41			16465 Mar 13 11:39	0° Y	
	16464 Apr 05 16:59	0° B					
superior conj	16464 Apr 06 03:17	0° B 49'14 0°21'56		superior conj	16465 Mar 20 14:34	14° Y 32'58	0°49'42
minimum elong	16464 Apr 06 04:38	0° B 55'42 0°21'26		minimum elong	16465 Mar 20 16:56	14° Y 44'54	0°49'13
desc. node	16464 Apr 08 17:37	5° B 43'37		max. Earth dist.	16465 Mar 26 09:03	25° Y 48'43	1.36674 AU
max. Earth dist.	16464 Apr 13 02:05	13° B 40'24 1.38943 AU		desc. node	16465 Mar 26 14:21	26° Y 13'46	
evening rise	16464 Apr 16 21:14	20° B 19'09			16465 Mar 28 14:53	0° B	
	16464 Apr 22 16:45	0° II		evening rise	16465 Mar 30 03:05	2° B 45'13	
	16464 May 13 07:55	0° E			16465 Apr 15 18:00	0° II	
evening max el	16464 May 22 00:50	9° E 59'18 24°28'14		evening max el	16465 May 04 14:27	23° II 53'44	25°43'13
retrograde	16464 Jun 02 13:17	16° E 43'09			16465 May 12 16:22	0° E	
asc. node	16464 Jun 03 02:55	16° E 41'47		retrograde	16465 May 17 01:46	1° E 05'18	
evening set	16464 Jun 08 03:24	14° E 20'49		asc. node	16465 May 21 00:00	0° E 03'13	
min. Earth dist.	16464 Jun 12 16:01	9° E 09'16 0.68661 AU			16465 May 21 02:21	30° R II	
inferior conj	16464 Jun 13 15:11	7° E 51'27 2°40'01		evening set	16465 May 23 02:52	28° II 34'59	
minimum elong	16464 Jun 13 13:20	7° E 57'41 2°39'01		min. Earth dist.	16465 May 27 08:14	24° II 00'17	0.67718 AU
morning rise	16464 Jun 18 23:23	1° E 51'24		inferior conj	16465 May 28 20:34	22° II 04'36	2°09'57
direct	16464 Jun 22 20:36	0° E 25'06		minimum elong	16465 May 28 18:23	22° II 11'35	2°08'45
morning max el	16464 Jun 30 07:59	4° E 34'53 19°50'03		morning rise	16465 Jun 03 10:27	16° II 15'09	
desc. node	16464 Jul 05 17:27	10° E 49'04		direct	16465 Jun 06 20:46	15° II 07'49	
	16464 Jul 19 03:58	0° O		morning max el	16465 Jun 13 14:50	18° II 46'14	18°53'58
morning set	16464 Jul 26 23:44	11° O 52'42		desc. node	16465 Jun 22 14:34	0° E 08'30	
max. Earth dist.	16464 Aug 06 22:00	28° O 53'01 1.44864 AU			16465 Jun 22 12:12	0° E	
	16464 Aug 07 14:55	0° M		greatest brilliancy	16465 Jun 27 00:21	6° E 41'17	-0.8m
				morning set	16465 Jul 06 09:36	21° E 07'06	
					16465 Jul 12 03:04	0° O	
superior conj	16464 Aug 11 22:15	6° M 52'52 -1°59'29		max. Earth dist.	16465 Jul 20 16:41	13° O 19'56	1.45815 AU
minimum elong	16464 Aug 12 05:39	7° M 22'40 1°59'17					
evening rise	16464 Aug 25 11:58	29° M 20'33		superior conj	16465 Jul 22 14:44	16° O 20'01	-2°13'50
	16464 Aug 25 21:17	0° A		minimum elong	16465 Jul 22 16:43	16° O 27'44	2°14'18
asc. node	16464 Aug 30 03:14	7° A 10'30			16465 Jul 31 06:31	0° M	
evening max el	16464 Sep 12 03:46	26° A 08'24 18°04'51		evening rise	16465 Aug 06 19:32	10° M 29'05	
retrograde	16464 Sep 18 12:59	29° A 28'54		asc. node	16465 Aug 16 23:59	26° M 45'26	
evening set	16464 Sep 21 05:33	28° A 51'24			16465 Aug 19 03:05	0° A	
inferior conj	16464 Sep 27 12:04	23° A 33'32 1°13'59		evening max el	16465 Aug 26 17:59	9° A 49'40	18°25'12
minimum elong	16464 Sep 27 13:57	23° A 28'29 1°13'31		retrograde	16465 Sep 02 04:08	13° A 15'44	
min. Earth dist.	16464 Sep 30 04:48	20° A 39'52 0.63078 AU		evening set	16465 Sep 05 05:45	12° A 23'08	
desc. node	16464 Oct 01 14:58	19° A 14'55		inferior conj	16465 Sep 11 01:10	6° A 49'34	2°04'37
morning rise	16464 Oct 03 20:09	17° A 21'56		minimum elong	16465 Sep 11 03:28	6° A 42'40	2°03'59
direct	16464 Oct 10 12:11	14° A 53'33		min. Earth dist.	16465 Sep 13 04:53	4° A 15'59	0.65119 AU
morning max el	16464 Oct 24 11:17	22° A 51'18 27°50'58		morning rise	16465 Sep 16 23:50	0° A 26'32	
	16464 Oct 30 19:51	0° M			16465 Sep 17 13:26	30° R M	
	16464 Nov 19 13:25	0° X		desc. node	16465 Sep 18 12:17	29° M 20'54	
asc. node	16464 Nov 26 03:57	12° X 25'37		direct	16465 Sep 23 10:45	27° M 50'27	
morning set	16464 Nov 27 23:57	16° X 05'43			16465 Sep 29 23:58	0° A	
max. Earth dist.	16464 Dec 03 00:58	26° X 38'15 1.31928 AU		morning max el	16465 Oct 06 22:21	5° A 43'09	27°11'03
	16464 Dec 04 14:17	0° Z			16465 Oct 25 13:19	0° M	
				morning set	16465 Nov 11 10:35	29° M 20'31	
superior conj	16464 Dec 05 15:55	2° Z 19'53 1°17'38			16465 Nov 11 18:41	0° X	
minimum elong	16464 Dec 05 13:42	2° Z 07'46 1°17'59		asc. node	16465 Nov 13 00:52	2° X 28'35	
evening rise	16464 Dec 12 10:54	17° Z 13'26		max. Earth dist.	16465 Nov 15 18:11	7° X 57'58	1.33259 AU
	16464 Dec 18 15:23	0° \approx					
desc. node	16464 Dec 28 13:29	16° \approx 50'47		superior conj	16465 Nov 19 19:19	16° X 25'44	0°58'35
evening max el	16465 Jan 05 15:05	26° \approx 31'49 23°53'26		minimum elong	16465 Nov 19 16:57	16° X 13'11	0°58'48
	16465 Jan 09 20:19	0° H			16465 Nov 26 02:53	0° Z	

evening rise	16465 Nov 26 21:23	1°♄38'47		evening rise	16466 Nov 11 05:48	15°♄57'59	
	16465 Dec 12 13:20	0°♄			16466 Nov 18 07:20	0°♄	
desc. node	16465 Dec 15 10:26	3°♄38'03		evening max el	16466 Nov 29 21:25	16°♄47'28	20°37'59
evening max el	16465 Dec 18 01:33	6°♄26'53	22°10'01	desc. node	16466 Dec 02 07:26	18°♄56'13	
retrograde	16465 Dec 30 16:04	12°♄40'45		retrograde	16466 Dec 11 02:12	22°♄21'03	
evening set	16466 Jan 03 04:41	12°♄13'13		evening set	16466 Dec 13 12:44	22°♄06'26	
inferior conj	16466 Jan 11 16:12	8°♄22'10	-6°02'20	inferior conj	16466 Dec 22 07:30	18°♄13'32	-5°27'26
minimum elong	16466 Jan 11 15:26	8°♄23'14	6°01'48	minimum elong	16466 Dec 21 22:50	18°♄26'05	5°25'10
min. Earth dist.	16466 Jan 11 08:04	8°♄33'32	0.54432 AU	min. Earth dist.	16466 Dec 23 13:31	17°♄30'04	0.54547 AU
morning rise	16466 Jan 20 03:05	4°♄34'51		morning rise	16466 Dec 30 08:43	14°♄16'44	
direct	16466 Jan 23 11:59	4°♄09'36		direct	16467 Jan 03 19:54	13°♄33'47	
morning max el	16466 Feb 04 17:17	10°♄04'25	21°43'01	morning max el	16467 Jan 17 04:46	20°♄07'09	23°30'29
asc. node	16466 Feb 08 23:35	14°♄49'38			16467 Jan 25 10:04	0°♄	
	16466 Feb 18 13:38	0°♄		asc. node	16467 Jan 26 20:49	2°♄09'00	
morning set	16466 Feb 25 07:32	13°♄30'52		morning set	16467 Feb 09 19:17	28°♄14'29	
					16467 Feb 10 14:57	0°♄	
superior conj	16466 Mar 04 11:47	28°♄41'53	1°11'14	superior conj	16467 Feb 16 15:58	13°♄07'49	1°26'25
minimum elong	16466 Mar 04 14:15	28°♄54'45	1°10'58	minimum elong	16467 Feb 16 17:53	13°♄18'10	1°26'28
	16466 Mar 05 02:46	0°♄		max. Earth dist.	16467 Feb 19 15:19	19°♄29'20	1.32969 AU
max. Earth dist.	16466 Mar 08 20:35	7°♄39'29	1.34629 AU	evening rise	16467 Feb 24 10:54	29°♄22'53	
evening rise	16466 Mar 13 00:46	15°♄49'13			16467 Feb 24 18:23	0°♄	
desc. node	16466 Mar 13 11:03	16°♄38'02		desc. node	16467 Feb 28 07:46	6°♄52'26	
	16466 Mar 20 21:16	0°♄			16467 Mar 13 23:49	0°♄	
	16466 Apr 10 06:10	0°♄		evening max el	16467 Mar 30 17:16	21°♄05'27	27°24'34
evening max el	16466 Apr 17 04:08	7°♄38'52	26°44'30	retrograde	16467 Apr 13 09:46	28°♄39'00	
retrograde	16466 Apr 30 08:52	15°♄06'53		retrograde	16467 Apr 20 02:42	26°♄10'30	
evening set	16466 May 06 19:21	12°♄34'04		evening set	16467 Apr 23 22:15	22°♄42'07	0.64532 AU
asc. node	16466 May 07 21:09	11°♄38'20		min. Earth dist.	16467 Apr 24 18:20	21°♄48'53	
min. Earth dist.	16466 May 10 18:56	8°♄34'16	0.66324 AU	asc. node	16467 Apr 26 12:05	19°♄55'44	0°32'17
inferior conj	16466 May 12 20:24	6°♄08'00	1°27'47	inferior conj	16467 Apr 26 11:11	19°♄58'08	0°31'31
minimum elong	16466 May 12 18:26	6°♄13'49	1°26'36	minimum elong	16467 May 02 21:48	14°♄32'24	
morning rise	16466 May 18 18:46	0°♄30'43		morning rise	16467 May 05 12:48	13°♄56'53	
	16466 May 19 22:09	30°♄		direct	16467 May 11 20:25	17°♄11'28	17°51'38
direct	16466 May 21 18:58	29°♄40'39		morning max el	16467 May 21 06:49	0°♄	
	16466 May 23 16:24	0°♄		desc. node	16467 May 27 08:31	9°♄58'58	
morning max el	16466 May 28 03:44	3°♄00'51	18°14'17	morning set	16467 May 29 03:31	12°♄58'26	
desc. node	16466 Jun 09 11:34	19°♄54'11			16467 Jun 08 11:27	0°♄	
	16466 Jun 15 19:54	0°♄		superior conj	16467 Jun 11 18:49	5°♄19'00	-1°44'54
morning set	16466 Jun 16 16:57	1°♄24'09		minimum elong	16467 Jun 11 10:15	4°♄44'49	1°44'43
superior conj	16466 Jul 01 23:56	25°♄34'05	-2°08'27	max. Earth dist.	16467 Jun 16 08:53	12°♄35'11	1.45462 AU
minimum elong	16466 Jul 01 18:20	25°♄12'09	2°08'47	evening rise	16467 Jun 27 15:23	0°♄02'42	
max. Earth dist.	16466 Jul 03 13:13	27°♄59'28	1.46013 AU		16467 Jun 27 14:40	0°♄	
	16466 Jul 04 20:09	0°♄		greatest brilliancy	16467 Jul 12 09:43	22°♄09'18	-0.6m
evening rise	16466 Jul 18 02:12	20°♄35'49			16467 Jul 18 00:44	0°♄	
	16466 Jul 24 03:45	0°♄		asc. node	16467 Jul 21 17:32	4°♄39'10	
greatest brilliancy	16466 Jul 28 19:57	7°♄09'27	-0.8m	evening max el	16467 Jul 24 09:57	7°♄34'29	19°56'11
asc. node	16466 Aug 03 20:45	15°♄57'47		retrograde	16467 Jul 31 23:07	11°♄49'47	
evening max el	16466 Aug 10 04:40	23°♄40'14	19°02'43	evening set	16467 Aug 04 20:34	10°♄22'28	
retrograde	16466 Aug 17 00:27	27°♄24'58		inferior conj	16467 Aug 10 03:46	4°♄23'06	2°59'22
evening set	16466 Aug 20 11:38	26°♄15'28		minimum elong	16467 Aug 10 04:58	4°♄19'02	2°58'54
inferior conj	16466 Aug 25 23:22	20°♄28'14	2°38'56	min. Earth dist.	16467 Aug 11 03:49	3°♄01'53	0.68069 AU
minimum elong	16466 Aug 26 01:20	20°♄21'55	2°38'23		16467 Aug 13 13:12	30°♄	
min. Earth dist.	16466 Aug 27 13:13	18°♄26'52	0.66805 AU	morning rise	16467 Aug 15 12:54	27°♄57'13	
morning rise	16466 Aug 31 14:14	14°♄01'05		direct	16467 Aug 21 04:38	25°♄29'25	
desc. node	16466 Sep 05 09:35	11°♄32'04		desc. node	16467 Aug 23 06:53	25°♄46'55	
direct	16466 Sep 06 16:37	11°♄25'31			16467 Aug 30 05:55	0°♄	
morning max el	16466 Sep 19 10:01	18°♄59'32	26°05'25	morning max el	16467 Sep 01 21:04	2°♄29'11	24°43'22
	16466 Sep 28 18:48	0°♄			16467 Sep 22 20:50	0°♄	
	16466 Oct 18 14:13	0°♄		morning set	16467 Oct 07 12:49	23°♄54'51	
morning set	16466 Oct 25 08:13	12°♄00'10			16467 Oct 10 22:36	0°♄	
max. Earth dist.	16466 Oct 29 01:42	19°♄03'30	1.35108 AU	max. Earth dist.	16467 Oct 11 01:41	0°♄13'58	1.37357 AU
asc. node	16466 Oct 30 21:44	22°♄38'36		asc. node	16467 Oct 17 18:30	12°♄51'01	
superior conj	16466 Nov 03 15:24	0°♄09'16	0°33'22	superior conj	16467 Oct 18 00:56	13°♄22'21	0°02'25
minimum elong	16466 Nov 03 13:38	0°♄00'15	0°33'33	minimum elong	16467 Oct 18 00:45	13°♄21'27	0°02'45
	16466 Nov 03 13:35	0°♄					

behind sun begin	16467 Oct 17 18:11	12° \mathbb{M} 49'30		superior conj	16468 Sep 29 20:09	25° \mathbb{A} 56'29	-0°33'01
behind sun end	16467 Oct 18 07:19	13° \mathbb{M} 53'29		minimum elong	16468 Sep 29 22:38	26° \mathbb{A} 07'59	0°32'21
evening rise	16467 Oct 26 09:50	0° \mathbb{X} 04'36			16468 Oct 02 00:30	0° \mathbb{M}	
	16467 Oct 26 08:56	0° \mathbb{X}		asc. node	16468 Oct 03 15:17	3° \mathbb{M} 02'53	
evening max el	16467 Nov 12 07:49	27° \mathbb{X} 55'42	19°26'20	evening rise	16468 Oct 09 06:42	13° \mathbb{M} 52'16	
	16467 Nov 14 16:12	0° \mathbb{B}			16468 Oct 18 01:17	0° \mathbb{X}	
desc. node	16467 Nov 19 04:31	2° \mathbb{B} 20'40		evening max el	16468 Oct 25 07:27	9° \mathbb{X} 53'57	18°37'06
retrograde	16467 Nov 21 21:18	2° \mathbb{B} 43'01		retrograde	16468 Nov 02 10:33	14° \mathbb{X} 00'59	
evening set	16467 Nov 23 19:56	2° \mathbb{B} 32'02		evening set	16468 Nov 04 09:02	13° \mathbb{X} 47'45	
	16467 Nov 29 21:58	30° \mathbb{R} \mathbb{X}		desc. node	16468 Nov 05 01:38	13° \mathbb{X} 36'53	
inferior conj	16467 Dec 02 10:08	28° \mathbb{X} 25'37	-4°03'39	inferior conj	16468 Nov 12 08:57	9° \mathbb{X} 20'37	-2°20'57
minimum elong	16467 Dec 02 00:38	28° \mathbb{X} 40'59	3°59'56	minimum elong	16468 Nov 12 03:17	9° \mathbb{X} 31'17	2°18'08
min. Earth dist.	16467 Dec 04 22:01	26° \mathbb{X} 48'42	0.55579 AU	min. Earth dist.	16468 Nov 15 12:16	6° \mathbb{X} 59'16	0.57331 AU
morning rise	16467 Dec 10 03:17	24° \mathbb{X} 01'26		morning rise	16468 Nov 19 18:20	4° \mathbb{X} 20'19	
direct	16467 Dec 15 13:54	22° \mathbb{X} 54'31		direct	16468 Nov 25 21:52	2° \mathbb{X} 46'47	
morning max el	16467 Dec 29 13:14	29° \mathbb{X} 57'43	25°18'32	morning max el	16468 Dec 10 03:01	10° \mathbb{X} 12'28	26°47'40
	16467 Dec 29 14:11	0° \mathbb{B}			16468 Dec 25 06:36	0° \mathbb{B}	
asc. node	16468 Jan 13 18:01	20° \mathbb{B} 21'42		asc. node	16468 Dec 30 15:10	9° \mathbb{B} 14'22	
	16468 Jan 19 00:44	0° \approx		morning set	16469 Jan 08 17:04	27° \mathbb{B} 23'19	
morning set	16468 Jan 25 07:03	12° \approx 53'29			16469 Jan 09 22:01	0° \approx	
superior conj	16468 Feb 01 00:34	27° \approx 42'56	1°35'22	superior conj	16469 Jan 15 11:31	12° \approx 21'22	1°38'13
minimum elong	16468 Feb 01 01:35	27° \approx 48'32	1°35'42	minimum elong	16469 Jan 15 11:29	12° \approx 21'11	1°38'44
	16468 Feb 02 01:25	0° \mathbb{H}		max. Earth dist.	16469 Jan 15 23:38	13° \approx 29'08	1.31115 AU
max. Earth dist.	16468 Feb 02 17:07	1° \mathbb{H} 26'20	1.31782 AU	evening rise	16469 Jan 22 08:54	27° \approx 29'05	
evening rise	16468 Feb 08 06:28	13° \mathbb{H} 18'16			16469 Jan 23 13:35	0° \mathbb{H}	
desc. node	16468 Feb 15 04:30	26° \mathbb{H} 51'24		desc. node	16469 Feb 01 01:15	16° \mathbb{H} 28'30	
	16468 Feb 16 21:55	0° \mathbb{Y}			16469 Feb 09 07:03	0° \mathbb{Y}	
	16468 Mar 08 07:32	0° \mathbb{B}		evening max el	16469 Feb 22 10:37	16° \mathbb{Y} 15'37	27°14'53
evening max el	16468 Mar 12 04:16	4° \mathbb{B} 01'57	27°36'32	retrograde	16469 Mar 08 11:34	23° \mathbb{Y} 35'30	
retrograde	16468 Mar 26 03:14	11° \mathbb{B} 31'43		evening set	16469 Mar 15 03:35	21° \mathbb{Y} 38'07	
evening set	16468 Apr 01 22:27	9° \mathbb{B} 15'15		min. Earth dist.	16469 Mar 19 00:52	18° \mathbb{Y} 53'46	0.60178 AU
min. Earth dist.	16468 Apr 05 16:39	6° \mathbb{B} 12'47	0.62434 AU	inferior conj	16469 Mar 22 06:10	16° \mathbb{Y} 11'19	-2°00'42
inferior conj	16468 Apr 08 16:33	3° \mathbb{B} 20'08	-0°37'28	minimum elong	16469 Mar 22 10:42	16° \mathbb{Y} 01'44	1°59'01
minimum elong	16468 Apr 08 17:49	3° \mathbb{B} 17'05	0°37'15	asc. node	16469 Mar 28 12:50	11° \mathbb{Y} 51'55	
asc. node	16468 Apr 10 15:34	1° \mathbb{B} 30'17		morning rise	16469 Mar 29 21:20	11° \mathbb{Y} 23'31	
	16468 Apr 12 11:31	30° \mathbb{R} \mathbb{Y}		direct	16469 Mar 31 22:31	11° \mathbb{Y} 06'47	
morning rise	16468 Apr 15 16:11	28° \mathbb{Y} 13'10		morning max el	16469 Apr 08 05:07	14° \mathbb{Y} 44'44	18°00'03
direct	16468 Apr 17 23:17	27° \mathbb{Y} 48'50			16469 Apr 18 17:02	0° \mathbb{B}	
	16468 Apr 23 06:44	0° \mathbb{B}		morning set	16469 Apr 23 18:57	9° \mathbb{B} 12'39	
morning max el	16468 Apr 24 13:59	1° \mathbb{B} 09'30	17°46'36	desc. node	16469 Apr 30 02:17	20° \mathbb{B} 44'16	
morning set	16468 May 10 14:10	25° \mathbb{B} 40'40					
desc. node	16468 May 13 05:26	0° \mathbb{I} 17'23		superior conj	16469 May 04 01:51	27° \mathbb{B} 49'36	-0°32'34
	16468 May 13 01:27	0° \mathbb{I}		minimum elong	16469 May 03 23:05	27° \mathbb{B} 37'25	0°32'36
					16469 May 05 07:42	0° \mathbb{I}	
superior conj	16468 May 22 10:39	16° \mathbb{I} 02'40	-1°10'23	max. Earth dist.	16469 May 11 15:03	10° \mathbb{I} 42'19	1.42435 AU
minimum elong	16468 May 22 04:12	15° \mathbb{I} 35'48	1°10'06	evening rise	16469 May 17 04:51	19° \mathbb{I} 45'29	
max. Earth dist.	16468 May 29 01:57	26° \mathbb{I} 53'53	1.44228 AU		16469 May 23 18:45	0° \mathbb{B}	
	16468 May 31 00:35	0° \mathbb{B}			16469 Jun 14 06:11	0° \mathbb{I}	
evening rise	16468 Jun 06 03:15	9° \mathbb{B} 33'49		evening max el	16469 Jun 19 03:13	5° \mathbb{I} 24'41	22°20'16
	16468 Jun 19 18:54	0° \mathbb{I}		asc. node	16469 Jun 24 11:17	9° \mathbb{I} 43'42	
evening max el	16468 Jul 06 09:14	21° \mathbb{I} 29'50	21°03'18	retrograde	16469 Jun 28 19:42	11° \mathbb{I} 04'23	
asc. node	16468 Jul 07 14:23	22° \mathbb{I} 39'18		evening set	16469 Jul 03 15:40	9° \mathbb{I} 02'33	
retrograde	16468 Jul 14 22:05	26° \mathbb{I} 24'59		inferior conj	16469 Jul 08 21:52	2° \mathbb{I} 42'59	3°05'13
evening set	16468 Jul 19 06:31	24° \mathbb{I} 39'52		minimum elong	16469 Jul 08 21:12	2° \mathbb{I} 45'19	3°04'37
inferior conj	16468 Jul 24 11:58	18° \mathbb{I} 29'39	3°07'44	min. Earth dist.	16469 Jul 08 19:12	2° \mathbb{I} 52'18	0.69178 AU
minimum elong	16468 Jul 24 12:14	18° \mathbb{I} 28'43	3°07'16		16469 Jul 10 21:42	30° \mathbb{R} \mathbb{B}	
min. Earth dist.	16468 Jul 24 22:31	17° \mathbb{I} 53'00	0.68868 AU	morning rise	16469 Jul 14 02:34	26° \mathbb{B} 29'11	
morning rise	16468 Jul 29 17:41	12° \mathbb{I} 08'42		direct	16469 Jul 18 18:21	24° \mathbb{B} 32'25	
direct	16468 Aug 03 21:40	9° \mathbb{I} 54'26		desc. node	16469 Jul 27 01:25	29° \mathbb{B} 02'10	
desc. node	16468 Aug 09 04:09	11° \mathbb{I} 45'04		morning max el	16469 Jul 27 22:28	29° \mathbb{B} 53'21	21°47'36
morning max el	16468 Aug 14 08:22	16° \mathbb{I} 07'14	23°14'34		16469 Jul 28 01:07	0° \mathbb{I}	
	16468 Aug 25 18:53	0° \mathbb{I}			16469 Aug 19 11:58	0° \mathbb{I}	
	16468 Sep 14 20:22	0° \mathbb{A}		morning set	16469 Aug 29 04:09	14° \mathbb{I} 56'01	
morning set	16468 Sep 17 20:19	4° \mathbb{A} 55'29		max. Earth dist.	16469 Sep 04 04:20	24° \mathbb{I} 39'39	1.42088 AU
max. Earth dist.	16468 Sep 22 00:36	11° \mathbb{A} 59'57	1.39782 AU		16469 Sep 07 09:05	0° \mathbb{A}	

superior conj	16469 Sep 11 20:32	7° Ω 40'50	-1°10'09	superior conj	16470 Aug 23 22:15	18° \mathbb{M} 27'17	-1°44'07
minimum elong	16469 Sep 12 02:20	8° Ω 06'05	1°09'16	minimum elong	16470 Aug 24 06:12	19° \mathbb{M} 00'06	1°43'30
asc. node	16469 Sep 20 12:02	23° Ω 09'49			16470 Aug 30 18:55	0° Ω	
evening rise	16469 Sep 22 16:42	27° Ω 11'06		evening rise	16470 Sep 05 11:08	9° Ω 49'11	
	16469 Sep 24 05:33	0° \mathbb{M}		asc. node	16470 Sep 07 08:46	13° Ω 07'55	
evening max el	16469 Oct 08 16:15	22° \mathbb{M} 33'25	18°09'15		16470 Sep 17 14:37	0° \mathbb{M}	
retrograde	16469 Oct 15 19:03	26° \mathbb{M} 12'17		evening max el	16470 Sep 22 05:57	5° \mathbb{M} 43'51	18°01'07
evening set	16469 Oct 17 22:56	25° \mathbb{M} 52'34		retrograde	16470 Sep 28 18:56	9° \mathbb{M} 07'35	
desc. node	16469 Oct 22 22:50	22° \mathbb{M} 59'31		evening set	16470 Oct 01 06:28	8° \mathbb{M} 37'38	
inferior conj	16469 Oct 25 05:29	21° \mathbb{M} 03'50	-0°43'49	inferior conj	16470 Oct 07 20:55	3° \mathbb{M} 29'38	0°36'28
minimum elong	16469 Oct 25 03:56	21° \mathbb{M} 07'16	0°42'44	minimum elong	16470 Oct 07 21:59	3° \mathbb{M} 26'56	0°36'22
min. Earth dist.	16469 Oct 28 11:00	18° \mathbb{M} 14'20	0.59494 AU	desc. node	16470 Oct 09 20:06	1° \mathbb{M} 30'08	
morning rise	16469 Nov 01 05:37	15° \mathbb{M} 28'55		min. Earth dist.	16470 Oct 10 19:49	0° \mathbb{M} 31'47	0.61785 AU
direct	16469 Nov 07 18:51	13° \mathbb{M} 29'55			16470 Oct 11 09:11	30° \mathbb{R} Ω	
morning max el	16469 Nov 22 01:22	21° \mathbb{M} 13'41	27°43'10	morning rise	16470 Oct 14 10:47	27° Ω 28'17	
	16469 Nov 29 17:10	0° \mathbb{X}		direct	16470 Oct 21 03:19	25° Ω 08'28	
asc. node	16469 Dec 17 12:17	28° \mathbb{X} 36'33			16470 Oct 31 21:37	0° \mathbb{M}	
	16469 Dec 18 05:38	0° \mathbb{Z}		morning max el	16470 Nov 04 06:54	3° \mathbb{M} 04'31	27°59'10
morning set	16469 Dec 23 23:30	11° \mathbb{Z} 39'41			16470 Nov 24 05:51	0° \mathbb{X}	
				asc. node	16470 Dec 04 09:18	18° \mathbb{X} 19'25	
superior conj	16469 Dec 30 22:54	26° \mathbb{Z} 58'00	1°35'02	morning set	16470 Dec 08 00:12	25° \mathbb{X} 36'42	
minimum elong	16469 Dec 30 21:51	26° \mathbb{Z} 52'05	1°35'35		16470 Dec 10 02:29	0° \mathbb{Z}	
max. Earth dist.	16469 Dec 30 07:21	25° \mathbb{Z} 30'55	1.30986 AU	max. Earth dist.	16470 Dec 13 12:09	7° \mathbb{Z} 20'48	1.31416 AU
	16470 Jan 01 07:24	0° \approx					
evening rise	16470 Jan 06 16:02	11° \approx 50'16		superior conj	16470 Dec 15 08:47	11° \mathbb{Z} 26'51	1°25'47
	16470 Jan 15 17:47	0° \mathbb{X}		minimum elong	16470 Dec 15 06:54	11° \mathbb{Z} 16'23	1°26'13
desc. node	16470 Jan 18 22:03	5° \mathbb{X} 35'35		evening rise	16470 Dec 22 01:51	26° \mathbb{Z} 16'12	
evening max el	16470 Feb 04 09:33	27° \mathbb{X} 37'13	26°18'03		16470 Dec 23 19:38	0° \approx	
	16470 Feb 07 02:50	0° \mathbb{Y}		desc. node	16471 Jan 05 18:54	24° \approx 00'53	
retrograde	16470 Feb 18 09:10	4° \mathbb{Y} 44'48			16471 Jan 09 22:26	0° \mathbb{X}	
evening set	16470 Feb 24 14:46	3° \mathbb{Y} 11'52		evening max el	16471 Jan 16 23:52	8° \mathbb{X} 06'49	24°51'29
min. Earth dist.	16470 Feb 28 22:46	0° \mathbb{Y} 34'12	0.57968 AU	retrograde	16471 Jan 30 18:23	15° \mathbb{X} 00'04	
	16470 Mar 01 17:59	30° \mathbb{R} \mathbb{X}		evening set	16471 Feb 05 04:33	13° \mathbb{X} 54'38	
inferior conj	16470 Mar 04 01:11	28° \mathbb{X} 18'59	-3°32'10	min. Earth dist.	16471 Feb 10 12:03	11° \mathbb{X} 07'41	0.56072 AU
minimum elong	16470 Mar 04 09:17	28° \mathbb{X} 04'12	3°29'16	inferior conj	16471 Feb 12 22:57	9° \mathbb{X} 34'26	-4°58'08
morning rise	16470 Mar 12 07:10	23° \mathbb{X} 52'49		minimum elong	16471 Feb 13 08:19	9° \mathbb{X} 19'35	4°55'33
direct	16470 Mar 14 06:02	23° \mathbb{X} 40'06		morning rise	16471 Feb 21 14:32	5° \mathbb{X} 29'12	
asc. node	16470 Mar 15 10:08	23° \mathbb{X} 44'51		direct	16471 Feb 23 17:53	5° \mathbb{X} 16'32	
morning max el	16470 Mar 22 14:00	27° \mathbb{X} 46'33	18°33'32	asc. node	16471 Mar 02 07:27	7° \mathbb{X} 24'44	
	16470 Mar 24 14:59	0° \mathbb{Y}		morning max el	16471 Mar 05 12:21	10° \mathbb{X} 01'56	19°29'00
morning set	16470 Apr 07 12:34	23° \mathbb{Y} 18'39			16471 Mar 18 16:16	0° \mathbb{Y}	
	16470 Apr 10 23:55	0° \mathbb{Z}		morning set	16471 Mar 22 14:49	7° \mathbb{Y} 45'20	
superior conj	16470 Apr 16 13:40	10° \mathbb{Z} 32'10	0°03'20	superior conj	16471 Mar 30 17:34	23° \mathbb{Y} 56'52	0°34'27
minimum elong	16470 Apr 16 13:52	10° \mathbb{Z} 33'07	0°02'56	minimum elong	16471 Mar 30 19:30	24° \mathbb{Y} 06'15	0°33'54
behind sun begin	16470 Apr 16 06:54	10° \mathbb{Z} 00'45			16471 Apr 02 21:04	0° \mathbb{Z}	
behind sun end	16470 Apr 16 20:51	11° \mathbb{Z} 05'24		desc. node	16471 Apr 03 19:52	1° \mathbb{Z} 47'28	
desc. node	16470 Apr 16 23:06	11° \mathbb{Z} 15'50		max. Earth dist.	16471 Apr 06 05:37	6° \mathbb{Z} 14'54	1.37962 AU
max. Earth dist.	16470 Apr 23 23:44	23° \mathbb{Z} 50'16	1.40268 AU	evening rise	16471 Apr 09 22:13	12° \mathbb{Z} 51'40	
	16470 Apr 27 14:37	0° \mathbb{I}			16471 Apr 20 06:12	0° \mathbb{I}	
evening rise	16470 Apr 28 03:09	0° \mathbb{I} 52'20			16471 May 12 05:00	0° \mathbb{Z}	
	16470 May 17 03:21	0° \mathbb{Z}		evening max el	16471 May 15 07:08	3° \mathbb{Z} 14'45	25°01'15
evening max el	16470 Jun 01 17:48	19° \mathbb{Z} 19'49	23°41'43	retrograde	16471 May 27 06:04	10° \mathbb{Z} 12'32	
asc. node	16470 Jun 11 08:15	25° \mathbb{Z} 35'36		asc. node	16471 May 29 05:17	9° \mathbb{Z} 56'28	
retrograde	16470 Jun 12 14:45	25° \mathbb{Z} 42'28		evening set	16471 Jun 02 01:00	7° \mathbb{Z} 45'58	
evening set	16470 Jun 17 22:23	23° \mathbb{Z} 26'22		min. Earth dist.	16471 Jun 06 10:15	2° \mathbb{Z} 50'19	0.68316 AU
min. Earth dist.	16470 Jun 22 15:47	17° \mathbb{Z} 53'36	0.68994 AU	inferior conj	16471 Jun 07 15:05	1° \mathbb{Z} 15'22	2°28'39
inferior conj	16470 Jun 23 07:33	16° \mathbb{Z} 59'34	2°52'16	minimum elong	16471 Jun 07 13:02	1° \mathbb{Z} 22'07	2°27'33
minimum elong	16470 Jun 23 06:04	17° \mathbb{Z} 04'40	2°51'24		16471 Jun 08 14:10	30° \mathbb{R} \mathbb{I}	
morning rise	16470 Jun 28 13:45	10° \mathbb{Z} 54'20		morning rise	16471 Jun 13 01:23	25° \mathbb{I} 19'45	
direct	16470 Jul 02 17:32	9° \mathbb{Z} 16'58		direct	16471 Jun 16 17:44	24° \mathbb{I} 01'54	
morning max el	16470 Jul 10 18:12	13° \mathbb{Z} 50'03	20°29'15	morning max el	16471 Jun 23 21:00	27° \mathbb{I} 57'02	19°24'13
desc. node	16470 Jul 13 22:39	17° \mathbb{Z} 18'27			16471 Jun 25 19:34	0° \mathbb{Z}	
	16470 Jul 23 12:00	0° \mathbb{I}		desc. node	16471 Jun 30 19:48	6° \mathbb{Z} 18'24	
morning set	16470 Aug 08 15:35	24° \mathbb{I} 06'28		greatest brilliancy	16471 Jul 06 13:29	14° \mathbb{Z} 28'54	-0.7m
	16470 Aug 12 10:36	0° \mathbb{M}			16471 Jul 16 20:17	0° \mathbb{I}	
max. Earth dist.	16470 Aug 17 14:35	8° \mathbb{M} 10'36	1.44009 AU	morning set	16471 Jul 18 20:11	3° \mathbb{I} 03'35	

max. Earth dist.	16471 Jul 31 06:13	22°♎19'39	1.45349 AU	superior conj	16472 Jul 13 12:32	7°♎35'08	-2°14'03
				minimum elong	16472 Jul 13 11:05	7°♎29'30	2°14'34
superior conj	16471 Aug 04 01:07	28°♎18'28	-2°07'48		16472 Jul 27 19:28	0°♎	
minimum elong	16471 Aug 04 06:53	28°♎41'20	2°07'55	evening rise	16472 Jul 29 05:24	2°♎14'13	
	16471 Aug 05 02:40	0°♎		greatest brilliancy	16472 Aug 05 18:43	14°♎10'32	-0.8m
evening rise	16471 Aug 18 08:45	21°♎33'26		asc. node	16472 Aug 11 02:13	22°♎19'12	
	16471 Aug 23 11:13	0°♎			16472 Aug 16 16:18	0°♎	
asc. node	16471 Aug 25 05:29	2°♎53'01		evening max el	16472 Aug 19 09:55	3°♎02'40	18°39'12
evening max el	16471 Sep 05 20:53	19°♎16'26	18°11'24	retrograde	16472 Aug 25 23:10	6°♎34'56	
retrograde	16471 Sep 12 05:36	22°♎38'00		evening set	16472 Aug 29 04:46	5°♎35'23	
evening set	16471 Sep 15 01:50	21°♎54'32		inferior conj	16472 Sep 03 20:32	29°♎56'06	2°21'00
inferior conj	16471 Sep 21 03:13	16°♎29'55	1°37'34	minimum elong	16472 Sep 03 22:46	29°♎49'12	2°20'23
minimum elong	16471 Sep 21 05:24	16°♎23'45	1°37'00		16472 Sep 03 19:16	30°♎	
min. Earth dist.	16471 Sep 23 14:43	13°♎42'40	0.63973 AU	min. Earth dist.	16472 Sep 05 18:30	27°♎34'46	0.65887 AU
desc. node	16471 Sep 26 17:24	10°♎39'53		morning rise	16472 Sep 09 15:40	23°♎30'39	
morning rise	16471 Sep 27 07:06	10°♎12'11		desc. node	16472 Sep 12 14:42	21°♎36'46	
direct	16471 Oct 03 21:26	7°♎39'12		direct	16472 Sep 15 23:27	20°♎53'29	
morning max el	16471 Oct 17 16:40	15°♎37'24	27°37'45	morning max el	16472 Sep 29 03:56	28°♎40'09	26°45'39
	16471 Oct 29 12:49	0°♎			16472 Sep 30 10:48	0°♎	
	16471 Nov 16 22:56	0°♎			16472 Oct 22 08:04	0°♎	
asc. node	16471 Nov 21 06:16	8°♎16'47		morning set	16472 Nov 03 22:15	22°♎09'19	
morning set	16471 Nov 21 16:47	9°♎09'01		asc. node	16472 Nov 07 03:09	28°♎23'05	
max. Earth dist.	16471 Nov 26 10:13	18°♎51'13	1.32418 AU		16472 Nov 07 22:37	0°♎	
				max. Earth dist.	16472 Nov 07 22:54	0°♎01'22	1.33985 AU
superior conj	16471 Nov 29 15:12	25°♎42'59	1°10'20	superior conj	16472 Nov 12 15:47	9°♎39'57	0°48'38
minimum elong	16471 Nov 29 12:51	25°♎30'16	1°10'37	minimum elong	16472 Nov 12 13:35	9°♎28'21	0°48'49
	16471 Dec 01 14:27	0°♎		evening rise	16472 Nov 19 22:24	25°♎05'47	
evening rise	16471 Dec 06 12:36	10°♎42'59			16472 Nov 22 06:45	0°♎	
	16471 Dec 16 05:51	0°♎		desc. node	16472 Dec 09 12:44	27°♎41'37	
desc. node	16471 Dec 23 15:47	11°♎29'31		evening max el	16472 Dec 09 22:54	28°♎07'01	21°28'49
evening max el	16471 Dec 29 09:22	18°♎05'00	23°09'04		16472 Dec 12 01:05	0°♎	
retrograde	16472 Jan 11 14:12	24°♎36'34		retrograde	16472 Dec 22 00:15	4°♎04'27	
evening set	16472 Jan 15 20:20	23°♎57'21		evening set	16472 Dec 25 00:26	3°♎43'47	
min. Earth dist.	16472 Jan 22 19:46	20°♎42'18	0.54791 AU	inferior conj	16473 Jan 02 16:13	29°♎54'11	-5°54'58
inferior conj	16472 Jan 24 01:07	20°♎00'12	-5°54'08	minimum elong	16473 Jan 02 11:28	0°♎00'51	5°53'58
minimum elong	16472 Jan 24 05:42	19°♎53'38	5°53'16		16473 Jan 02 12:04	30°♎	
morning rise	16472 Feb 01 16:20	16°♎09'21		min. Earth dist.	16473 Jan 03 00:54	29°♎42'00	0.54364 AU
direct	16472 Feb 04 11:17	15°♎50'56		morning rise	16473 Jan 10 22:56	26°♎05'06	
morning max el	16472 Feb 15 20:23	21°♎21'23	20°47'44	direct	16473 Jan 14 19:16	25°♎32'57	
asc. node	16472 Feb 17 04:44	22°♎44'00			16473 Jan 25 13:59	0°♎	
	16472 Feb 22 19:28	0°♎		morning max el	16473 Jan 27 13:38	1°♎45'34	22°27'27
morning set	16472 Mar 05 22:35	22°♎23'57		asc. node	16473 Feb 03 02:00	9°♎24'47	
	16472 Mar 09 14:09	0°♎			16473 Feb 14 23:10	0°♎	
superior conj	16472 Mar 13 09:28	7°♎52'26	0°59'36	morning set	16473 Feb 18 09:30	7°♎07'42	
minimum elong	16472 Mar 13 11:59	8°♎05'16	0°59'11	superior conj	16473 Feb 25 09:59	22°♎09'40	1°18'26
max. Earth dist.	16472 Mar 18 13:33	18°♎11'25	1.35767 AU	minimum elong	16473 Feb 25 12:16	22°♎21'49	1°18'18
desc. node	16472 Mar 20 16:35	22°♎15'44		max. Earth dist.	16473 Mar 01 04:08	0°♎01'07	1.33873 AU
evening rise	16472 Mar 22 11:14	25°♎35'13			16473 Mar 01 03:55	0°♎	
	16472 Mar 24 21:24	0°♎		evening rise	16473 Mar 05 14:40	8°♎53'29	
	16472 Apr 12 18:00	0°♎		desc. node	16473 Mar 07 13:17	12°♎36'47	
evening max el	16472 Apr 26 20:46	17°♎06'11	26°11'27		16473 Mar 17 10:15	0°♎	
retrograde	16472 May 09 16:34	24°♎26'46			16473 Apr 08 15:54	0°♎	
asc. node	16472 May 15 02:23	22°♎32'15		evening max el	16473 Apr 09 10:38	0°♎46'17	27°04'39
evening set	16472 May 15 21:44	21°♎54'45		retrograde	16473 Apr 22 21:05	8°♎17'20	
min. Earth dist.	16472 May 20 00:29	17°♎34'58	0.67173 AU	evening set	16473 Apr 29 10:38	5°♎45'49	
inferior conj	16472 May 21 18:24	15°♎25'10	1°53'37	asc. node	16473 May 01 23:32	3°♎27'38	
minimum elong	16472 May 21 16:13	15°♎31'55	1°52'23	min. Earth dist.	16473 May 03 08:24	1°♎59'39	0.65607 AU
morning rise	16472 May 27 11:31	9°♎40'31			16473 May 05 02:29	30°♎	
direct	16472 May 30 17:21	8°♎40'52		inferior conj	16473 May 05 15:09	29°♎23'40	1°06'00
morning max el	16472 Jun 06 06:35	12°♎10'20	18°34'55	minimum elong	16473 May 05 13:31	29°♎28'19	1°04'55
desc. node	16472 Jun 16 16:53	25°♎50'09		morning rise	16473 May 11 17:58	23°♎51'44	
	16472 Jun 19 10:31	0°♎		direct	16473 May 14 14:11	23°♎08'07	
morning set	16472 Jun 27 13:37	12°♎40'13		morning max el	16473 May 20 21:23	26°♎24'27	18°02'29
	16472 Jul 08 15:43	0°♎			16473 May 24 01:48	0°♎	
max. Earth dist.	16472 Jul 13 01:31	6°♎52'13	1.45989 AU	desc. node	16473 Jun 03 13:53	15°♎45'15	

morning set	16473 Jun 08 08:41	23° Π 31'15			16474 May 17 22:58	0° Π	
	16473 Jun 12 08:33	0° \mathfrak{D}		morning set	16474 May 21 06:11	5° Π 36'50	
				desc. node	16474 May 21 10:49	5° Π 56'35	
superior conj	16473 Jun 22 23:57	16° \mathfrak{D} 57'48	-2°00'18				
minimum elong	16473 Jun 22 16:19	16° \mathfrak{D} 27'45	2°00'26	superior conj	16474 Jun 03 02:55	27° Π 05'43	-1°31'06
max. Earth dist.	16473 Jun 25 22:17	21° \mathfrak{D} 33'28	1.45875 AU	minimum elong	16474 Jun 02 18:51	26° Π 32'57	1°30'49
	16473 Jul 01 08:30	0° Ω			16474 Jun 04 22:02	0° \mathfrak{D}	
evening rise	16473 Jul 09 03:09	12° Ω 00'17		max. Earth dist.	16474 Jun 08 17:38	6° \mathfrak{D} 05'46	1.45023 AU
	16473 Jul 20 22:56	0° \mathfrak{M}		evening rise	16474 Jun 18 13:40	21° \mathfrak{D} 23'44	
greatest brilliancy	16473 Jul 21 21:18	1° \mathfrak{M} 22'58	-0.7m		16474 Jun 24 05:48	0° Ω	
asc. node	16473 Jul 28 23:00	11° \mathfrak{M} 19'42		asc. node	16474 Jul 15 19:48	29° Ω 44'57	
evening max el	16473 Aug 02 18:36	16° \mathfrak{M} 56'00	19°23'37		16474 Jul 16 01:29	0° \mathfrak{M}	
retrograde	16473 Aug 09 20:41	20° \mathfrak{M} 51'52		evening max el	16474 Jul 16 21:19	0° \mathfrak{M} 50'49	20°23'12
evening set	16473 Aug 13 12:16	19° \mathfrak{M} 34'42		retrograde	16474 Jul 24 19:46	5° \mathfrak{M} 22'03	
inferior conj	16473 Aug 18 21:42	13° \mathfrak{M} 42'13	2°49'10	evening set	16474 Jul 28 21:54	3° \mathfrak{M} 46'50	
minimum elong	16473 Aug 18 23:23	13° \mathfrak{M} 36'42	2°48'39		16474 Aug 01 11:02	30° \mathfrak{R} Ω	
min. Earth dist.	16473 Aug 20 05:37	11° \mathfrak{M} 57'22	0.67408 AU	inferior conj	16474 Aug 03 04:01	27° Ω 42'30	3°04'18
morning rise	16473 Aug 24 09:54	7° \mathfrak{M} 15'21		minimum elong	16474 Aug 03 04:50	27° Ω 39'42	3°03'51
direct	16473 Aug 30 08:03	4° \mathfrak{M} 42'19		min. Earth dist.	16474 Aug 03 22:10	26° Ω 40'14	0.68471 AU
desc. node	16473 Aug 30 12:00	4° \mathfrak{M} 42'26		morning rise	16474 Aug 08 11:25	21° Ω 18'31	
morning max el	16473 Sep 11 15:14	12° \mathfrak{M} 02'39	25°31'51	direct	16474 Aug 13 22:10	18° Ω 56'11	
	16473 Sep 26 02:07	0° \mathfrak{L}		desc. node	16474 Aug 17 09:18	19° Ω 44'05	
	16473 Oct 15 00:28	0° \mathfrak{M}		morning max el	16474 Aug 25 02:21	25° Ω 36'46	24°05'54
morning set	16473 Oct 17 13:04	4° \mathfrak{M} 30'17			16474 Aug 29 02:32	0° \mathfrak{M}	
max. Earth dist.	16473 Oct 21 02:43	11° \mathfrak{M} 05'48	1.36036 AU		16474 Sep 19 13:57	0° \mathfrak{L}	
asc. node	16473 Oct 24 23:59	18° \mathfrak{M} 34'29		morning set	16474 Sep 29 09:12	16° \mathfrak{L} 03'15	
				max. Earth dist.	16474 Oct 03 01:56	22° \mathfrak{L} 30'25	1.38386 AU
					16474 Oct 07 05:08	0° \mathfrak{M}	
superior conj	16473 Oct 27 07:48	23° \mathfrak{M} 11'23	0°20'52				
minimum elong	16473 Oct 27 06:34	23° \mathfrak{M} 05'14	0°21'06				
	16473 Oct 30 16:20	0° \mathfrak{X}		superior conj	16474 Oct 10 11:46	6° \mathfrak{M} 09'08	-0°12'14
evening rise	16473 Nov 04 05:15	9° \mathfrak{X} 20'13		minimum elong	16474 Oct 10 12:36	6° \mathfrak{M} 13'05	0°11'45
	16473 Nov 15 06:15	0° \mathfrak{Z}		behind sun begin	16474 Oct 10 07:46	5° \mathfrak{M} 50'05	
evening max el	16473 Nov 22 00:43	8° \mathfrak{Z} 45'54	20°04'41	behind sun end	16474 Oct 10 17:26	6° \mathfrak{M} 36'07	
desc. node	16473 Nov 26 09:46	12° \mathfrak{Z} 13'55		asc. node	16474 Oct 11 20:47	8° \mathfrak{M} 47'16	
retrograde	16473 Dec 02 12:26	13° \mathfrak{Z} 59'31		evening rise	16474 Oct 19 06:40	23° \mathfrak{M} 20'17	
evening set	16473 Dec 04 16:19	13° \mathfrak{Z} 47'14			16474 Oct 22 16:27	0° \mathfrak{X}	
inferior conj	16473 Dec 13 10:38	9° \mathfrak{Z} 49'36	-4°56'09	evening max el	16474 Nov 04 17:05	20° \mathfrak{X} 15'52	19°02'37
minimum elong	16473 Dec 13 00:44	10° \mathfrak{Z} 04'31	4°52'59	desc. node	16474 Nov 13 06:52	24° \mathfrak{X} 45'01	
min. Earth dist.	16473 Dec 15 06:51	8° \mathfrak{Z} 43'04	0.54884 AU	retrograde	16474 Nov 13 15:05	24° \mathfrak{X} 45'24	
morning rise	16473 Dec 21 08:16	5° \mathfrak{Z} 43'27		evening set	16474 Nov 15 12:30	24° \mathfrak{X} 34'04	
direct	16473 Dec 26 06:18	4° \mathfrak{Z} 50'52		inferior conj	16474 Nov 23 21:21	20° \mathfrak{X} 18'55	-3°20'38
morning max el	16474 Jan 08 22:21	11° \mathfrak{Z} 37'08	24°17'43	minimum elong	16474 Nov 23 13:14	20° \mathfrak{X} 32'57	3°17'04
asc. node	16474 Jan 20 23:14	27° \mathfrak{Z} 08'30		min. Earth dist.	16474 Nov 26 17:26	18° \mathfrak{X} 21'40	0.56248 AU
	16474 Jan 22 16:42	0° \approx		morning rise	16474 Dec 01 11:18	15° \mathfrak{X} 39'38	
morning set	16474 Feb 02 21:30	21° \approx 49'57		direct	16474 Dec 07 05:39	14° \mathfrak{X} 21'51	
	16474 Feb 06 15:26	0° \mathfrak{X}		morning max el	16474 Dec 21 08:37	21° \mathfrak{X} 35'15	26°00'00
					16474 Dec 28 17:07	0° \mathfrak{Z}	
superior conj	16474 Feb 09 16:17	6° \mathfrak{X} 39'57	1°30'57	asc. node	16475 Jan 07 20:25	15° \mathfrak{Z} 39'48	
minimum elong	16474 Feb 09 17:51	6° \mathfrak{X} 48'30	1°31'09		16475 Jan 15 07:40	0° \approx	
max. Earth dist.	16474 Feb 12 02:20	11° \mathfrak{X} 54'50	1.32402 AU	morning set	16475 Jan 18 08:46	6° \approx 26'01	
evening rise	16474 Feb 17 05:08	22° \mathfrak{X} 37'02					
	16474 Feb 20 23:03	0° \mathfrak{Y}		superior conj	16475 Jan 25 02:09	21° \approx 17'19	1°37'19
desc. node	16474 Feb 22 09:59	2° \mathfrak{Y} 45'16		minimum elong	16475 Jan 25 02:44	21° \approx 20'32	1°37'45
	16474 Mar 11 04:02	0° \mathfrak{B}		max. Earth dist.	16475 Jan 26 06:36	23° \approx 55'21	1.31429 AU
evening max el	16474 Mar 22 23:13	14° \mathfrak{B} 02'02	27°33'30		16475 Jan 29 01:01	0° \mathfrak{X}	
retrograde	16474 Apr 05 18:43	21° \mathfrak{B} 34'08		evening rise	16475 Feb 01 03:54	6° \mathfrak{X} 39'33	
evening set	16474 Apr 12 13:22	19° \mathfrak{B} 09'53		desc. node	16475 Feb 09 06:44	22° \mathfrak{X} 35'51	
min. Earth dist.	16474 Apr 16 08:00	15° \mathfrak{B} 53'28	0.63675 AU		16475 Feb 13 11:49	0° \mathfrak{Y}	
asc. node	16474 Apr 18 20:44	13° \mathfrak{B} 17'36		evening max el	16475 Mar 05 08:23	26° \mathfrak{Y} 40'53	27°31'32
inferior conj	16474 Apr 19 02:29	13° \mathfrak{B} 02'44	0°04'31		16475 Mar 09 05:11	0° \mathfrak{B}	
minimum elong	16474 Apr 19 02:22	13° \mathfrak{B} 03'04	0°04'05	retrograde	16475 Mar 19 08:26	4° \mathfrak{B} 07'19	
transit middle	16474 Apr 19 02:22	13° \mathfrak{B} 03'04	0°04'05	evening set	16475 Mar 26 03:16	1° \mathfrak{B} 57'45	
transit begin	16474 Apr 18 23:19	13° \mathfrak{B} 10'56			16475 Mar 28 19:44	30° \mathfrak{R} \mathfrak{Y}	
transit end	16474 Apr 19 05:24	12° \mathfrak{B} 55'13		min. Earth dist.	16475 Mar 29 21:55	29° \mathfrak{Y} 04'31	0.61486 AU
morning rise	16474 Apr 25 17:50	7° \mathfrak{B} 46'01		inferior conj	16475 Apr 02 01:04	26° \mathfrak{Y} 13'50	-1°11'16
direct	16474 Apr 28 05:26	7° \mathfrak{B} 15'32		minimum elong	16475 Apr 02 03:36	26° \mathfrak{Y} 08'03	1°10'29
morning max el	16474 May 04 14:49	10° \mathfrak{B} 30'56	17°47'20	asc. node	16475 Apr 05 17:59	23° \mathfrak{Y} 07'35	

morning rise	16475 Apr 09 07:15	21° Υ 15'01		asc. node	16476 Mar 22 15:16	4° Υ 03'02	
direct	16475 Apr 11 11:33	20° Υ 54'22		direct	16476 Mar 24 04:23	3° Υ 54'08	
morning max el	16475 Apr 18 07:51	24° Υ 20'43	17°50'03	morning max el	16476 Mar 31 20:51	7° Υ 43'08	18°11'48
	16475 Apr 22 22:43	0° B			16476 Apr 15 04:02	0° B	
morning set	16475 May 04 01:13	18° B 41'58		morning set	16476 Apr 16 12:02	2° B 29'47	
desc. node	16475 May 08 07:43	26° B 19'04		desc. node	16476 Apr 24 04:34	16° B 48'17	
	16475 May 10 09:50	0° II					
superior conj	16475 May 15 04:52	8° II 17'02	-0°54'23	superior conj	16476 Apr 26 05:20	20° B 29'01	-0°16'54
minimum elong	16475 May 14 23:58	7° II 56'11	0°54'12	minimum elong	16476 Apr 26 03:58	20° B 22'52	0°17'07
max. Earth dist.	16475 May 22 09:06	20° II 12'52	1.43524 AU	max. Earth dist.	16476 May 03 19:39	3° II 42'36	1.41539 AU
	16475 May 28 12:25	0° B		evening rise	16476 May 08 15:57	11° II 43'02	
evening rise	16475 May 29 05:54	1° B 08'19			16476 May 20 11:03	0° B	
	16475 Jun 17 18:43	0° Ω		evening max el	16476 Jun 11 10:17	28° B 40'25	22°54'46
evening max el	16475 Jun 29 18:02	14° Ω 45'13	21°35'04		16476 Jun 12 19:33	0° Ω	
asc. node	16475 Jul 02 16:40	17° Ω 23'05		asc. node	16476 Jun 18 13:35	3° Ω 59'17	
retrograde	16475 Jul 08 18:28	19° Ω 59'38		retrograde	16476 Jun 21 15:15	4° Ω 39'28	
evening set	16475 Jul 13 07:44	18° Ω 07'08		evening set	16476 Jun 26 16:03	2° Ω 31'25	
inferior conj	16475 Jul 18 13:11	11° Ω 52'26	3°07'58		16476 Jun 29 01:43	30° R B	
minimum elong	16475 Jul 18 13:03	11° Ω 52'55	3°07'27	inferior conj	16476 Jul 01 23:15	26° B 08'22	3°01'00
min. Earth dist.	16475 Jul 18 18:03	11° Ω 35'30	0.69058 AU	minimum elong	16476 Jul 01 22:13	26° B 11'59	3°00'19
morning rise	16475 Jul 23 18:11	5° Ω 34'10		min. Earth dist.	16476 Jul 01 15:05	26° B 36'47	0.69156 AU
direct	16475 Jul 28 16:51	3° Ω 27'11		morning rise	16476 Jul 07 04:16	19° B 57'47	
desc. node	16475 Aug 04 06:36	6° Ω 18'20		direct	16476 Jul 11 14:53	18° B 09'02	
morning max el	16475 Aug 07 14:39	9° Ω 18'32	22°36'50	morning max el	16476 Jul 20 06:49	23° B 09'11	21°12'50
	16475 Aug 23 21:02	0° M		desc. node	16476 Jul 21 03:51	24° B 03'03	
morning set	16475 Sep 10 06:46	26° M 38'38			16476 Jul 26 05:51	0° Ω	
	16475 Sep 12 07:51	0° B			16476 Aug 16 04:01	0° M	
max. Earth dist.	16475 Sep 15 02:13	4° B 37'19	1.40789 AU	morning set	16476 Aug 20 05:03	6° M 15'48	
				max. Earth dist.	16476 Aug 27 08:12	17° M 38'17	1.42966 AU
superior conj	16475 Sep 22 23:29	18° B 22'50	-0°48'49				
minimum elong	16475 Sep 23 03:22	18° B 40'20	0°48'02	superior conj	16476 Sep 03 14:40	29° M 43'52	-1°25'19
asc. node	16475 Sep 28 17:33	28° B 57'12		minimum elong	16476 Sep 03 21:40	0° B 13'42	1°24'29
	16475 Sep 29 06:57	0° M			16476 Sep 03 18:27	0° B	
evening rise	16475 Oct 02 23:25	6° M 56'53		asc. node	16476 Sep 14 14:17	19° B 00'59	
	16475 Oct 16 15:01	0° A		evening rise	16476 Sep 15 03:28	20° B 00'07	
evening max el	16475 Oct 18 21:09	2° A 32'47	18°22'46		16476 Sep 20 18:19	0° M	
retrograde	16475 Oct 26 12:49	6° A 26'25		evening max el	16476 Oct 01 08:37	15° M 27'10	18°03'29
evening set	16475 Oct 28 13:00	6° A 11'02		retrograde	16476 Oct 08 04:12	18° M 57'38	
desc. node	16475 Oct 31 04:03	5° A 08'29		evening set	16476 Oct 10 11:13	18° M 33'58	
inferior conj	16475 Nov 05 05:38	1° A 34'52	-1°38'07	inferior conj	16476 Oct 17 10:39	13° M 37'00	-0°07'27
minimum elong	16475 Nov 05 01:50	1° A 42'31	1°36'03	minimum elong	16476 Oct 17 10:25	13° M 37'33	0°06'57
	16475 Nov 07 04:23	30° R M		transit middle	16476 Oct 17 10:25	13° M 37'33	0°06'57
min. Earth dist.	16475 Nov 08 11:20	28° M 58'54	0.58213 AU	transit begin	16476 Oct 17 07:26	13° M 44'31	
morning rise	16475 Nov 12 11:11	26° M 18'46		transit end	16476 Oct 17 13:24	13° M 30'34	
direct	16475 Nov 18 19:38	24° M 33'50		desc. node	16476 Oct 17 01:16	13° M 58'53	
	16475 Nov 30 17:29	0° A		min. Earth dist.	16476 Oct 20 14:20	10° M 41'19	0.60476 AU
morning max el	16475 Dec 03 02:09	2° A 08'50	27°15'56	morning rise	16476 Oct 24 06:29	7° M 49'49	
	16475 Dec 23 02:46	0° B		direct	16476 Oct 30 22:08	5° M 40'47	
asc. node	16475 Dec 25 17:34	4° B 45'54		morning max el	16476 Nov 14 03:38	13° M 30'42	27°54'40
morning set	16476 Jan 02 17:28	20° B 50'29			16476 Nov 27 08:53	0° A	
	16476 Jan 06 21:56	0° \approx		asc. node	16476 Dec 11 14:40	24° A 17'31	
					16476 Dec 14 11:47	0° B	
superior conj	16476 Jan 09 13:31	5° \approx 55'29	1°37'37	morning set	16476 Dec 16 21:41	4° B 58'45	
minimum elong	16476 Jan 09 13:02	5° \approx 52'48	1°38'09	max. Earth dist.	16476 Dec 22 20:37	17° B 54'02	1.31100 AU
max. Earth dist.	16476 Jan 09 13:53	5° \approx 57'31	1.30988 AU				
evening rise	16476 Jan 16 08:34	20° \approx 54'53		superior conj	16476 Dec 24 00:30	20° B 29'17	1°31'52
	16476 Jan 20 17:52	0° H		minimum elong	16476 Dec 23 23:03	20° B 21'14	1°32'22
desc. node	16476 Jan 27 03:31	12° H 00'59			16476 Dec 28 06:53	0° \approx	
	16476 Feb 07 22:08	0° Υ		evening rise	16476 Dec 30 17:03	5° \approx 18'23	
evening max el	16476 Feb 15 11:39	8° Υ 32'05	26°54'51		16477 Jan 12 11:52	0° H	
retrograde	16476 Feb 29 12:49	15° Υ 47'54		desc. node	16477 Jan 13 00:18	0° H 51'21	
evening set	16476 Mar 07 01:12	14° Υ 00'17		evening max el	16477 Jan 27 07:00	19° H 30'48	25°44'17
min. Earth dist.	16476 Mar 11 01:46	11° Υ 20'17	0.59210 AU	retrograde	16477 Feb 10 05:23	26° H 32'25	
inferior conj	16476 Mar 14 07:08	8° Υ 47'08	-2°39'08	evening set	16477 Feb 16 03:36	25° H 11'26	
minimum elong	16476 Mar 14 13:16	8° Υ 34'58	2°36'50	min. Earth dist.	16477 Feb 20 19:59	22° H 31'40	0.57100 AU
morning rise	16476 Mar 22 04:57	4° Υ 08'35		inferior conj	16477 Feb 23 17:16	20° H 33'03	-4°10'38

minimum elong	16477 Feb 24 02:25	20° H 17'20	4°07'37	minimum elong	16478 Feb 04 14:26	1° H 14'22	5°25'21
morning rise	16477 Mar 04 04:14	16° H 15'45			16478 Feb 06 17:21	30° R \approx	
direct	16477 Mar 06 03:51	16° H 03'37		morning rise	16478 Feb 12 22:58	27° \approx 28'42	
asc. node	16477 Mar 09 12:36	16° H 40'30		direct	16478 Feb 15 07:44	27° \approx 14'18	
morning max el	16477 Mar 15 01:42	20° H 26'04	18°54'20		16478 Feb 23 00:59	0° H	
	16477 Mar 22 07:05	0° Y		asc. node	16478 Feb 24 09:54	1° H 04'40	
morning set	16477 Mar 31 09:44	16° Y 45'34		morning max el	16478 Feb 25 18:14	2° H 18'19	19°59'40
	16477 Apr 07 04:26	0° B			16478 Mar 14 23:09	0° Y	
				morning set	16478 Mar 15 14:42	1° Y 18'49	
superior conj	16477 Apr 09 00:27	3° B 30'14	0°17'13	superior conj	16478 Mar 23 09:56	17° Y 09'31	0°45'53
minimum elong	16477 Apr 09 01:32	3° B 35'25	0°16'43	minimum elong	16478 Mar 23 12:14	17° Y 20'57	0°45'22
desc. node	16477 Apr 11 01:20	7° B 19'56		desc. node	16478 Mar 28 22:04	27° Y 50'40	
max. Earth dist.	16477 Apr 16 02:39	16° B 30'50	1.39286 AU	max. Earth dist.	16478 Mar 29 09:21	28° Y 43'38	1.37004 AU
evening rise	16477 Apr 19 23:18	23° B 12'58			16478 Mar 30 01:42	0° B	
	16477 Apr 24 00:54	0° II		evening rise	16478 Apr 02 02:27	5° B 32'24	
	16477 May 14 07:12	0° E			16478 Apr 16 22:57	0° II	
evening max el	16477 May 25 00:16	12° E 36'15	24°16'20	evening max el	16478 May 07 13:44	26° II 30'38	25°32'41
retrograde	16477 Jun 05 08:44	19° E 14'39			16478 May 11 12:16	0° E	
asc. node	16477 Jun 05 10:34	19° E 14'38		retrograde	16478 May 19 21:55	3° E 38'53	
evening set	16477 Jun 10 21:12	16° E 53'50		asc. node	16478 May 23 07:37	2° E 51'48	
min. Earth dist.	16477 Jun 15 11:01	11° E 36'52	0.68764 AU	evening set	16478 May 25 21:31	1° E 09'16	
inferior conj	16477 Jun 16 08:15	10° E 25'09	2°43'35		16478 May 27 03:15	30° R II	
minimum elong	16477 Jun 16 06:29	10° E 31'07	2°42'38	min. Earth dist.	16478 May 30 03:50	26° II 29'17	0.67891 AU
morning rise	16477 Jun 21 15:51	4° E 23'44		inferior conj	16478 May 31 14:14	24° II 38'43	2°15'15
direct	16477 Jun 25 14:47	2° E 54'30		minimum elong	16478 May 31 12:04	24° II 45'41	2°14'05
morning max el	16477 Jul 03 05:20	7° E 09'49	19°59'47	morning rise	16478 Jun 06 03:06	18° II 47'43	
desc. node	16477 Jul 08 01:02	12° E 39'17		direct	16478 Jun 09 14:59	17° II 37'43	
	16477 Jul 20 09:24	0° O		morning max el	16478 Jun 16 11:09	21° II 19'55	19°01'17
morning set	16477 Jul 30 11:18	15° O 14'15			16478 Jun 23 13:52	0° E	
	16477 Aug 08 22:55	0° M		desc. node	16478 Jun 24 22:10	1° E 53'39	
max. Earth dist.	16477 Aug 09 21:10	1° M 28'06	1.44668 AU	greatest brilliancy	16478 Jun 29 13:02	8° E 40'48	-0.7m
				morning set	16478 Jul 09 19:05	24° E 22'06	
superior conj	16477 Aug 15 06:23	10° M 06'02	-1°55'52		16478 Jul 13 10:30	0° O	
minimum elong	16477 Aug 15 14:06	10° M 37'19	1°55'32	max. Earth dist.	16478 Jul 23 15:11	15° O 50'53	1.45718 AU
	16477 Aug 27 05:32	0° A					
evening rise	16477 Aug 28 13:39	2° A 16'39		superior conj	16478 Jul 26 01:08	19° O 37'57	-2°12'53
asc. node	16477 Sep 01 10:59	8° A 54'00		minimum elong	16478 Jul 26 04:14	19° O 50'08	2°13'16
evening max el	16477 Sep 14 23:18	28° A 48'14	18°03'16		16478 Aug 01 14:28	0° M	
	16477 Sep 16 07:04	0° M		evening rise	16478 Aug 10 00:56	13° M 34'28	
retrograde	16477 Sep 21 09:08	2° M 09'06		asc. node	16478 Aug 19 07:41	28° M 31'36	
evening set	16477 Sep 24 00:24	1° M 33'36			16478 Aug 20 06:21	0° A	
	16477 Sep 26 12:17	30° R A		evening max el	16478 Aug 29 13:44	12° A 27'13	18°21'03
inferior conj	16477 Sep 30 08:53	26° A 18'07	1°04'41	retrograde	16478 Sep 04 23:17	15° A 51'50	
minimum elong	16477 Sep 30 10:35	26° A 13'36	1°04'19	evening set	16478 Sep 07 23:27	15° A 01'42	
min. Earth dist.	16477 Oct 03 03:17	23° A 22'54	0.62751 AU	inferior conj	16478 Sep 13 20:18	9° A 30'16	1°58'01
desc. node	16477 Oct 03 22:31	22° A 34'59		minimum elong	16478 Sep 13 22:36	9° A 23'29	1°57'23
morning rise	16477 Oct 06 18:27	20° A 08'55		min. Earth dist.	16478 Sep 16 02:02	6° A 52'46	0.64830 AU
direct	16477 Oct 13 10:46	17° A 42'36		morning rise	16478 Sep 19 20:16	3° A 08'18	
morning max el	16477 Oct 27 11:10	25° A 39'58	27°54'16	desc. node	16478 Sep 20 19:49	2° A 24'21	
	16477 Oct 31 11:33	0° M		direct	16478 Sep 26 08:09	0° A 32'49	
	16477 Nov 20 21:41	0° X		morning max el	16478 Oct 09 22:01	8° A 27'30	27°18'54
asc. node	16477 Nov 28 11:40	14° X 07'11			16478 Oct 26 17:21	0° M	
morning set	16477 Nov 30 19:16	18° X 45'48			16478 Nov 13 05:44	0° X	
max. Earth dist.	16477 Dec 05 23:05	29° X 36'49	1.31776 AU	morning set	16478 Nov 14 07:31	2° X 05'17	
	16477 Dec 06 03:23	0° Z		asc. node	16478 Nov 15 08:35	4° X 08'45	
				max. Earth dist.	16478 Nov 18 17:40	10° X 59'22	1.33022 AU
superior conj	16477 Dec 08 09:10	4° Z 53'28	1°20'00	superior conj	16478 Nov 22 13:24	19° X 01'57	1°01'53
minimum elong	16477 Dec 08 07:01	4° Z 41'42	1°20'22	minimum elong	16478 Nov 22 11:01	18° X 49'14	1°02'07
evening rise	16477 Dec 15 03:31	19° Z 45'32			16478 Nov 27 15:21	0° Z	
	16477 Dec 20 01:05	0° \approx		evening rise	16478 Nov 29 14:06	4° Z 11'16	
desc. node	16477 Dec 30 21:09	18° \approx 54'39			16478 Dec 13 09:40	0° \approx	
evening max el	16478 Jan 08 18:43	29° \approx 44'20	24°08'51	desc. node	16478 Dec 17 18:04	5° \approx 53'22	
	16478 Jan 09 01:19	0° H		evening max el	16478 Dec 21 04:29	9° \approx 38'29	22°25'05
retrograde	16478 Jan 22 08:22	6° H 28'47		retrograde	16479 Jan 02 23:14	15° \approx 57'40	
evening set	16478 Jan 27 07:43	5° H 34'59		evening set	16479 Jan 06 16:22	15° \approx 27'21	
min. Earth dist.	16478 Feb 02 06:22	2° H 38'44	0.55436 AU				
inferior conj	16478 Feb 04 06:13	1° H 26'44	-5°27'12				

min. Earth dist.	16479 Jan 14 12:16	11° \approx 54'37	0.54494 AU	min. Earth dist.	16479 Dec 26 17:37	20° \approx 50'12	0.54470 AU
inferior conj	16479 Jan 15 02:08	11° \approx 35'08	-6°02'12	morning rise	16480 Jan 02 19:26	17° \approx 31'21	
minimum elong	16479 Jan 15 02:52	11° \approx 34'07	6°01'41	direct	16480 Jan 07 02:49	16° \approx 51'23	
morning rise	16479 Jan 23 14:23	7° \approx 47'30		morning max el	16480 Jan 20 08:27	23° \approx 19'56	23°13'58
direct	16479 Jan 26 19:20	7° \approx 24'22			16480 Jan 26 05:12	0° \approx	
morning max el	16479 Feb 07 19:44	13° \approx 12'58	21°28'04	asc. node	16480 Jan 29 04:28	4° \approx 10'14	
asc. node	16479 Feb 11 07:12	17° \approx 00'46		morning set	16480 Feb 12 11:41	0° \approx 43'41	
	16479 Feb 19 20:53	0° \approx			16480 Feb 12 03:29	0° \approx	
morning set	16479 Feb 28 00:05	16° \approx 00'19					
	16479 Mar 06 15:27	0° \approx		superior conj	16480 Feb 19 09:13	15° \approx 38'54	1°24'29
				minimum elong	16480 Feb 19 11:15	15° \approx 49'49	1°24'30
superior conj	16479 Mar 07 05:54	1° \approx 15'20	1°08'21	max. Earth dist.	16480 Feb 22 13:16	22° \approx 23'23	1.33188 AU
minimum elong	16479 Mar 07 08:24	1° \approx 28'18	1°08'03		16480 Feb 26 06:14	0° \approx	
max. Earth dist.	16479 Mar 11 19:45	10° \approx 34'49	1.34913 AU	evening rise	16480 Feb 27 06:31	2° \approx 00'56	
evening rise	16479 Mar 15 22:00	18° \approx 31'17		desc. node	16480 Mar 01 15:29	8° \approx 31'56	
desc. node	16479 Mar 15 18:47	18° \approx 16'01			16480 Mar 14 04:10	0° \approx	
	16479 Mar 22 06:03	0° \approx		evening max el	16480 Apr 01 16:42	23° \approx 47'34	27°20'17
	16479 Apr 11 02:43	0° \approx			16480 Apr 10 00:15	0° \approx	
evening max el	16479 Apr 20 03:20	10° \approx 17'18	26°36'30	retrograde	16480 Apr 15 07:57	1° \approx 20'59	
retrograde	16479 May 03 05:59	17° \approx 44'00			16480 Apr 20 06:15	30° \approx 31'30	
evening set	16479 May 09 15:11	15° \approx 11'04		evening set	16480 Apr 22 00:04	28° \approx 51'30	
asc. node	16479 May 10 04:45	14° \approx 42'27		min. Earth dist.	16480 Apr 25 20:07	25° \approx 18'35	0.64818 AU
min. Earth dist.	16479 May 13 15:29	11° \approx 06'15	0.66557 AU	asc. node	16480 Apr 26 01:57	25° \approx 03'04	
inferior conj	16479 May 15 15:03	8° \approx 43'48	1°35'03	inferior conj	16480 Apr 28 08:09	22° \approx 34'26	0°41'40
minimum elong	16479 May 15 13:00	8° \approx 49'56	1°33'49	minimum elong	16480 Apr 28 07:02	22° \approx 37'31	0°40'46
morning rise	16479 May 21 11:58	3° \approx 04'38		morning rise	16480 May 04 15:59	17° \approx 08'46	
direct	16479 May 24 13:34	2° \approx 12'13		direct	16480 May 07 08:16	16° \approx 31'17	
morning max el	16479 May 30 23:17	5° \approx 34'27	18°19'05	morning max el	16480 May 13 15:35	19° \approx 46'06	17°53'53
desc. node	16479 Jun 11 19:13	21° \approx 35'52			16480 May 21 11:19	0° \approx	
	16479 Jun 17 03:10	0° \approx		desc. node	16480 May 28 16:12	11° \approx 38'13	
morning set	16479 Jun 19 22:34	4° \approx 27'52		morning set	16480 May 31 05:13	15° \approx 51'01	
					16480 Jun 08 20:00	0° \approx	
superior conj	16479 Jul 05 10:23	28° \approx 51'21	-2°10'32				
minimum elong	16479 Jul 05 05:44	28° \approx 33'13	2°10'58	superior conj	16480 Jun 14 02:54	8° \approx 29'17	-1°49'22
	16479 Jul 06 03:59	0° \approx		minimum elong	16480 Jun 13 18:24	7° \approx 55'27	1°49'15
max. Earth dist.	16479 Jul 06 11:21	0° \approx 28'39	1.46027 AU	max. Earth dist.	16480 Jun 18 07:14	15° \approx 05'34	1.45589 AU
evening rise	16479 Jul 21 11:05	23° \approx 04'37			16480 Jun 27 21:51	0° \approx	
	16479 Jul 25 10:05	0° \approx		evening rise	16480 Jun 30 01:58	3° \approx 01'43	
greatest brilliancy	16479 Jul 31 10:56	9° \approx 19'47	-0.8m	greatest brilliancy	16480 Jul 14 12:00	24° \approx 58'56	-0.6m
asc. node	16479 Aug 06 04:26	17° \approx 47'53			16480 Jul 18 00:41	0° \approx	
evening max el	16479 Aug 13 01:06	26° \approx 16'57	18°56'06	asc. node	16480 Jul 23 01:13	6° \approx 34'30	
retrograde	16479 Aug 19 19:00	29° \approx 58'11		evening max el	16480 Jul 26 07:20	10° \approx 11'00	19°47'20
evening set	16479 Aug 23 04:41	28° \approx 51'22		retrograde	16480 Aug 02 17:26	14° \approx 20'53	
inferior conj	16479 Aug 28 17:22	23° \approx 06'10	2°34'40	evening set	16480 Aug 06 13:20	12° \approx 56'15	
minimum elong	16479 Aug 28 19:25	22° \approx 59'39	2°34'05	inferior conj	16480 Aug 11 21:01	6° \approx 58'43	2°57'04
min. Earth dist.	16479 Aug 30 09:20	20° \approx 59'15	0.66577 AU	minimum elong	16480 Aug 11 22:21	6° \approx 54'15	2°56'35
morning rise	16479 Sep 03 09:16	16° \approx 39'10		min. Earth dist.	16480 Aug 12 23:08	5° \approx 31'07	0.67911 AU
desc. node	16479 Sep 07 17:07	14° \approx 16'00		morning rise	16480 Aug 17 06:53	0° \approx 32'29	
direct	16479 Sep 09 13:06	14° \approx 02'54			16480 Aug 17 22:26	30° \approx 03'01	
morning max el	16479 Sep 22 09:41	21° \approx 41'00	26°16'26	direct	16480 Aug 23 00:22	28° \approx 03'01	
	16479 Sep 29 16:14	0° \approx		desc. node	16480 Aug 24 14:27	28° \approx 13'03	
	16479 Oct 19 22:24	0° \approx			16480 Aug 28 17:39	0° \approx	
morning set	16479 Oct 28 07:18	14° \approx 50'38		morning max el	16480 Sep 03 20:45	5° \approx 08'36	24°56'13
max. Earth dist.	16479 Nov 01 02:26	22° \approx 05'24	1.34803 AU		16480 Sep 23 01:52	0° \approx	
asc. node	16479 Nov 02 05:26	24° \approx 17'54		morning set	16480 Oct 09 14:42	26° \approx 52'19	
	16479 Nov 05 01:40	0° \approx			16480 Oct 11 08:45	0° \approx	
				max. Earth dist.	16480 Oct 13 03:07	3° \approx 12'37	1.37008 AU
superior conj	16479 Nov 06 10:45	2° \approx 49'10	0°37'35	asc. node	16480 Oct 19 02:15	14° \approx 30'07	
minimum elong	16479 Nov 06 08:50	2° \approx 39'19	0°37'46				
evening rise	16479 Nov 13 22:57	18° \approx 31'25		superior conj	16480 Oct 19 22:06	16° \approx 07'15	0°07'26
	16479 Nov 19 15:19	0° \approx		minimum elong	16480 Oct 19 21:37	16° \approx 04'50	0°07'45
evening max el	16479 Dec 02 22:29	19° \approx 53'05	20°50'31	behind sun begin	16480 Oct 19 15:50	15° \approx 36'30	
desc. node	16479 Dec 04 15:03	21° \approx 26'15		behind sun end	16480 Oct 20 03:24	16° \approx 33'14	
retrograde	16479 Dec 14 08:56	25° \approx 33'05			16480 Oct 26 20:11	0° \approx	
evening set	16479 Dec 16 22:29	25° \approx 17'16		evening rise	16480 Oct 28 03:49	2° \approx 40'07	
inferior conj	16479 Dec 25 16:52	21° \approx 25'41	-5°36'28		16480 Nov 13 10:09	0° \approx	
minimum elong	16479 Dec 25 08:59	21° \approx 36'58	5°34'33	evening max el	16480 Nov 14 06:44	0° \approx 53'42	19°35'33

desc. node	16480 Nov 20 12:06	5° Z 09'13		evening set	16481 Nov 07 10:17	16° Z 44'23	
retrograde	16480 Nov 24 01:47	5° Z 47'28		desc. node	16481 Nov 07 09:15	16° Z 44'56	
evening set	16480 Nov 26 01:24	5° Z 36'21		inferior conj	16481 Nov 15 12:38	12° Z 20'18	-2°36'32
inferior conj	16480 Dec 04 17:03	1° Z 32'32	-4°18'13	minimum elong	16481 Nov 15 06:18	12° Z 31'58	2°33'29
minimum elong	16480 Dec 04 07:15	1° Z 48'04	4°14'34	min. Earth dist.	16481 Nov 18 14:29	10° Z 04'49	0.57034 AU
min. Earth dist.	16480 Dec 07 01:23	0° Z 03'15	0.55377 AU	morning rise	16481 Nov 22 23:15	7° Z 25'34	
	16480 Dec 07 03:29	30° R Z		direct	16481 Nov 29 00:39	5° Z 56'11	
morning rise	16480 Dec 12 11:20	27° Z 13'28		morning max el	16481 Dec 13 05:19	13° Z 18'32	26°36'22
direct	16480 Dec 17 19:00	26° Z 10'15			16481 Dec 26 09:09	0° Z	
	16480 Dec 27 22:49	0° Z		asc. node	16482 Jan 01 22:51	11° Z 03'09	
morning max el	16480 Dec 31 16:37	3° Z 09'15	25°03'15	morning set	16482 Jan 11 10:00	29° Z 55'11	
asc. node	16481 Jan 15 01:41	22° Z 15'47			16482 Jan 11 10:53	0° \approx	
	16481 Jan 19 09:47	0° \approx					
morning set	16481 Jan 26 23:36	15° \approx 23'45		superior conj	16482 Jan 18 04:03	14° \approx 51'07	1°38'11
				minimum elong	16482 Jan 18 04:10	14° \approx 51'51	1°38'40
superior conj	16481 Feb 02 17:20	0° X 13'03	1°34'24	max. Earth dist.	16482 Jan 18 20:24	16° \approx 22'31	1.31180 AU
minimum elong	16481 Feb 02 18:30	0° X 19'29	1°34'42	evening rise	16482 Jan 25 02:26	0° X 02'23	
	16481 Feb 02 14:58	0° X			16482 Jan 25 01:59	0° X	
max. Earth dist.	16481 Feb 04 14:16	4° X 19'46	1.31927 AU	desc. node	16482 Feb 03 08:57	18° X 14'22	
evening rise	16481 Feb 10 00:53	15° X 53'43			16482 Feb 10 09:16	0° Y	
desc. node	16481 Feb 16 12:13	28° X 33'39		evening max el	16482 Feb 25 11:33	19° Y 10'34	27°20'21
	16481 Feb 17 06:57	0° Y		retrograde	16482 Mar 11 12:16	26° Y 32'00	
	16481 Mar 08 22:08	0° Z		evening set	16482 Mar 18 05:15	24° Y 31'18	
evening max el	16481 Mar 15 04:20	6° Z 50'05	27°36'51	min. Earth dist.	16482 Mar 22 01:39	21° Y 45'02	0.60519 AU
retrograde	16481 Mar 29 02:33	14° Z 20'30		inferior conj	16482 Mar 25 06:39	18° Y 59'56	-1°47'21
evening set	16481 Apr 04 21:45	12° Z 01'55		minimum elong	16482 Mar 25 10:38	18° Y 51'21	1°45'53
min. Earth dist.	16481 Apr 08 16:01	8° Z 55'59	0.62761 AU	asc. node	16482 Mar 30 20:29	14° Y 55'52	
inferior conj	16481 Apr 11 14:35	6° Z 03'24	-0°25'54	morning rise	16482 Apr 01 19:29	14° Y 09'11	
minimum elong	16481 Apr 11 15:26	6° Z 01'18	0°25'53	direct	16482 Apr 03 21:27	13° Y 51'30	
asc. node	16481 Apr 12 23:11	4° Z 44'46		morning max el	16482 Apr 11 00:59	17° Y 25'59	17°56'51
morning rise	16481 Apr 18 11:59	0° Z 53'41			16482 Apr 20 00:04	0° Z	
direct	16481 Apr 20 20:13	0° Z 27'50		morning set	16482 Apr 26 15:09	11° Z 50'11	
morning max el	16481 Apr 27 09:15	3° Z 46'47	17°46'12	desc. node	16482 May 02 10:00	22° Z 20'45	
morning set	16481 May 13 12:43	28° Z 24'42			16482 May 06 17:41	0° II	
	16481 May 14 10:39	0° II					
desc. node	16481 May 15 13:08	1° II 55'01		superior conj	16482 May 07 03:11	0° II 41'24	-0°38'17
				minimum elong	16482 May 06 23:52	0° II 26'58	0°38'16
superior conj	16481 May 25 15:20	19° II 03'31	-1°16'00	max. Earth dist.	16482 May 14 15:03	13° II 23'04	1.42735 AU
minimum elong	16481 May 25 08:24	18° II 34'47	1°15'41	evening rise	16482 May 20 11:57	22° II 51'46	
max. Earth dist.	16481 Jun 01 01:04	29° II 28'38	1.44457 AU		16482 May 25 01:48	0° O	
	16481 Jun 01 08:55	0° O			16482 Jun 15 02:59	0° O	
evening rise	16481 Jun 09 13:02	12° O 47'47		evening max el	16482 Jun 22 02:12	8° O 00'47	22°08'17
	16481 Jun 20 23:46	0° O		asc. node	16482 Jun 26 18:58	11° O 55'17	
evening max el	16481 Jul 09 07:34	24° O 06'14	20°52'33	retrograde	16482 Jul 01 14:24	13° O 33'48	
asc. node	16481 Jul 09 22:03	24° O 41'32		evening set	16482 Jul 06 08:39	11° O 34'13	
retrograde	16481 Jul 17 16:26	28° O 54'45		inferior conj	16482 Jul 11 14:35	5° O 15'48	3°06'15
evening set	16481 Jul 21 23:16	27° O 12'07		minimum elong	16482 Jul 11 14:03	5° O 17'39	3°05'41
inferior conj	16481 Jul 27 04:49	21° O 03'27	3°07'10	min. Earth dist.	16482 Jul 11 13:50	5° O 18'26	0.69167 AU
minimum elong	16481 Jul 27 05:14	21° O 02'01	3°06'42		16482 Jul 15 18:12	30° R O	
min. Earth dist.	16481 Jul 27 17:21	20° O 20'06	0.68785 AU	morning rise	16482 Jul 16 19:18	29° O 00'52	
morning rise	16481 Aug 01 10:55	14° O 41'42		direct	16482 Jul 21 12:52	27° O 01'28	
direct	16481 Aug 06 16:41	12° O 25'13			16482 Jul 28 03:30	0° O	
desc. node	16481 Aug 11 11:46	13° O 56'53		desc. node	16482 Jul 29 09:03	1° O 03'15	
morning max el	16481 Aug 17 07:53	18° O 45'06	23°27'50	morning max el	16482 Jul 30 21:28	2° O 30'06	22°00'06
	16481 Aug 26 19:27	0° P			16482 Aug 20 17:48	0° P	
	16481 Sep 16 04:21	0° P		morning set	16482 Sep 01 12:56	18° P 10'18	
morning set	16481 Sep 21 01:33	8° P 00'53		max. Earth dist.	16482 Sep 07 04:53	27° P 23'51	1.41761 AU
max. Earth dist.	16481 Sep 25 01:56	14° P 52'03	1.39423 AU		16482 Sep 08 18:17	0° P	
superior conj	16481 Oct 02 19:43	28° P 47'26	-0°27'27	superior conj	16482 Sep 14 23:10	10° P 39'31	-1°04'35
minimum elong	16481 Oct 02 21:44	28° P 56'52	0°26'51	minimum elong	16482 Sep 15 04:29	11° P 02'51	1°03'44
	16481 Oct 03 11:17	0° P		asc. node	16482 Sep 22 19:46	24° P 49'39	
asc. node	16481 Oct 05 23:01	4° P 41'54		evening rise	16482 Sep 25 13:51	29° P 54'40	
evening rise	16481 Oct 12 01:57	16° P 30'50			16482 Sep 25 15:00	0° P	
	16481 Oct 19 06:25	0° P		evening max el	16482 Oct 11 12:17	25° P 18'15	18°12'08
evening max el	16481 Oct 28 04:37	12° P 44'31	18°43'02	retrograde	16482 Oct 18 18:09	29° P 00'42	
retrograde	16481 Nov 05 12:15	16° P 57'01		evening set	16482 Oct 20 20:58	28° P 42'15	

desc. node	16482 Oct 25 06:26	26° \mathbb{M} 22'06	retrograde	16483 Oct 01 15:56	11° \mathbb{M} 49'31	
inferior conj	16482 Oct 28 06:05	23° \mathbb{M} 56'38 -0°57'38	evening set	16483 Oct 04 02:12	11° \mathbb{M} 21'22	
minimum elong	16482 Oct 28 04:00	24° \mathbb{M} 01'09 0°56'17	inferior conj	16483 Oct 10 18:54	6° \mathbb{M} 16'14	0°25'32
min. Earth dist.	16482 Oct 31 11:55	21° \mathbb{M} 10'02 0.59151 AU	minimum elong	16483 Oct 10 19:41	6° \mathbb{M} 14'18	0°25'33
morning rise	16482 Nov 04 07:38	18° \mathbb{M} 26'17	desc. node	16483 Oct 12 03:41	4° \mathbb{M} 54'35	
direct	16482 Nov 10 19:46	16° \mathbb{M} 30'53	min. Earth dist.	16483 Oct 13 19:15	3° \mathbb{M} 18'11	0.61446 AU
morning max el	16482 Nov 25 02:32	24° \mathbb{M} 12'38 27°37'25	morning rise	16483 Oct 17 10:18	0° \mathbb{M} 18'08	
	16482 Nov 30 09:21	0° \mathbb{M}		16483 Oct 17 21:18	30° \mathbb{R} $\underline{\mathbb{A}}$	
asc. node	16482 Dec 19 19:57	0° \mathbb{S} 21'19	direct	16483 Oct 24 02:47	28° $\underline{\mathbb{A}}$ 00'46	
	16482 Dec 19 15:27	0° \mathbb{S}		16483 Oct 30 19:05	0° \mathbb{M}	
morning set	16482 Dec 26 17:04	14° \mathbb{S} 13'49	morning max el	16483 Nov 07 07:06	5° \mathbb{M} 55'51	27°59'16
max. Earth dist.	16483 Jan 02 04:09	28° \mathbb{S} 24'50 1.30968 AU		16483 Nov 25 11:20	0° \mathbb{M}	
			asc. node	16483 Dec 06 16:59	20° \mathbb{M} 01'08	
superior conj	16483 Jan 02 15:28	29° \mathbb{S} 28'10 1°35'56	morning set	16483 Dec 10 18:44	28° \mathbb{M} 13'37	
minimum elong	16483 Jan 02 14:33	29° \mathbb{S} 23'04 1°36'28		16483 Dec 11 15:08	0° \mathbb{S}	
	16483 Jan 02 21:08	0° \mathbb{M}	max. Earth dist.	16483 Dec 16 09:28	10° \mathbb{S} 15'55	1.31311 AU
evening rise	16483 Jan 09 08:58	14° \mathbb{M} 22'00				
	16483 Jan 17 02:19	0° \mathbb{M}	superior conj	16483 Dec 18 01:40	13° \mathbb{S} 58'09	1°27'36
desc. node	16483 Jan 21 05:44	7° \mathbb{M} 26'22	minimum elong	16483 Dec 17 23:53	13° \mathbb{S} 48'16	1°28'03
	16483 Feb 06 19:19	0° \mathbb{Y}	evening rise	16483 Dec 24 18:27	28° \mathbb{S} 46'58	
evening max el	16483 Feb 07 11:32	0° \mathbb{Y} 39'14 26°28'33		16483 Dec 25 07:59	0° \mathbb{M}	
retrograde	16483 Feb 21 11:35	7° \mathbb{Y} 49'08	desc. node	16484 Jan 08 02:32	25° \mathbb{M} 58'24	
evening set	16483 Feb 27 19:17	6° \mathbb{Y} 12'09		16484 Jan 10 18:34	0° \mathbb{M}	
min. Earth dist.	16483 Mar 04 00:57	3° \mathbb{Y} 34'24 0.58285 AU	evening max el	16484 Jan 20 03:01	11° \mathbb{M} 15'34	25°05'51
inferior conj	16483 Mar 07 04:34	1° \mathbb{Y} 13'57 -3°18'16	retrograde	16484 Feb 02 22:54	18° \mathbb{M} 11'24	
minimum elong	16483 Mar 07 12:12	0° \mathbb{Y} 59'43 3°15'29	evening set	16484 Feb 08 12:25	17° \mathbb{M} 01'58	
	16483 Mar 08 21:02	30° \mathbb{R} \mathbb{H}	min. Earth dist.	16484 Feb 13 15:28	14° \mathbb{M} 17'23	0.56319 AU
morning rise	16483 Mar 15 08:35	26° \mathbb{M} 44'40	inferior conj	16484 Feb 16 05:31	12° \mathbb{M} 37'09	-4°46'23
direct	16483 Mar 17 07:24	26° \mathbb{M} 31'39	minimum elong	16484 Feb 16 15:00	12° \mathbb{M} 21'48	4°43'39
asc. node	16483 Mar 17 17:46	26° \mathbb{M} 32'18	morning rise	16484 Feb 24 20:13	8° \mathbb{M} 28'57	
	16483 Mar 24 21:04	0° \mathbb{Y}	direct	16484 Feb 26 22:11	8° \mathbb{M} 16'38	
morning max el	16483 Mar 25 11:02	0° \mathbb{Y} 33'03 18°27'13	asc. node	16484 Mar 03 15:03	9° \mathbb{M} 55'40	
morning set	16483 Apr 10 07:05	25° \mathbb{Y} 51'12	morning max el	16484 Mar 07 11:12	12° \mathbb{M} 55'59	19°19'16
	16483 Apr 12 11:03	0° \mathbb{S}		16484 Mar 19 01:23	0° \mathbb{Y}	
desc. node	16483 Apr 19 06:47	12° \mathbb{S} 51'18	morning set	16484 Mar 24 08:13	10° \mathbb{Y} 15'13	
superior conj	16483 Apr 19 12:09	13° \mathbb{S} 15'57 -0°01'53	superior conj	16484 Apr 01 13:53	26° \mathbb{Y} 34'52	0°30'05
minimum elong	16483 Apr 19 11:59	13° \mathbb{S} 15'11 0°02'15	minimum elong	16484 Apr 01 15:38	26° \mathbb{Y} 43'19	0°29'33
behind sun begin	16483 Apr 19 04:50	12° \mathbb{S} 42'20		16484 Apr 03 08:34	0° \mathbb{S}	
behind sun end	16483 Apr 19 19:07	13° \mathbb{S} 47'58	desc. node	16484 Apr 05 03:33	3° \mathbb{S} 23'09	
max. Earth dist.	16483 Apr 27 00:02	26° \mathbb{S} 35'54 1.40604 AU	max. Earth dist.	16484 Apr 08 05:51	9° \mathbb{S} 05'28	1.38302 AU
	16483 Apr 28 23:59	0° \mathbb{I}	evening rise	16484 Apr 11 23:03	15° \mathbb{S} 41'36	
evening rise	16483 May 01 06:58	3° \mathbb{I} 49'37		16484 Apr 20 13:32	0° \mathbb{I}	
	16483 May 18 07:09	0° \mathbb{S}		16484 May 11 22:03	0° \mathbb{S}	
evening max el	16483 Jun 04 17:02	21° \mathbb{S} 55'21 23°29'32	evening max el	16484 May 17 06:29	5° \mathbb{S} 50'43	24°49'52
asc. node	16483 Jun 13 15:55	27° \mathbb{S} 59'17	retrograde	16484 May 29 01:55	12° \mathbb{S} 44'02	
retrograde	16483 Jun 15 09:57	28° \mathbb{S} 12'21	asc. node	16484 May 30 12:55	12° \mathbb{S} 35'10	
evening set	16483 Jun 20 15:49	25° \mathbb{S} 58'09	evening set	16484 Jun 03 19:09	10° \mathbb{S} 18'52	
min. Earth dist.	16483 Jun 25 10:35	20° \mathbb{S} 19'43 0.69051 AU	min. Earth dist.	16484 Jun 08 05:32	5° \mathbb{S} 17'39	0.68445 AU
inferior conj	16483 Jun 26 00:24	19° \mathbb{S} 32'09 2°54'53	inferior conj	16484 Jun 09 08:23	3° \mathbb{S} 48'33	2°32'58
minimum elong	16483 Jun 25 23:02	19° \mathbb{S} 36'53 2°54'06	minimum elong	16484 Jun 09 06:24	3° \mathbb{S} 55'09	2°31'55
morning rise	16483 Jul 01 06:13	13° \mathbb{S} 25'27		16484 Jun 12 09:51	30° \mathbb{R} \mathbb{I}	
direct	16483 Jul 05 11:42	11° \mathbb{S} 45'12	morning rise	16484 Jun 14 17:53	27° \mathbb{I} 51'19	
morning max el	16483 Jul 13 16:14	16° \mathbb{S} 25'10 20°40'08	direct	16484 Jun 18 11:55	26° \mathbb{I} 30'32	
desc. node	16483 Jul 16 06:17	19° \mathbb{S} 11'36		16484 Jun 25 05:05	0° \mathbb{S}	
	16483 Jul 24 14:55	0° \mathbb{Q}	morning max el	16484 Jun 25 17:54	0° \mathbb{S} 30'40	19°32'56
morning set	16483 Aug 12 02:50	27° \mathbb{Q} 26'42	desc. node	16484 Jul 02 03:26	8° \mathbb{S} 05'51	
	16483 Aug 13 18:20	0° \mathbb{M}	greatest brilliancy	16484 Jul 08 12:14	17° \mathbb{S} 04'55	-0.6m
max. Earth dist.	16483 Aug 20 13:55	10° \mathbb{M} 46'44 1.43756 AU		16484 Jul 17 03:04	0° \mathbb{Q}	
			morning set	16484 Jul 21 07:14	6° \mathbb{Q} 22'38	
superior conj	16483 Aug 27 04:25	21° \mathbb{M} 34'41 -1°39'28	max. Earth dist.	16484 Aug 02 04:48	24° \mathbb{Q} 51'00	1.45196 AU
minimum elong	16483 Aug 27 12:13	22° \mathbb{M} 07'13 1°38'46		16484 Aug 05 10:56	0° \mathbb{M}	
	16483 Sep 01 04:09	0° \mathbb{S}				
evening rise	16483 Sep 08 10:57	12° \mathbb{S} 39'31	superior conj	16484 Aug 06 10:31	1° \mathbb{M} 33'51	-2°05'12
asc. node	16483 Sep 09 16:28	14° \mathbb{S} 49'08	minimum elong	16484 Aug 06 16:59	1° \mathbb{M} 59'39	2°05'11
	16483 Sep 18 15:36	0° \mathbb{M}	evening rise	16484 Aug 20 12:00	24° \mathbb{M} 32'39	
evening max el	16483 Sep 25 01:29	8° \mathbb{M} 24'23 18°01'08		16484 Aug 23 18:29	0° \mathbb{S}	

asc. node	16484 Aug 26 13:11	4°♌36'31		evening max el	16485 Aug 22 06:01	5°♌39'14	18°33'57
evening max el	16484 Sep 07 16:29	21°♌54'23	18°08'41	retrograde	16485 Aug 28 17:58	9°♌08'56	
retrograde	16484 Sep 14 01:10	25°♌15'13		evening set	16485 Aug 31 22:11	8°♌11'50	
evening set	16484 Sep 16 20:06	24°♌33'55		inferior conj	16485 Sep 06 15:10	2°♌34'31	2°15'25
inferior conj	16484 Sep 22 23:14	19°♌11'40	1°29'29	minimum elong	16485 Sep 06 17:26	2°♌27'35	2°14'47
minimum elong	16484 Sep 23 01:20	19°♌05'51	1°28'56	min. Earth dist.	16485 Sep 08 15:08	0°♌08'44	0.65629 AU
min. Earth dist.	16484 Sep 25 12:39	16°♌21'47	0.63670 AU		16485 Sep 08 18:05	30°♌	
desc. node	16484 Sep 28 00:57	13°♌52'55		morning rise	16485 Sep 12 11:30	26°♌09'50	
morning rise	16484 Sep 29 04:34	12°♌55'55		desc. node	16485 Sep 14 22:16	24°♌31'15	
direct	16484 Oct 05 19:38	10°♌24'15		direct	16485 Sep 18 20:30	23°♌32'55	
morning max el	16484 Oct 19 16:18	18°♌22'33	27°42'58		16485 Sep 30 17:58	0°♌	
	16484 Oct 29 12:05	0°♌		morning max el	16485 Oct 02 03:30	1°♌21'46	26°54'59
	16484 Nov 17 08:56	0°♌			16485 Oct 23 14:32	0°♌	
asc. node	16484 Nov 22 13:57	9°♌56'17		morning set	16485 Nov 06 20:01	24°♌55'02	
morning set	16484 Nov 23 12:40	11°♌49'23		asc. node	16485 Nov 09 10:51	0°♌01'37	
max. Earth dist.	16484 Nov 28 08:38	21°♌48'33	1.32233 AU		16485 Nov 09 10:32	0°♌	
				max. Earth dist.	16485 Nov 10 22:56	3°♌02'05	1.33721 AU
superior conj	16484 Dec 01 08:43	28°♌16'07	1°13'05	superior conj	16485 Nov 15 10:23	12°♌16'38	0°52'19
minimum elong	16484 Dec 01 06:24	28°♌03'33	1°13'23	minimum elong	16485 Nov 15 08:06	12°♌04'37	0°52'32
	16484 Dec 02 03:47	0°♌		evening rise	16485 Nov 22 15:16	27°♌37'35	
evening rise	16484 Dec 08 05:09	13°♌13'28			16485 Nov 23 18:18	0°♌	
	16484 Dec 16 12:38	0°♌		desc. node	16485 Dec 11 20:21	0°♌01'34	
desc. node	16484 Dec 24 23:24	13°♌36'18			16485 Dec 11 19:46	0°♌	
evening max el	16484 Dec 31 12:53	21°♌16'26	23°24'40	evening max el	16485 Dec 13 01:12	1°♌15'35	21°42'57
retrograde	16485 Jan 13 20:30	27°♌51'33		retrograde	16485 Dec 25 07:19	7°♌18'54	
evening set	16485 Jan 18 07:10	27°♌08'51		evening set	16485 Dec 28 11:46	6°♌56'00	
min. Earth dist.	16485 Jan 24 23:50	23°♌59'18	0.54927 AU	inferior conj	16486 Jan 06 02:11	3°♌06'19	-5°58'57
inferior conj	16485 Jan 26 10:14	23°♌09'26	-5°48'46	minimum elong	16486 Jan 05 22:46	3°♌11'04	5°58'09
minimum elong	16485 Jan 26 15:59	23°♌01'06	5°47'41	min. Earth dist.	16486 Jan 06 05:01	3°♌02'21	0.54366 AU
morning rise	16485 Feb 04 02:09	19°♌16'59			16486 Jan 12 07:10	30°♌	
direct	16485 Feb 06 18:07	18°♌59'49		morning rise	16486 Jan 14 10:23	29°♌18'16	
morning max el	16485 Feb 17 21:28	24°♌23'41	20°34'36	direct	16486 Jan 18 02:42	28°♌48'41	
asc. node	16485 Feb 18 12:22	25°♌00'44			16486 Jan 23 15:35	0°♌	
	16485 Feb 22 16:52	0°♌		morning max el	16486 Jan 30 16:41	4°♌55'10	22°11'39
morning set	16485 Mar 08 15:21	24°♌52'37		asc. node	16486 Feb 05 09:39	11°♌30'30	
	16485 Mar 11 02:42	0°♌			16486 Feb 16 09:41	0°♌	
superior conj	16485 Mar 16 04:13	10°♌26'23	0°56'10	morning set	16486 Feb 21 01:59	9°♌36'14	
minimum elong	16485 Mar 16 06:42	10°♌38'59	0°55'44	superior conj	16486 Feb 28 03:41	24°♌41'01	1°15'58
max. Earth dist.	16485 Mar 21 13:23	21°♌05'52	1.36077 AU	minimum elong	16486 Feb 28 06:03	24°♌53'29	1°15'47
desc. node	16485 Mar 23 00:15	23°♌52'02			16486 Mar 02 16:40	0°♌	
evening rise	16485 Mar 25 09:38	28°♌19'16		max. Earth dist.	16486 Mar 04 02:59	2°♌56'07	1.34129 AU
	16485 Mar 26 07:43	0°♌		evening rise	16486 Mar 08 11:10	11°♌32'56	
	16485 Apr 13 20:47	0°♌		desc. node	16486 Mar 09 20:58	14°♌14'20	
evening max el	16485 Apr 29 20:08	19°♌43'23	26°01'56		16486 Mar 18 17:46	0°♌	
retrograde	16485 May 12 13:06	27°♌00'59			16486 Apr 09 02:54	0°♌	
asc. node	16485 May 17 10:01	25°♌27'09		evening max el	16486 Apr 12 10:01	3°♌25'39	26°58'03
evening set	16485 May 18 16:52	24°♌29'32		retrograde	16486 Apr 25 18:30	10°♌55'38	
min. Earth dist.	16485 May 22 20:32	20°♌04'31	0.67374 AU	evening set	16486 May 02 07:04	8°♌23'32	
inferior conj	16485 May 24 12:28	17°♌59'34	1°59'46	asc. node	16486 May 04 07:10	6°♌36'07	
minimum elong	16485 May 24 10:17	18°♌06'26	1°58'32	min. Earth dist.	16486 May 06 05:27	4°♌32'42	0.65870 AU
morning rise	16485 May 30 04:23	12°♌13'07		inferior conj	16486 May 08 10:22	1°♌59'55	1°14'09
direct	16485 Jun 02 11:47	11°♌10'47		minimum elong	16486 May 08 08:36	2°♌05'02	1°13'00
morning max el	16485 Jun 09 02:32	14°♌43'07	18°41'13		16486 May 10 04:57	30°♌	
desc. node	16485 Jun 19 00:31	27°♌33'12		morning rise	16486 May 14 11:34	26°♌26'03	
	16485 Jun 20 15:44	0°♌		direct	16486 May 17 09:11	25°♌40'11	
morning set	16485 Jun 30 21:39	15°♌50'22		morning max el	16486 May 23 16:43	28°♌57'29	18°06'13
	16485 Jul 09 23:40	0°♌			16486 May 24 17:10	0°♌	
max. Earth dist.	16485 Jul 15 23:55	9°♌21'50	1.45946 AU	desc. node	16486 Jun 05 21:34	17°♌25'04	
superior conj	16485 Jul 16 23:20	10°♌53'10	-2°14'24	morning set	16486 Jun 11 12:34	26°♌29'17	
minimum elong	16485 Jul 16 23:07	10°♌52'19	2°14'55		16486 Jun 13 16:47	0°♌	
	16485 Jul 29 03:10	0°♌		superior conj	16486 Jun 26 09:35	20°♌11'32	-2°03'33
evening rise	16485 Aug 01 12:26	5°♌22'55		minimum elong	16486 Jun 26 02:32	19°♌43'53	2°03'45
greatest brilliancy	16485 Aug 07 19:56	15°♌25'35	-0.9m	max. Earth dist.	16486 Jun 28 20:44	24°♌02'55	1.45942 AU
asc. node	16485 Aug 13 09:54	24°♌05'55			16486 Jul 02 16:28	0°♌	
	16485 Aug 17 12:12	0°♌					

evening rise	16486 Jul 12 13:04	15°Ω15'20		max. Earth dist.	16487 Jun 11 16:23	8°Ω37'18	1.45189 AU
	16486 Jul 22 03:57	0°൬		evening rise	16487 Jun 22 00:13	24°Ω39'24	
greatest brilliancy	16486 Jul 24 14:54	3°൬41'21	-0.7m		16487 Jun 25 12:29	0°Ω	
asc. node	16486 Jul 31 06:40	13°൬10'38			16487 Jul 16 15:55	0°൬	
evening max el	16486 Aug 05 15:26	19°൬31'30	19°16'00	asc. node	16487 Jul 18 03:28	1°൬42'08	
retrograde	16486 Aug 12 15:08	23°൬23'14		evening max el	16487 Jul 19 19:04	3°൬26'23	20°13'28
evening set	16486 Aug 16 05:12	22°൬08'42		retrograde	16487 Jul 27 14:10	7°൬51'56	
inferior conj	16486 Aug 21 15:22	16°൬17'58	2°45'45	evening set	16487 Jul 31 14:39	6°൬19'29	
minimum elong	16486 Aug 21 17:09	16°൬12'09	2°45'13	inferior conj	16487 Aug 05 21:04	0°൬16'47	3°02'45
min. Earth dist.	16486 Aug 23 01:19	14°൬27'18	0.67206 AU	minimum elong	16487 Aug 05 22:02	0°൬13'31	3°02'18
morning rise	16486 Aug 27 04:28	9°൬50'57			16487 Aug 06 01:59	30°℞Ω	
desc. node	16486 Sep 01 19:37	7°൬17'29		min. Earth dist.	16487 Aug 06 17:16	29°Ω07'51	0.68339 AU
direct	16486 Sep 02 04:05	7°൬16'59		morning rise	16487 Aug 11 05:03	23°Ω52'01	
morning max el	16486 Sep 14 14:58	14°൬42'16	25°43'52	direct	16487 Aug 16 17:31	21°Ω27'45	
	16486 Sep 27 04:08	0°Ω		desc. node	16487 Aug 19 16:57	22°Ω03'09	
	16486 Oct 16 09:54	0°ℳ		morning max el	16487 Aug 28 02:09	28°Ω15'25	24°19'06
morning set	16486 Oct 20 13:18	7°ℳ22'41			16487 Aug 29 18:04	0°൬	
max. Earth dist.	16486 Oct 24 04:08	14°ℳ07'04	1.35706 AU		16487 Sep 20 20:40	0°Ω	
asc. node	16486 Oct 27 07:42	20°ℳ12'30		morning set	16487 Oct 02 12:31	19°Ω03'42	
				max. Earth dist.	16487 Oct 06 03:32	25°Ω26'27	1.38025 AU
superior conj	16486 Oct 30 03:53	25°ℳ52'26	0°25'27		16487 Oct 08 15:51	0°ℳ	
minimum elong	16486 Oct 30 02:27	25°ℳ45'09	0°25'41				
	16486 Nov 01 04:33	0°♁		superior conj	16487 Oct 13 09:55	8°ℳ55'51	-0°06'55
evening rise	16486 Nov 06 22:45	11°♁53'53		minimum elong	16487 Oct 13 10:21	8°ℳ58'00	0°06'29
	16486 Nov 16 08:57	0°♁		behind sun begin	16487 Oct 13 04:02	8°ℳ27'40	
evening max el	16486 Nov 25 00:51	11°♁47'26	20°15'50	behind sun end	16487 Oct 13 16:41	9°ℳ28'23	
desc. node	16486 Nov 28 17:24	14°♁50'42		asc. node	16487 Oct 14 04:29	10°ℳ25'19	
retrograde	16486 Dec 05 18:32	17°♁08'11		evening rise	16487 Oct 22 01:10	25°ℳ56'34	
evening set	16486 Dec 08 00:29	16°♁55'13			16487 Oct 24 02:25	0°♁	
inferior conj	16486 Dec 16 19:12	12°♁59'23	-5°08'08	evening max el	16487 Nov 07 15:11	23°♁09'57	19°10'25
minimum elong	16486 Dec 16 09:34	13°♁13'40	5°05'16	desc. node	16487 Nov 15 14:30	27°♁41'13	
min. Earth dist.	16486 Dec 18 10:38	12°♁00'53	0.54748 AU	retrograde	16487 Nov 16 18:31	27°♁45'34	
morning rise	16486 Dec 24 18:02	8°♁56'53		evening set	16487 Nov 18 16:06	27°♁34'30	
direct	16486 Dec 29 12:22	8°♁07'50		inferior conj	16487 Nov 27 02:59	23°♁22'29	-3°36'09
morning max el	16487 Jan 12 02:11	14°♁49'41	24°01'20	minimum elong	16487 Nov 26 18:18	23°♁37'08	3°32'29
asc. node	16487 Jan 23 06:54	29°♁05'39		min. Earth dist.	16487 Nov 29 20:30	21°♁32'06	0.56003 AU
	16487 Jan 23 20:31	0°≈		morning rise	16487 Dec 04 18:02	18°♁48'31	
morning set	16487 Feb 05 13:58	24°≈18'57		direct	16487 Dec 10 09:49	17°♁34'32	
	16487 Feb 08 04:52	0°℥		morning max el	16487 Dec 24 11:43	24°♁44'39	25°45'59
					16487 Dec 29 08:09	0°♁	
superior conj	16487 Feb 12 09:19	9°℥09'45	1°29'27	asc. node	16488 Jan 10 04:07	17°♁30'34	
minimum elong	16487 Feb 12 11:01	9°℥18'59	1°29'35		16488 Jan 16 19:01	0°≈	
max. Earth dist.	16487 Feb 15 00:00	14°℥48'12	1.32589 AU	morning set	16488 Jan 21 01:26	8°≈55'59	
evening rise	16487 Feb 20 00:12	25°℥12'55					
	16487 Feb 22 10:14	0°Υ		superior conj	16488 Jan 27 18:47	23°≈46'21	1°36'45
desc. node	16487 Feb 24 17:41	4°Υ24'45		minimum elong	16488 Jan 27 19:31	23°≈50'26	1°37'08
	16487 Mar 12 05:01	0°♁		max. Earth dist.	16488 Jan 29 03:24	26°≈47'04	1.31541 AU
evening max el	16487 Mar 25 22:49	16°♁45'14	27°30'58		16488 Jan 30 14:30	0°℥	
retrograde	16487 Apr 08 17:18	24°♁18'00		evening rise	16488 Feb 03 21:53	9°℥12'50	
evening set	16487 Apr 15 11:29	21°♁52'03		desc. node	16488 Feb 11 14:24	24°℥18'09	
min. Earth dist.	16487 Apr 19 06:21	18°♁31'40	0.63980 AU		16488 Feb 14 19:02	0°Υ	
asc. node	16487 Apr 21 04:23	16°♁31'57		evening max el	16488 Mar 07 08:35	29°Υ30'05	27°34'01
inferior conj	16487 Apr 21 23:18	15°♁42'05	0°14'47		16488 Mar 07 21:15	0°♁	
minimum elong	16487 Apr 21 22:53	15°♁43'12	0°14'12	retrograde	16488 Mar 21 08:26	6°♁58'05	
transit middle	16487 Apr 21 22:53	15°♁43'12	0°14'12	evening set	16488 Mar 28 03:29	4°♁45'55	
transit begin	16487 Apr 21 21:27	15°♁46'58		min. Earth dist.	16488 Mar 31 21:51	1°♁49'39	0.61815 AU
transit end	16487 Apr 22 00:18	15°♁39'27			16488 Apr 02 21:29	30°℞Υ	
morning rise	16487 Apr 28 12:37	10°♁23'06		inferior conj	16488 Apr 04 00:00	28°Υ57'51	-0°58'58
direct	16487 May 01 01:25	9°♁50'55		minimum elong	16488 Apr 04 02:04	28°Υ53'04	0°58'22
morning max el	16487 May 07 10:00	13°♁05'43	17°48'30	asc. node	16488 Apr 07 01:40	26°Υ16'58	
	16487 May 19 06:37	0°Π		morning rise	16488 Apr 11 03:52	23°Υ56'12	
desc. node	16487 May 23 18:32	7°Π34'14		direct	16488 Apr 13 09:04	23°Υ34'23	
morning set	16487 May 24 06:25	8°Π24'29		morning max el	16488 Apr 20 03:17	26°Υ58'34	17°48'30
					16488 Apr 22 19:40	0°♁	
superior conj	16487 Jun 06 09:38	0°Ω11'25	-1°36'13	morning set	16488 May 05 22:37	21°♁21'50	
minimum elong	16487 Jun 06 01:18	29°Π37'48	1°35'57	desc. node	16488 May 09 15:25	27°♁55'10	
	16487 Jun 06 06:48	0°Ω			16488 May 10 19:48	0°Π	

superior conj	16488 May 17 08:02	11° Π 13'06	-1°00'08	minimum elong	16489 Apr 29 03:29	23° \mathcal{B} 08'27	0°22'36
minimum elong	16488 May 17 02:34	10° Π 50'01	0°59'55		16489 May 03 01:14	0° Π	
max. Earth dist.	16488 May 24 08:16	22° Π 48'09	1.43777 AU	max. Earth dist.	16489 May 06 19:41	6° Π 24'41	1.41859 AU
	16488 May 28 20:31	0° \mathfrak{C}		evening rise	16489 May 11 21:38	14° Π 45'18	
evening rise	16488 May 31 14:36	4° \mathfrak{C} 18'29			16489 May 21 17:09	0° \mathfrak{C}	
	16488 Jun 17 21:35	0° Ω			16489 Jun 13 03:43	0° Ω	
evening max el	16488 Jul 01 16:38	17° Ω 21'04	21°23'46	evening max el	16489 Jun 14 09:29	1° Ω 16'27	22°42'36
asc. node	16488 Jul 04 00:20	19° Ω 28'33		asc. node	16489 Jun 20 21:16	6° Ω 15'26	
retrograde	16488 Jul 10 13:00	22° Ω 28'48		retrograde	16489 Jun 24 10:04	7° Ω 08'39	
evening set	16488 Jul 15 00:32	20° Ω 38'53		evening set	16489 Jun 29 09:10	5° Ω 02'47	
inferior conj	16488 Jul 20 05:57	14° Ω 25'43	3°08'05		16489 Jul 03 17:10	30° $\mathcal{R}\mathfrak{C}$	
minimum elong	16488 Jul 20 05:57	14° Ω 25'42	3°07'36	inferior conj	16489 Jul 04 15:59	28° \mathfrak{C} 40'57	3°02'43
min. Earth dist.	16488 Jul 20 12:49	14° Ω 01'48	0.69001 AU	minimum elong	16489 Jul 04 15:04	28° \mathfrak{C} 44'06	3°02'04
morning rise	16488 Jul 25 11:08	8° Ω 06'23		min. Earth dist.	16489 Jul 04 09:45	29° \mathfrak{C} 02'38	0.69177 AU
direct	16488 Jul 30 11:39	5° Ω 56'46		morning rise	16489 Jul 09 20:50	22° \mathfrak{C} 29'10	
desc. node	16488 Aug 05 14:15	8° Ω 24'59		direct	16489 Jul 14 09:17	20° \mathfrak{C} 37'32	
morning max el	16488 Aug 09 14:01	11° Ω 55'49	22°49'56	morning max el	16489 Jul 23 05:20	25° \mathfrak{C} 44'45	21°24'44
	16488 Aug 24 00:36	0° \mathfrak{M}		desc. node	16489 Jul 23 11:29	26° \mathfrak{C} 00'13	
morning set	16488 Sep 12 13:35	29° \mathfrak{M} 47'56			16489 Jul 27 01:56	0° Ω	
	16488 Sep 12 16:31	0° $\underline{\mathfrak{L}}$			16489 Aug 17 10:55	0° \mathfrak{M}	
max. Earth dist.	16488 Sep 17 03:01	7° $\underline{\mathfrak{L}}$ 24'54	1.40442 AU	morning set	16489 Aug 23 15:03	9° \mathfrak{M} 32'51	
				max. Earth dist.	16489 Aug 30 08:11	20° \mathfrak{M} 18'33	1.42672 AU
superior conj	16488 Sep 25 00:18	21° $\underline{\mathfrak{L}}$ 16'46	-0°43'09		16489 Sep 05 03:49	0° $\underline{\mathfrak{L}}$	
minimum elong	16488 Sep 25 03:41	21° $\underline{\mathfrak{L}}$ 32'07	0°42'25				
	16488 Sep 29 17:35	0° \mathfrak{M}		superior conj	16489 Sep 06 18:45	2° $\underline{\mathfrak{L}}$ 46'07	-1°20'01
asc. node	16488 Sep 30 01:13	0° \mathfrak{M} 35'53		minimum elong	16489 Sep 07 01:22	3° $\underline{\mathfrak{L}}$ 14'29	1°19'09
evening rise	16488 Oct 04 19:24	9° \mathfrak{M} 37'02		asc. node	16489 Sep 16 21:56	20° $\underline{\mathfrak{L}}$ 40'48	
	16488 Oct 16 09:56	0° \mathfrak{J}		evening rise	16489 Sep 18 01:35	22° $\underline{\mathfrak{L}}$ 45'50	
evening max el	16488 Oct 20 17:46	5° \mathfrak{J} 20'30	18°27'22		16489 Sep 22 02:01	0° \mathfrak{M}	
retrograde	16488 Oct 28 13:13	9° \mathfrak{J} 18'31		evening max el	16489 Oct 04 04:21	18° \mathfrak{M} 09'48	18°05'05
evening set	16488 Oct 30 12:43	9° \mathfrak{J} 03'58		retrograde	16489 Oct 11 02:12	21° \mathfrak{M} 42'49	
desc. node	16488 Nov 01 11:40	8° \mathfrak{J} 23'01		evening set	16489 Oct 13 08:08	21° \mathfrak{M} 20'35	
inferior conj	16488 Nov 07 07:56	4° \mathfrak{J} 31'02	-1°53'11	desc. node	16489 Oct 19 08:53	17° \mathfrak{M} 23'11	
minimum elong	16488 Nov 07 03:30	4° \mathfrak{J} 39'47	1°50'50	inferior conj	16489 Oct 20 10:01	16° \mathfrak{M} 26'26	-0°20'00
min. Earth dist.	16488 Nov 10 13:07	1° \mathfrak{J} 59'45	0.57899 AU	minimum elong	16489 Oct 20 09:20	16° \mathfrak{M} 27'58	0°19'20
	16488 Nov 13 10:52	30° $\mathcal{R}\mathfrak{M}$		min. Earth dist.	16489 Oct 23 14:29	13° \mathfrak{M} 32'32	0.60134 AU
morning rise	16488 Nov 14 14:51	29° \mathfrak{M} 20'25		morning rise	16489 Oct 27 07:21	10° \mathfrak{M} 43'26	
direct	16488 Nov 20 21:47	27° \mathfrak{M} 39'18		direct	16489 Nov 02 22:21	8° \mathfrak{M} 37'48	
	16488 Nov 28 13:35	0° \mathfrak{J}		morning max el	16489 Nov 17 04:11	16° \mathfrak{M} 25'31	27°51'29
morning max el	16488 Dec 05 03:52	5° \mathfrak{J} 11'14	27°06'47		16489 Nov 28 08:54	0° \mathfrak{J}	
	16488 Dec 23 09:28	0° \mathfrak{Z}		asc. node	16489 Dec 13 22:17	26° \mathfrak{J} 00'25	
asc. node	16488 Dec 27 01:15	6° \mathfrak{Z} 32'08			16489 Dec 15 23:10	0° \mathfrak{Z}	
morning set	16489 Jan 04 10:37	23° \mathfrak{Z} 22'33		morning set	16489 Dec 19 15:36	7° \mathfrak{Z} 33'35	
	16489 Jan 07 11:32	0° \approx		max. Earth dist.	16489 Dec 25 17:35	20° \mathfrak{Z} 48'16	1.31047 AU
superior conj	16489 Jan 11 06:01	8° \approx 24'55	1°37'58	superior conj	16489 Dec 26 17:08	22° \mathfrak{Z} 59'41	1°33'08
minimum elong	16489 Jan 11 05:42	8° \approx 23'07	1°38'29	minimum elong	16489 Dec 26 15:50	22° \mathfrak{Z} 52'22	1°33'39
max. Earth dist.	16489 Jan 11 10:26	8° \approx 49'38	1.31018 AU		16489 Dec 29 20:21	0° \approx	
evening rise	16489 Jan 18 01:47	23° \approx 26'55		evening rise	16490 Jan 02 09:48	7° \approx 49'40	
	16489 Jan 21 05:11	0° \mathfrak{H}			16490 Jan 13 17:08	0° \mathfrak{H}	
desc. node	16489 Jan 28 11:09	13° \mathfrak{H} 47'55		desc. node	16490 Jan 15 07:57	2° \mathfrak{H} 44'33	
	16489 Feb 07 18:02	0° \mathfrak{Y}		evening max el	16490 Jan 30 09:42	22° \mathfrak{H} 36'33	25°56'44
evening max el	16489 Feb 17 13:02	11° \mathfrak{Y} 29'48	27°02'39	retrograde	16490 Feb 13 08:33	29° \mathfrak{H} 40'07	
retrograde	16489 Mar 03 14:19	18° \mathfrak{Y} 47'11		evening set	16490 Feb 19 09:32	28° \mathfrak{H} 14'59	
evening set	16489 Mar 10 04:02	16° \mathfrak{Y} 56'09		min. Earth dist.	16490 Feb 23 22:44	25° \mathfrak{H} 36'17	0.57395 AU
min. Earth dist.	16489 Mar 14 03:18	14° \mathfrak{Y} 14'49	0.59543 AU	inferior conj	16490 Feb 26 22:04	23° \mathfrak{H} 31'39	-3°57'08
inferior conj	16489 Mar 17 08:49	11° \mathfrak{Y} 38'02	-2°25'18	minimum elong	16490 Feb 27 06:55	23° \mathfrak{H} 16'09	3°54'08
minimum elong	16489 Mar 17 14:23	11° \mathfrak{Y} 26'45	2°23'12	morning rise	16490 Mar 07 07:26	19° \mathfrak{H} 11'12	
asc. node	16489 Mar 24 22:57	6° \mathfrak{Y} 59'42		direct	16490 Mar 09 06:38	18° \mathfrak{H} 58'57	
morning rise	16489 Mar 25 04:20	6° \mathfrak{Y} 56'10		asc. node	16490 Mar 11 20:16	19° \mathfrak{H} 20'55	
direct	16489 Mar 27 04:16	6° \mathfrak{Y} 41'01		morning max el	16490 Mar 17 23:25	23° \mathfrak{H} 15'35	18°46'34
morning max el	16489 Apr 03 17:07	10° \mathfrak{Y} 26'02	18°07'16		16490 Mar 23 08:57	0° \mathfrak{Y}	
	16489 Apr 16 13:39	0° \mathcal{B}		morning set	16490 Apr 03 03:44	19° \mathfrak{Y} 17'08	
morning set	16489 Apr 19 07:25	5° \mathcal{B} 04'40			16490 Apr 08 15:56	0° \mathcal{B}	
desc. node	16489 Apr 26 12:13	18° \mathcal{B} 23'40					
superior conj	16489 Apr 29 05:20	23° \mathcal{B} 16'41	-0°22'27	superior conj	16490 Apr 11 21:56	6° \mathcal{B} 11'24	0°12'21
				minimum elong	16490 Apr 11 22:44	6° \mathcal{B} 15'11	0°11'54

behind sun begin	16490 Apr 11 18:08	5°♄53'32		minimum elong	16491 Mar 26 07:43	19°♄56'34	0°41'23
behind sun end	16490 Apr 12 03:20	6°♄36'49		desc. node	16491 Mar 31 05:43	29°♄26'17	
desc. node	16490 Apr 13 08:58	8°♄55'11			16491 Mar 31 12:54	0°♄	
max. Earth dist.	16490 Apr 19 03:16	19°♄19'59	1.39633 AU	max. Earth dist.	16491 Apr 01 09:34	1°♄36'30	1.37336 AU
evening rise	16490 Apr 23 01:48	26°♄07'06		evening rise	16491 Apr 05 02:10	8°♄19'30	
	16490 Apr 25 09:34	0°♄			16491 Apr 18 04:50	0°♄	
	16490 May 15 08:17	0°♄		evening max el	16491 May 10 12:59	29°♄06'27	25°21'55
evening max el	16490 May 27 23:38	15°♄12'02	24°04'17		16491 May 11 11:12	0°♄	
asc. node	16490 Jun 07 18:16	21°♄44'15		retrograde	16491 May 22 18:00	6°♄11'21	
retrograde	16490 Jun 08 04:03	21°♄44'15		asc. node	16491 May 25 15:19	5°♄37'10	
evening set	16490 Jun 13 14:53	19°♄25'40		evening set	16491 May 28 16:03	3°♄42'36	
min. Earth dist.	16490 Jun 18 05:55	14°♄03'14	0.68857 AU		16491 Jun 01 03:26	30°♄	
inferior conj	16490 Jun 19 01:14	12°♄57'40	2°46'55	min. Earth dist.	16491 Jun 01 23:18	28°♄57'15	0.68049 AU
minimum elong	16490 Jun 18 23:34	13°♄03'20	2°46'00	inferior conj	16491 Jun 03 07:48	27°♄11'55	2°20'19
morning rise	16490 Jun 24 08:17	6°♄54'55		minimum elong	16491 Jun 03 05:40	27°♄18'51	2°19'09
direct	16490 Jun 28 08:55	5°♄22'48		morning rise	16491 Jun 08 19:42	21°♄19'23	
morning max el	16490 Jul 06 02:50	9°♄44'01	20°09'49	direct	16491 Jun 12 09:08	20°♄06'41	
desc. node	16490 Jul 10 08:39	14°♄29'32		morning max el	16491 Jun 19 07:38	23°♄53'07	19°08'59
	16490 Jul 21 14:30	0°♄			16491 Jun 24 13:28	0°♄	
morning set	16490 Aug 02 22:49	18°♄35'01		desc. node	16491 Jun 27 05:47	3°♄38'53	
	16490 Aug 10 07:01	0°♄		greatest brilliancy	16491 Jul 02 04:05	10°♄48'37	-0.7m
max. Earth dist.	16490 Aug 12 20:24	4°♄02'58	1.44451 AU	morning set	16491 Jul 13 05:04	27°♄38'00	
					16491 Jul 14 17:55	0°♄	
superior conj	16490 Aug 18 14:00	13°♄17'07	-1°51'57	max. Earth dist.	16491 Jul 26 13:39	18°♄21'24	1.45601 AU
minimum elong	16490 Aug 18 21:54	13°♄49'23	1°51'29				
	16490 Aug 28 14:13	0°♄		superior conj	16491 Jul 29 11:21	22°♄55'05	-2°11'28
evening rise	16490 Aug 31 14:49	5°♄10'43		minimum elong	16491 Jul 29 15:30	23°♄11'27	2°11'47
asc. node	16490 Sep 03 18:39	10°♄36'11			16491 Aug 02 22:38	0°♄	
	16490 Sep 16 09:57	0°♄		evening rise	16491 Aug 13 05:47	16°♄38'04	
evening max el	16490 Sep 17 18:47	1°♄27'46	18°02'06		16491 Aug 21 11:10	0°♄	
retrograde	16490 Sep 24 05:31	4°♄49'23		asc. node	16491 Aug 21 15:23	0°♄16'49	
evening set	16490 Sep 26 19:28	4°♄15'53		evening max el	16491 Sep 01 09:28	15°♄04'43	18°17'19
	16490 Oct 02 07:48	30°♄		retrograde	16491 Sep 07 18:35	18°♄28'07	
inferior conj	16490 Oct 03 05:57	29°♄02'52	0°55'00	evening set	16491 Sep 10 17:19	17°♄40'24	
minimum elong	16490 Oct 03 07:27	28°♄58'56	0°54'42	inferior conj	16491 Sep 16 15:42	12°♄11'17	1°51'02
min. Earth dist.	16490 Oct 06 01:58	26°♄06'27	0.62416 AU	minimum elong	16491 Sep 16 17:58	12°♄04'40	1°50'25
desc. node	16490 Oct 06 06:08	25°♄56'04		min. Earth dist.	16491 Sep 18 23:28	9°♄30'03	0.64535 AU
morning rise	16490 Oct 09 17:01	22°♄56'13		morning rise	16491 Sep 22 16:59	5°♄50'32	
direct	16490 Oct 16 09:29	20°♄32'06		desc. node	16491 Sep 23 03:27	5°♄30'23	
morning max el	16490 Oct 30 11:07	28°♄29'03	27°56'46	direct	16491 Sep 29 05:46	3°♄15'47	
	16490 Oct 31 22:35	0°♄		morning max el	16491 Oct 12 21:44	11°♄12'07	27°26'06
	16490 Nov 22 05:22	0°♄			16491 Oct 27 20:25	0°♄	
asc. node	16490 Nov 30 19:16	15°♄47'57			16491 Nov 14 16:33	0°♄	
morning set	16490 Dec 03 14:20	21°♄24'32		morning set	16491 Nov 17 04:11	4°♄48'49	
	16490 Dec 07 16:28	0°♄		asc. node	16491 Nov 17 16:12	5°♄48'12	
max. Earth dist.	16490 Dec 08 21:00	2°♄34'12	1.31639 AU	max. Earth dist.	16491 Nov 21 16:54	13°♄59'42	1.32800 AU
superior conj	16490 Dec 11 02:17	7°♄25'51	1°22'12	superior conj	16491 Nov 25 07:20	21°♄37'11	1°05'03
minimum elong	16490 Dec 11 00:13	7°♄14'30	1°22'36	minimum elong	16491 Nov 25 04:57	21°♄24'23	1°05'18
evening rise	16490 Dec 17 20:05	22°♄16'46			16491 Nov 29 04:13	0°♄	
	16490 Dec 21 11:47	0°♄		evening rise	16491 Dec 02 06:47	6°♄43'00	
desc. node	16491 Jan 02 04:48	20°♄56'12			16491 Dec 14 10:10	0°♄	
	16491 Jan 09 02:43	0°♄		desc. node	16491 Dec 20 01:43	8°♄06'06	
evening max el	16491 Jan 11 22:09	2°♄55'07	24°23'59	evening max el	16491 Dec 24 07:35	12°♄49'42	22°40'17
retrograde	16491 Jan 25 13:36	9°♄42'47		retrograde	16492 Jan 06 06:13	19°♄13'38	
evening set	16491 Jan 30 17:00	8°♄44'54		evening set	16492 Jan 10 03:52	18°♄40'24	
min. Earth dist.	16491 Feb 05 09:58	5°♄52'21	0.55646 AU	min. Earth dist.	16492 Jan 17 16:26	15°♄14'11	0.54578 AU
inferior conj	16491 Feb 07 14:00	4°♄32'45	-5°17'39	inferior conj	16492 Jan 18 11:53	14°♄46'43	-6°00'37
minimum elong	16491 Feb 07 22:47	4°♄19'19	5°15'30	minimum elong	16492 Jan 18 14:02	14°♄43'41	6°00'03
morning rise	16491 Feb 16 06:36	0°♄32'26		morning rise	16492 Jan 27 01:20	10°♄58'18	
direct	16491 Feb 18 13:14	0°♄18'46		direct	16492 Jan 30 02:33	10°♄37'01	
asc. node	16491 Feb 26 17:32	3°♄29'29		morning max el	16492 Feb 10 21:51	16°♄19'30	21°13'36
morning max el	16491 Feb 28 18:02	5°♄16'03	19°48'27	asc. node	16492 Feb 13 14:49	19°♄12'50	
	16491 Mar 16 10:21	0°♄			16492 Feb 21 02:32	0°♄	
morning set	16491 Mar 18 07:48	3°♄48'16		morning set	16492 Mar 01 16:42	18°♄29'06	
					16492 Mar 07 04:16	0°♄	
superior conj	16491 Mar 26 05:32	19°♄45'47	0°41'54				

superior conj	16492 Mar 09 00:11	3°♈48'34	1°05'21	superior conj	16493 Feb 21 02:36	18°♏10'14	1°22'27
minimum elong	16492 Mar 09 02:42	4°♈01'33	1°04'59	minimum elong	16493 Feb 21 04:44	18°♏21'39	1°22'24
max. Earth dist.	16492 Mar 13 19:01	13°♈29'14	1.35202 AU	max. Earth dist.	16493 Feb 24 11:28	25°♏17'56	1.33417 AU
desc. node	16492 Mar 17 02:27	19°♈53'01			16493 Feb 26 18:21	0°♈	
evening rise	16492 Mar 17 19:32	21°♈13'31		evening rise	16493 Mar 01 02:22	4°♈39'39	
	16492 Mar 22 15:25	0°♏		desc. node	16493 Mar 03 23:10	10°♈11'02	
	16492 Apr 11 01:32	0°♏			16493 Mar 15 09:31	0°♏	
evening max el	16492 Apr 22 02:35	12°♏55'16	26°28'09	evening max el	16493 Apr 04 16:12	26°♏29'30	27°15'24
retrograde	16492 May 05 03:02	20°♏20'19			16493 Apr 08 16:46	0°♏	
evening set	16492 May 11 10:52	17°♏47'31		retrograde	16493 Apr 18 05:59	4°♏02'26	
asc. node	16492 May 11 12:26	17°♏44'17		evening set	16493 Apr 24 21:13	1°♏32'10	
min. Earth dist.	16492 May 15 11:57	13°♏37'33	0.66779 AU		16493 Apr 26 16:28	30°♏♏	
inferior conj	16492 May 17 09:34	11°♏19'15	1°42'00	asc. node	16493 Apr 28 09:38	28°♏16'37	
minimum elong	16492 May 17 07:28	11°♏25'39	1°40'46	min. Earth dist.	16493 Apr 28 17:51	27°♏54'38	0.65100 AU
morning rise	16492 May 23 05:07	5°♏38'08		inferior conj	16493 May 01 04:03	25°♏13'04	0°50'42
direct	16492 May 26 08:08	4°♏43'17		minimum elong	16493 May 01 02:44	25°♏16'46	0°49'44
morning max el	16492 Jun 01 18:59	8°♏07'53	18°24'16	morning rise	16493 May 07 10:04	19°♏45'08	
desc. node	16492 Jun 13 02:51	23°♏17'48		direct	16493 May 10 03:42	19°♏05'34	
	16492 Jun 17 10:04	0°♏		morning max el	16493 May 16 10:48	22°♏20'43	17°56'30
morning set	16492 Jun 22 04:52	7°♏33'17			16493 May 22 13:51	0°♏	
	16492 Jul 06 11:55	0°♏		desc. node	16493 May 30 23:51	13°♏17'46	
				morning set	16493 Jun 03 07:31	18°♏45'29	
superior conj	16492 Jul 07 21:02	2°♏09'02	-2°12'13		16493 Jun 10 04:27	0°♏	
minimum elong	16492 Jul 07 17:27	1°♏55'06	2°12'41	superior conj	16493 Jun 17 11:29	11°♏41'02	-1°53'34
max. Earth dist.	16492 Jul 08 09:29	2°♏57'34	1.46027 AU	minimum elong	16493 Jun 17 03:10	11°♏08'03	1°53'31
evening rise	16492 Jul 23 19:33	27°♏02'03		max. Earth dist.	16493 Jun 21 05:39	17°♏36'03	1.45706 AU
	16492 Jul 25 16:57	0°♏			16493 Jun 29 05:13	0°♏	
greatest brilliancy	16492 Aug 02 00:29	11°♏24'14	-0.8m	evening rise	16493 Jul 03 12:32	6°♏36'55	
asc. node	16492 Aug 07 12:09	19°♏37'07		greatest brilliancy	16493 Jul 17 10:21	27°♏34'42	-0.6m
evening max el	16492 Aug 14 21:30	28°♏53'34	18°49'53		16493 Jul 19 02:32	0°♏	
	16492 Aug 16 02:17	0°♏		asc. node	16493 Jul 25 08:58	8°♏29'01	
retrograde	16492 Aug 21 13:38	2°♏31'27		evening max el	16493 Jul 29 04:38	12°♏47'33	19°38'46
evening set	16492 Aug 24 21:51	1°♏27'16		retrograde	16493 Aug 05 11:46	16°♏52'13	
	16492 Aug 26 17:50	30°♏♏		evening set	16493 Aug 09 06:09	15°♏30'12	
inferior conj	16492 Aug 30 11:33	25°♏44'10	2°30'00	inferior conj	16493 Aug 14 14:24	9°♏34'30	2°54'25
minimum elong	16492 Aug 30 13:41	25°♏37'28	2°29'25	minimum elong	16493 Aug 14 15:52	9°♏29'37	2°53'57
min. Earth dist.	16492 Sep 01 05:39	23°♏31'56	0.66343 AU	min. Earth dist.	16493 Aug 15 18:33	8°♏00'41	0.67746 AU
morning rise	16492 Sep 05 04:33	19°♏17'31		morning rise	16493 Aug 20 01:02	3°♏07'59	
desc. node	16492 Sep 09 00:46	17°♏02'39		direct	16493 Aug 25 20:13	0°♏37'06	
direct	16492 Sep 11 09:49	16°♏40'43		desc. node	16493 Aug 26 22:05	0°♏41'44	
morning max el	16492 Sep 24 09:20	24°♏22'19	26°27'01	morning max el	16493 Sep 06 20:24	7°♏48'02	25°08'51
	16492 Sep 29 11:20	0°♏			16493 Sep 24 06:12	0°♏	
	16492 Oct 20 06:15	0°♏		morning set	16493 Oct 12 16:09	29°♏48'35	
morning set	16492 Oct 30 06:04	17°♏39'47			16493 Oct 12 18:43	0°♏	
max. Earth dist.	16492 Nov 03 02:56	25°♏06'33	1.34507 AU	max. Earth dist.	16493 Oct 16 04:34	6°♏12'10	1.36659 AU
asc. node	16492 Nov 03 13:06	25°♏56'39		asc. node	16493 Oct 21 09:56	16°♏08'58	
	16492 Nov 05 13:47	0°♏					
superior conj	16492 Nov 08 05:54	5°♏28'12	0°41'40	superior conj	16493 Oct 22 19:00	18°♏51'29	0°12'22
minimum elong	16492 Nov 08 03:52	5°♏17'37	0°41'51	minimum elong	16493 Oct 22 18:13	18°♏47'37	0°12'39
evening rise	16492 Nov 15 16:02	21°♏04'17		behind sun begin	16493 Oct 22 14:11	18°♏27'42	
	16492 Nov 20 00:38	0°♏		behind sun end	16493 Oct 22 22:15	19°♏07'35	
evening max el	16492 Dec 04 23:56	22°♏59'41	21°03'31		16493 Oct 28 07:44	0°♏	
desc. node	16492 Dec 05 22:43	23°♏53'43		evening rise	16493 Oct 30 21:40	5°♏15'27	
retrograde	16492 Dec 16 15:49	28°♏45'52			16493 Nov 13 21:28	0°♏	
evening set	16492 Dec 19 08:47	28°♏28'36		evening max el	16493 Nov 17 06:01	3°♏53'16	19°45'21
inferior conj	16492 Dec 28 02:28	24°♏38'02	-5°44'13	desc. node	16493 Nov 22 19:46	7°♏55'23	
minimum elong	16492 Dec 27 19:33	24°♏47'51	5°42'39	retrograde	16493 Nov 27 06:46	8°♏53'51	
min. Earth dist.	16492 Dec 28 21:47	24°♏10'37	0.54413 AU	evening set	16493 Nov 29 07:41	8°♏42'25	
morning rise	16493 Jan 05 06:26	20°♏45'52		inferior conj	16493 Dec 08 00:29	4°♏40'59	-4°32'21
direct	16493 Jan 09 10:01	20°♏08'43		minimum elong	16493 Dec 07 14:31	4°♏56'29	4°28'48
morning max el	16493 Jan 22 12:00	26°♏32'05	22°57'34	min. Earth dist.	16493 Dec 10 04:53	3°♏19'34	0.55187 AU
	16493 Jan 25 18:27	0°♏		morning rise	16493 Dec 15 19:54	0°♏26'47	
asc. node	16493 Jan 30 12:05	6°♏12'37			16493 Dec 17 04:45	30°♏♏	
	16493 Feb 12 15:37	0°♏		direct	16493 Dec 21 00:23	29°♏27'21	
morning set	16493 Feb 14 04:07	3°♏12'51			16493 Dec 24 19:09	0°♏	
				morning max el	16494 Jan 03 20:09	6°♏21'53	24°47'32

asc. node	16494 Jan 17 09:18	24°☿11'10"		direct	16494 Dec 02 03:41	9°♄07'12"	
	16494 Jan 20 17:35	0°♊		morning max el	16494 Dec 16 07:52	16°♄26'25"	26°24'20"
morning set	16494 Jan 29 16:07	17°♊54'15"			16494 Dec 27 09:22	0°☿	
	16494 Feb 04 04:28	0°♋		asc. node	16495 Jan 04 06:28	12°☿52'56"	
					16495 Jan 12 23:16	0°♊	
superior conj	16494 Feb 05 10:09	2°♋43'36"	1°33'17"	morning set	16495 Jan 14 02:50	2°♊27'23"	
minimum elong	16494 Feb 05 11:27	2°♋50'50"	1°33'32"				
max. Earth dist.	16494 Feb 07 11:36	7°♋14'07"	1.32086 AU	superior conj	16495 Jan 20 20:34	17°♊21'22"	1°38'00"
evening rise	16494 Feb 12 19:28	18°♋29'52"		minimum elong	16495 Jan 20 20:51	17°♊22'59"	1°38'28"
desc. node	16494 Feb 18 19:53	0°♌15'35"		max. Earth dist.	16495 Jan 21 17:12	19°♊16'30"	1.31256 AU
	16494 Feb 18 16:33	0°♌			16495 Jan 26 14:37	0°♋	
	16494 Mar 09 16:35	0°♍		evening rise	16495 Jan 27 20:03	2°♋36'20"	
evening max el	16494 Mar 18 04:18	9°♍37'21"	27°36'18"	desc. node	16495 Feb 05 16:37	19°♋59'56"	
retrograde	16494 Apr 01 01:36	17°♍08'14"			16495 Feb 11 12:59	0°♌	
evening set	16494 Apr 07 20:42	14°♍47'37"		evening max el	16495 Feb 28 12:12	22°♌04'19"	27°24'57"
min. Earth dist.	16494 Apr 11 15:03	11°♍38'07"	0.63089 AU	retrograde	16495 Mar 14 12:38	29°♌27'26"	
inferior conj	16494 Apr 14 12:15	8°♍45'56"	-0°14'42"	evening set	16495 Mar 21 06:28	27°♌23'27"	
minimum elong	16494 Apr 14 12:44	8°♍44'44"	0°14'51"	min. Earth dist.	16495 Mar 25 02:08	24°♌35'00"	0.60861 AU
transit middle	16494 Apr 14 12:44	8°♍44'44"	0°14'51"	inferior conj	16495 Mar 28 06:39	21°♌47'36"	-1°34'13"
transit begin	16494 Apr 14 11:34	8°♍47'40"		minimum elong	16495 Mar 28 10:06	21°♌40'01"	1°33'00"
transit end	16494 Apr 14 13:55	8°♍41'47"		asc. node	16495 Apr 02 04:06	18°♌01'49"	
asc. node	16494 Apr 15 06:51	7°♍59'50"		morning rise	16495 Apr 04 17:08	16°♌54'00"	
morning rise	16494 Apr 21 07:28	3°♍33'36"		direct	16495 Apr 06 19:54	16°♌35'20"	
direct	16494 Apr 23 16:53	3°♍06'11"		morning max el	16495 Apr 13 20:39	20°♌06'35"	17°54'05"
morning max el	16494 Apr 30 04:26	6°♍23'36"	17°46'12"		16495 Apr 21 05:25	0°♍	
	16494 May 15 19:28	0°♎		morning set	16495 Apr 29 11:34	14°♍28'28"	
morning set	16494 May 16 11:39	1°♎09'49"		desc. node	16495 May 04 17:38	23°♍57'25"	
desc. node	16494 May 17 20:48	3°♎32'49"			16495 May 08 03:34	0°♎	
superior conj	16494 May 28 20:30	22°♎05'49"	-1°21'29"	superior conj	16495 May 10 04:55	3°♎34'36"	-0°44'01"
minimum elong	16494 May 28 13:07	21°♎35'25"	1°21'11"	minimum elong	16495 May 10 01:03	3°♎17'53"	0°43'56"
	16494 Jun 02 17:22	0°♏		max. Earth dist.	16495 May 17 14:46	16°♎02'36"	1.43020 AU
max. Earth dist.	16494 Jun 04 00:11	2°♏03'10"	1.44672 AU	evening rise	16495 May 23 19:25	25°♎59'23"	
evening rise	16494 Jun 12 23:04	16°♏02'35"			16495 May 26 09:02	0°♏	
	16494 Jun 22 05:08	0°♐			16495 Jun 16 01:53	0°♐	
evening max el	16494 Jul 12 05:43	26°♐42'36"	20°42'00"	evening max el	16495 Jun 25 01:00	10°♐37'16"	21°56'29"
asc. node	16494 Jul 12 05:47	26°♐42'46"		asc. node	16495 Jun 29 02:39	14°♐05'51"	
	16494 Jul 16 05:17	0°♑		retrograde	16495 Jul 04 09:02	16°♐03'49"	
retrograde	16494 Jul 20 10:46	1°♑24'45"		evening set	16495 Jul 09 01:33	14°♐06'36"	
	16494 Jul 24 07:59	30°♑♐		inferior conj	16495 Jul 14 07:16	7°♐49'23"	3°07'05"
evening set	16494 Jul 24 15:59	29°♐44'39"		minimum elong	16495 Jul 14 06:52	7°♐50'45"	3°06'32"
inferior conj	16494 Jul 29 21:41	23°♐37'30"	3°06'20"	min. Earth dist.	16495 Jul 14 08:27	7°♐45'15"	0.69140 AU
minimum elong	16494 Jul 29 22:14	23°♐35'33"	3°05'53"	morning rise	16495 Jul 19 12:02	1°♐33'17"	
min. Earth dist.	16494 Jul 30 12:10	22°♐47'31"	0.68689 AU		16495 Jul 21 22:34	30°♑♏	
morning rise	16494 Aug 04 04:12	17°♐14'57"		direct	16495 Jul 24 07:21	29°♏31'15"	
direct	16494 Aug 09 11:43	14°♐56'23"			16495 Jul 26 19:33	0°♐	
desc. node	16494 Aug 13 19:24	16°♐10'51"		desc. node	16495 Jul 31 16:40	3°♐06'30"	
morning max el	16494 Aug 20 07:27	21°♐23'29"	23°41'07"	morning max el	16495 Aug 02 20:36	5°♐07'50"	22°12'50"
	16494 Aug 27 18:18	0°♑			16495 Aug 21 22:56	0°♑	
	16494 Sep 17 11:55	0°♒		morning set	16495 Sep 04 21:13	21°♑24'09"	
morning set	16494 Sep 24 06:16	11°♒05'23"		max. Earth dist.	16495 Sep 10 05:28	0°♒09'30"	1.41429 AU
max. Earth dist.	16494 Sep 28 03:27	17°♒46'01"	1.39060 AU		16495 Sep 10 03:12	0°♒	
	16494 Oct 04 21:59	0°♓					
				superior conj	16495 Sep 18 01:18	13°♒37'32"	-0°58'59"
superior conj	16494 Oct 05 18:53	1°♓37'39"	-0°21'57"	minimum elong	16495 Sep 18 06:06	13°♒58'51"	0°58'09"
minimum elong	16494 Oct 05 20:27	1°♓45'04"	0°21'23"	asc. node	16495 Sep 25 03:27	26°♒29'45"	
asc. node	16494 Oct 08 06:43	6°♓21'04"			16495 Sep 27 00:44	0°♓	
evening rise	16494 Oct 14 20:58	19°♓09'18"		evening rise	16495 Sep 28 10:40	2°♓37'58"	
	16494 Oct 20 13:18	0°♄		evening max el	16495 Oct 14 08:24	28°♓04'11"	18°15'24"
evening max el	16494 Oct 31 01:58	15°♄36'25"	18°49'27"		16495 Oct 16 14:20	0°♄	
retrograde	16494 Nov 08 14:25	19°♄54'45"		retrograde	16495 Oct 21 17:33	1°♄50'23"	
desc. node	16494 Nov 09 16:54	19°♄50'38"		evening set	16495 Oct 23 19:20	1°♄33'07"	
evening set	16494 Nov 10 12:07	19°♄42'39"			16495 Oct 27 03:45	30°♑♓	
inferior conj	16494 Nov 18 16:49	15°♄21'40"	-2°52'16"	desc. node	16495 Oct 27 14:05	29°♓43'13"	
minimum elong	16494 Nov 18 09:50	15°♄34'17"	2°49'00"	inferior conj	16495 Oct 31 07:04	26°♓50'45"	-1°11'44"
min. Earth dist.	16494 Nov 21 16:53	13°♄12'22"	0.56745 AU	minimum elong	16495 Oct 31 04:24	26°♓56'23"	1°10'09"
morning rise	16494 Nov 26 04:36	10°♄32'26"		min. Earth dist.	16495 Nov 03 13:03	24°♓07'27"	0.58817 AU

morning rise	16495 Nov 07 10:01	21° \mathbb{M} 25'11		inferior conj	16496 Oct 12 17:14	9° \mathbb{M} 04'17	0°14'11
direct	16495 Nov 13 20:58	19° \mathbb{M} 33'21		minimum elong	16496 Oct 12 17:41	9° \mathbb{M} 03'11	0°14'20
morning max el	16495 Nov 28 03:50	27° \mathbb{M} 13'01	27°30'46	transit middle	16496 Oct 12 17:41	9° \mathbb{M} 03'11	0°14'20
	16495 Nov 30 20:14	0° \mathbb{Z}		transit begin	16496 Oct 12 16:11	9° \mathbb{M} 06'51	
	16495 Dec 21 00:28	0° \mathbb{Z}		transit end	16496 Oct 12 19:12	8° \mathbb{M} 59'31	
asc. node	16495 Dec 22 03:35	2° \mathbb{Z} 06'47		desc. node	16496 Oct 13 11:20	8° \mathbb{M} 20'09	
morning set	16495 Dec 29 10:30	16° \mathbb{Z} 47'54		min. Earth dist.	16496 Oct 15 18:55	6° \mathbb{M} 06'34	0.61111 AU
	16496 Jan 04 10:47	0° \approx		morning rise	16496 Oct 19 10:10	3° \mathbb{M} 09'46	
				direct	16496 Oct 26 02:30	0° \mathbb{M} 55'04	
superior conj	16496 Jan 05 07:58	1° \approx 58'37	1°36'39	morning max el	16496 Nov 09 07:21	8° \mathbb{M} 48'40	27°58'26
minimum elong	16496 Jan 05 07:12	1° \approx 54'23	1°37'12		16496 Nov 25 15:29	0° \mathbb{Z}	
max. Earth dist.	16496 Jan 05 00:48	1° \approx 18'27	1.30960 AU	asc. node	16496 Dec 08 00:37	21° \mathbb{Z} 43'29	
evening rise	16496 Jan 12 01:55	16° \approx 54'09			16496 Dec 12 03:22	0° \mathbb{Z}	
	16496 Jan 18 11:39	0° \mathbb{H}		morning set	16496 Dec 12 13:06	0° \mathbb{Z} 50'31	
desc. node	16496 Jan 23 13:23	9° \mathbb{H} 16'42		max. Earth dist.	16496 Dec 18 06:36	13° \mathbb{Z} 10'57	1.31220 AU
	16496 Feb 07 00:19	0° \mathbb{Y}					
evening max el	16496 Feb 10 13:17	3° \mathbb{Y} 40'37	26°38'27	superior conj	16496 Dec 19 18:28	16° \mathbb{Z} 29'52	1°29'15
retrograde	16496 Feb 24 13:50	10° \mathbb{Y} 52'52		minimum elong	16496 Dec 19 16:48	16° \mathbb{Z} 20'36	1°29'44
evening set	16496 Mar 01 23:21	9° \mathbb{Y} 12'00			16496 Dec 25 20:38	0° \approx	
min. Earth dist.	16496 Mar 06 02:57	6° \mathbb{Y} 33'48	0.58604 AU	evening rise	16496 Dec 26 11:05	1° \approx 18'27	
inferior conj	16496 Mar 09 07:29	4° \mathbb{Y} 08'27	-3°04'18	desc. node	16497 Jan 09 10:13	27° \approx 55'36	
minimum elong	16496 Mar 09 14:35	3° \mathbb{Y} 54'53	3°01'40		16497 Jan 10 17:57	0° \mathbb{H}	
	16496 Mar 16 01:07	30° \mathbb{R} \mathbb{H}		evening max el	16497 Jan 22 06:09	14° \mathbb{H} 24'44	25°19'53
morning rise	16496 Mar 17 09:24	29° \mathbb{H} 36'01		retrograde	16497 Feb 05 03:11	21° \mathbb{H} 22'52	
direct	16496 Mar 19 08:18	29° \mathbb{H} 22'35		evening set	16497 Feb 10 19:51	20° \mathbb{H} 09'26	
asc. node	16496 Mar 19 01:23	29° \mathbb{H} 22'53		min. Earth dist.	16497 Feb 15 18:49	17° \mathbb{H} 26'54	0.56575 AU
	16496 Mar 22 12:39	0° \mathbb{Y}		inferior conj	16497 Feb 18 11:41	15° \mathbb{H} 39'58	-4°34'07
morning max el	16496 Mar 27 07:50	3° \mathbb{Y} 19'22	18°21'22	minimum elong	16497 Feb 18 21:10	15° \mathbb{H} 24'19	4°31'14
morning set	16496 Apr 12 01:45	28° \mathbb{Y} 24'56		morning rise	16497 Feb 27 01:16	11° \mathbb{H} 28'39	
	16496 Apr 12 21:45	0° \mathbb{B}		direct	16497 Mar 01 02:08	11° \mathbb{H} 16'32	
desc. node	16496 Apr 20 14:25	14° \mathbb{B} 27'26		asc. node	16497 Mar 05 22:41	12° \mathbb{H} 30'04	
				morning max el	16497 Mar 10 09:47	15° \mathbb{H} 49'58	19°10'03
superior conj	16496 Apr 21 10:57	16° \mathbb{B} 01'23	-0°07'11		16497 Mar 20 08:59	0° \mathbb{Y}	
minimum elong	16496 Apr 21 10:23	15° \mathbb{B} 58'47	0°07'29	morning set	16497 Mar 27 01:49	12° \mathbb{Y} 46'41	
behind sun begin	16496 Apr 21 03:52	15° \mathbb{B} 29'02					
behind sun end	16496 Apr 21 16:54	16° \mathbb{B} 28'30		superior conj	16497 Apr 04 10:31	29° \mathbb{Y} 14'48	0°25'34
max. Earth dist.	16496 Apr 29 00:07	29° \mathbb{B} 20'52	1.40934 AU	minimum elong	16497 Apr 04 12:03	29° \mathbb{Y} 22'11	0°25'03
	16496 Apr 29 09:18	0° \mathbb{I}			16497 Apr 04 19:56	0° \mathbb{B}	
evening rise	16496 May 03 11:11	6° \mathbb{I} 48'50		desc. node	16497 Apr 07 11:11	4° \mathbb{B} 59'25	
	16496 May 18 11:29	0° \mathbb{E}		max. Earth dist.	16497 Apr 11 06:18	11° \mathbb{B} 57'12	1.38646 AU
evening max el	16496 Jun 06 16:14	24° \mathbb{E} 31'48	23°17'21	evening rise	16497 Apr 15 00:22	18° \mathbb{B} 33'51	
	16496 Jun 13 23:53	0° \mathbb{Q}			16497 Apr 21 21:04	0° \mathbb{I}	
asc. node	16496 Jun 14 23:36	0° \mathbb{Q} 21'43			16497 May 12 17:53	0° \mathbb{E}	
retrograde	16496 Jun 17 05:04	0° \mathbb{Q} 42'52		evening max el	16497 May 20 05:54	8° \mathbb{E} 27'41	24°38'14
	16496 Jun 20 04:42	30° \mathbb{R} \mathbb{E}		retrograde	16497 May 31 21:38	15° \mathbb{E} 15'59	
evening set	16496 Jun 22 09:09	28° \mathbb{E} 30'45		asc. node	16497 Jun 01 20:37	15° \mathbb{E} 12'08	
min. Earth dist.	16496 Jun 27 05:21	22° \mathbb{E} 46'37	0.69097 AU	evening set	16497 Jun 06 13:11	12° \mathbb{E} 52'18	
inferior conj	16496 Jun 27 17:12	22° \mathbb{E} 05'39	2°57'20	min. Earth dist.	16497 Jun 11 00:45	7° \mathbb{E} 45'29	0.68570 AU
minimum elong	16496 Jun 27 15:56	22° \mathbb{E} 10'00	2°56'34	inferior conj	16497 Jun 12 01:36	6° \mathbb{E} 22'27	2°37'01
morning rise	16496 Jul 02 22:40	15° \mathbb{E} 57'32		minimum elong	16497 Jun 11 23:41	6° \mathbb{E} 28'50	2°36'00
direct	16496 Jul 07 05:55	14° \mathbb{E} 14'20		morning rise	16497 Jun 17 10:22	0° \mathbb{E} 23'37	
morning max el	16496 Jul 15 14:23	19° \mathbb{E} 01'20	20°51'19		16497 Jun 18 00:19	30° \mathbb{R} \mathbb{I}	
desc. node	16496 Jul 17 13:52	21° \mathbb{E} 06'38		direct	16497 Jun 21 06:07	28° \mathbb{I} 59'51	
	16496 Jul 24 16:16	0° \mathbb{Q}			16497 Jun 24 16:45	0° \mathbb{E}	
	16496 Aug 14 01:38	0° \mathbb{M}		morning max el	16497 Jun 28 14:56	3° \mathbb{E} 05'07	19°41'57
morning set	16496 Aug 14 13:50	0° \mathbb{M} 47'20		desc. node	16497 Jul 04 11:01	9° \mathbb{E} 54'33	
max. Earth dist.	16496 Aug 22 13:20	13° \mathbb{M} 24'38	1.43492 AU	greatest brilliancy	16497 Jul 11 21:00	20° \mathbb{E} 17'54	-0.6m
					16497 Jul 18 09:18	0° \mathbb{Q}	
superior conj	16496 Aug 29 10:03	24° \mathbb{M} 41'48	-1°34'35	morning set	16497 Jul 24 18:27	9° \mathbb{Q} 42'50	
minimum elong	16496 Aug 29 17:38	25° \mathbb{M} 13'40	1°33'49	max. Earth dist.	16497 Aug 05 03:31	27° \mathbb{Q} 23'47	1.45029 AU
	16496 Sep 01 13:14	0° \mathbb{L}			16497 Aug 06 19:00	0° \mathbb{M}	
evening rise	16496 Sep 10 10:18	15° \mathbb{L} 29'30					
asc. node	16496 Sep 11 00:10	16° \mathbb{L} 30'51		superior conj	16497 Aug 09 19:26	4° \mathbb{M} 48'44	-2°02'11
	16496 Sep 18 19:07	0° \mathbb{M}		minimum elong	16497 Aug 10 02:28	5° \mathbb{M} 16'58	2°02'04
evening max el	16496 Sep 26 21:04	11° \mathbb{M} 06'19	18°01'32	evening rise	16497 Aug 23 14:39	27° \mathbb{M} 30'57	
retrograde	16496 Oct 03 13:07	14° \mathbb{M} 33'02			16497 Aug 25 02:07	0° \mathbb{L}	
evening set	16496 Oct 05 22:13	14° \mathbb{M} 06'33		asc. node	16497 Aug 28 20:54	6° \mathbb{L} 20'23	

evening max el	16497 Sep 10 12:05	24°♄33'31	18°06'25		16498 Aug 18 11:50	0°♄	
retrograde	16497 Sep 16 20:56	27°♄53'58		evening max el	16498 Aug 25 02:01	8°♄16'38	18°29'07
evening set	16497 Sep 19 14:35	27°♄14'45		retrograde	16498 Aug 31 12:55	11°♄44'16	
inferior conj	16497 Sep 25 19:32	21°♄54'50	1°20'59	evening set	16498 Sep 03 15:44	10°♄49'35	
minimum elong	16497 Sep 25 21:30	21°♄49'25	1°20'29	inferior conj	16498 Sep 09 09:59	5°♄14'16	2°09'28
min. Earth dist.	16497 Sep 28 10:44	19°♄02'46	0.63358 AU	minimum elong	16498 Sep 09 12:17	5°♄07'20	2°08'51
desc. node	16497 Sep 30 08:36	17°♄08'56		min. Earth dist.	16498 Sep 11 11:58	2°♄44'14	0.65357 AU
morning rise	16497 Oct 02 02:19	15°♄41'15			16498 Sep 14 00:36	30°♄	
direct	16497 Oct 08 18:00	13°♄11'14		morning rise	16498 Sep 15 07:34	28°♄50'27	
morning max el	16497 Oct 22 15:58	21°♄09'17	27°47'33	desc. node	16498 Sep 17 05:54	27°♄29'26	
	16497 Oct 30 08:54	0°♄		direct	16498 Sep 21 17:37	26°♄13'56	
	16497 Nov 18 18:14	0°♄			16498 Sep 30 13:35	0°♄	
asc. node	16497 Nov 24 21:36	11°♄36'37		morning max el	16498 Oct 05 03:08	4°♄04'52	27°03'52
morning set	16497 Nov 26 08:21	14°♄30'08			16498 Oct 24 20:01	0°♄	
max. Earth dist.	16497 Dec 01 06:57	24°♄46'48	1.32061 AU	morning set	16498 Nov 09 17:32	27°♄41'04	
	16497 Dec 03 16:59	0°♄			16498 Nov 10 22:04	0°♄	
				asc. node	16498 Nov 11 18:32	1°♄40'56	
superior conj	16497 Dec 04 02:10	0°♄50'02	1°15'42	max. Earth dist.	16498 Nov 13 22:56	6°♄04'13	1.33469 AU
minimum elong	16497 Dec 03 23:54	0°♄37'41	1°16'01				
evening rise	16497 Dec 10 21:46	15°♄45'10		superior conj	16498 Nov 18 04:49	14°♄53'47	0°55'54
	16497 Dec 17 20:40	0°♄		minimum elong	16498 Nov 18 02:29	14°♄41'25	0°56'06
desc. node	16497 Dec 27 07:07	15°♄42'40		evening rise	16498 Nov 25 08:09	0°♄10'18	
evening max el	16498 Jan 03 16:32	24°♄29'04	23°40'14		16498 Nov 25 06:12	0°♄	
	16498 Jan 11 15:36	0°♄			16498 Dec 12 05:02	0°♄	
retrograde	16498 Jan 17 02:29	1°♄07'30		desc. node	16498 Dec 14 04:05	2°♄20'21	
evening set	16498 Jan 21 17:42	0°♄21'06		evening max el	16498 Dec 16 03:45	4°♄25'35	21°57'21
	16498 Jan 22 17:33	30°♄		retrograde	16498 Dec 28 14:25	10°♄34'37	
min. Earth dist.	16498 Jan 28 03:50	27°♄16'36	0.55084 AU	evening set	16498 Dec 31 23:17	10°♄09'17	
inferior conj	16498 Jan 29 19:07	26°♄19'02	-5°42'11	inferior conj	16499 Jan 09 12:09	6°♄19'03	-6°01'23
minimum elong	16498 Jan 30 01:53	26°♄09'07	5°40'50	minimum elong	16499 Jan 09 10:11	6°♄21'48	6°00'47
morning rise	16498 Feb 07 11:33	22°♄24'48		min. Earth dist.	16499 Jan 09 09:07	6°♄23'18	0.54393 AU
direct	16498 Feb 10 00:45	22°♄08'44		morning rise	16499 Jan 17 21:52	2°♄31'35	
asc. node	16498 Feb 20 19:59	27°♄20'19		direct	16499 Jan 21 10:10	2°♄04'25	
morning max el	16498 Feb 20 22:15	27°♄25'47	20°21'58	morning max el	16499 Feb 02 19:34	8°♄04'41	21°56'08
	16498 Feb 23 07:46	0°♄		asc. node	16499 Feb 07 17:16	13°♄38'03	
morning set	16498 Mar 11 08:17	27°♄22'39			16499 Feb 17 19:08	0°♄	
	16498 Mar 12 14:52	0°♄		morning set	16499 Feb 23 18:31	12°♄05'20	
superior conj	16498 Mar 18 23:16	13°♄02'00	0°52'36	superior conj	16499 Mar 02 21:33	27°♄13'18	1°13'22
minimum elong	16498 Mar 19 01:41	13°♄14'16	0°52'08	minimum elong	16499 Mar 02 23:58	27°♄26'01	1°13'08
max. Earth dist.	16498 Mar 24 13:30	24°♄01'27	1.36396 AU		16499 Mar 04 05:26	0°♄	
desc. node	16498 Mar 25 07:56	25°♄28'54		max. Earth dist.	16499 Mar 07 01:57	5°♄51'24	1.34394 AU
	16498 Mar 27 18:10	0°♄		evening rise	16499 Mar 11 07:56	14°♄13'24	
evening rise	16498 Mar 28 08:27	1°♄05'15		desc. node	16499 Mar 12 04:40	15°♄52'08	
	16498 Apr 15 00:24	0°♄			16499 Mar 20 01:48	0°♄	
evening max el	16498 May 02 19:32	22°♄21'15	25°51'58		16499 Apr 09 18:34	0°♄	
retrograde	16498 May 15 09:30	29°♄35'37		evening max el	16499 Apr 15 09:20	6°♄04'58	26°50'59
asc. node	16498 May 19 17:43	28°♄20'20		retrograde	16499 Apr 28 15:50	13°♄33'56	
evening set	16498 May 21 11:52	27°♄04'44		evening set	16499 May 05 03:19	11°♄01'21	
min. Earth dist.	16498 May 25 16:27	22°♄34'30	0.67568 AU	asc. node	16499 May 06 14:51	9°♄43'25	
inferior conj	16498 May 27 06:26	20°♄34'29	2°05'35	min. Earth dist.	16499 May 09 02:19	7°♄05'48	0.66119 AU
minimum elong	16498 May 27 04:14	20°♄41'26	2°04'23	inferior conj	16499 May 11 05:24	4°♄36'22	1°21'55
morning rise	16498 Jun 01 21:13	14°♄46'22		minimum elong	16499 May 11 03:31	4°♄41'54	1°20'45
direct	16498 Jun 05 06:12	13°♄41'21			16499 May 15 17:09	30°♄	
morning max el	16498 Jun 11 22:37	17°♄16'44	18°47'51	morning rise	16499 May 17 05:03	29°♄00'41	
desc. node	16498 Jun 21 08:07	29°♄17'18		direct	16499 May 20 04:04	28°♄12'33	
	16498 Jun 21 19:45	0°♄			16499 May 24 17:46	0°♄	
greatest brilliancy	16498 Jun 25 17:21	5°♄51'34	-0.8m	morning max el	16499 May 26 12:09	1°♄31'13	18°10'23
morning set	16498 Jul 04 06:16	19°♄02'47		desc. node	16499 Jun 08 05:10	19°♄05'37	
	16498 Jul 11 07:23	0°♄		morning set	16499 Jun 14 17:07	29°♄29'55	
max. Earth dist.	16498 Jul 18 22:22	11°♄52'17	1.45885 AU		16499 Jun 15 00:37	0°♄	
superior conj	16498 Jul 20 10:04	14°♄11'40	-2°14'18	superior conj	16499 Jun 29 19:36	23°♄27'15	-2°06'25
minimum elong	16498 Jul 20 11:04	14°♄15'34	2°14'46	minimum elong	16499 Jun 29 13:17	23°♄02'34	2°06'42
	16498 Jul 30 10:54	0°♄		max. Earth dist.	16499 Jul 01 19:13	26°♄33'12	1.45988 AU
evening rise	16498 Aug 04 18:55	8°♄30'53			16499 Jul 04 00:19	0°♄	
asc. node	16498 Aug 15 17:39	25°♄53'00		evening rise	16499 Jul 15 22:43	18°♄30'43	

	16499 Jul 23 09:26	0°♎			16500 Jul 17 11:14	0°♎	
greatest brilliancy	16499 Jul 27 07:32	5°♎57'19	-0.7m	asc. node	16500 Jul 20 11:13	3°♎39'15	
asc. node	16499 Aug 02 14:25	15°♎01'56		evening max el	16500 Jul 22 16:41	6°♎02'37	20°03'59
evening max el	16499 Aug 08 12:08	22°♎07'54	19°08'43	retrograde	16500 Jul 30 08:32	10°♎22'35	
retrograde	16499 Aug 15 09:39	25°♎55'45		evening set	16500 Aug 03 07:22	8°♎52'54	
evening set	16499 Aug 18 22:10	24°♎43'55		inferior conj	16500 Aug 08 14:11	2°♎51'58	3°00'55
inferior conj	16499 Aug 24 09:09	18°♎55'01	2°42'01	minimum elong	16500 Aug 08 15:17	2°♎48'14	3°00'28
minimum elong	16499 Aug 24 11:02	18°♎48'54	2°41'29	min. Earth dist.	16500 Aug 09 12:27	1°♎36'22	0.68202 AU
min. Earth dist.	16499 Aug 25 21:11	16°♎58'33	0.66994 AU		16500 Aug 10 17:36	30°♎	
morning rise	16499 Aug 29 23:11	12°♎27'51		morning rise	16500 Aug 13 22:47	26°♎26'30	
desc. node	16499 Sep 04 03:13	9°♎56'04		direct	16500 Aug 19 13:00	24°♎00'17	
direct	16499 Sep 05 00:17	9°♎53'02		desc. node	16500 Aug 22 00:30	24°♎24'52	
morning max el	16499 Sep 17 14:45	17°♎23'09	25°55'35		16500 Aug 30 03:47	0°♎	
	16499 Sep 28 04:36	0°♎		morning max el	16500 Aug 31 01:53	0°♎54'36	24°32'08
	16499 Oct 17 18:47	0°♎			16500 Sep 22 02:44	0°♎	
morning set	16499 Oct 23 13:08	10°♎14'50		morning set	16500 Oct 05 15:16	22°♎03'04	
max. Earth dist.	16499 Oct 27 05:22	17°♎09'12	1.35382 AU	max. Earth dist.	16500 Oct 09 04:55	28°♎22'52	1.37667 AU
asc. node	16499 Oct 29 15:22	21°♎51'12			16500 Oct 10 02:19	0°♎	
superior conj	16499 Nov 01 23:42	28°♎33'25	0°29'56	superior conj	16500 Oct 16 07:38	11°♎41'48	-0°01'43
minimum elong	16499 Nov 01 22:04	28°♎25'07	0°30'07	minimum elong	16500 Oct 16 07:43	11°♎42'14	0°01'19
	16499 Nov 02 16:41	0°♎		behind sun begin	16500 Oct 16 01:00	11°♎09'45	
evening rise	16499 Nov 09 16:07	14°♎27'51		behind sun end	16500 Oct 16 14:26	12°♎14'47	
	16499 Nov 17 14:05	0°♎		asc. node	16500 Oct 16 12:11	12°♎03'53	
evening max el	16499 Nov 28 01:17	14°♎50'45	20°27'30	evening rise	16500 Oct 24 19:24	28°♎32'26	
desc. node	16499 Dec 01 01:06	17°♎25'26			16500 Oct 25 12:57	0°♎	
retrograde	16499 Dec 09 00:58	20°♎18'26		evening max el	16500 Nov 10 13:30	26°♎05'22	19°18'45
evening set	16499 Dec 11 09:15	20°♎04'39			16500 Nov 16 01:36	0°♎	
inferior conj	16499 Dec 20 04:05	16°♎10'27	-5°19'10	desc. node	16500 Nov 17 22:09	0°♎34'38	
minimum elong	16499 Dec 19 18:55	16°♎23'52	5°16'37	retrograde	16500 Nov 19 22:16	0°♎47'10	
min. Earth dist.	16499 Dec 21 14:33	15°♎19'59	0.54634 AU	evening set	16500 Nov 21 20:17	0°♎36'13	
morning rise	16499 Dec 28 04:10	12°♎11'10			16500 Nov 23 23:36	30°♎	
direct	16500 Jan 01 18:43	11°♎25'27		inferior conj	16500 Nov 30 09:01	26°♎27'16	-3°51'25
morning max el	16500 Jan 15 06:02	18°♎02'50	23°44'49	minimum elong	16500 Nov 29 23:52	26°♎42'23	3°47'42
	16500 Jan 24 21:45	0°♎		min. Earth dist.	16500 Dec 02 23:40	24°♎43'58	0.55769 AU
asc. node	16500 Jan 25 14:30	1°♎04'10		morning rise	16500 Dec 08 01:10	21°♎58'36	
morning set	16500 Feb 08 06:23	26°♎48'12		direct	16500 Dec 13 14:16	20°♎48'21	
	16500 Feb 09 17:57	0°♎		morning max el	16500 Dec 27 14:52	27°♎54'53	25°31'29
					16500 Dec 29 16:22	0°♎	
superior conj	16500 Feb 15 02:24	11°♎40'12	1°27'48	asc. node	16501 Jan 12 11:42	19°♎22'17	
minimum elong	16500 Feb 15 04:13	11°♎50'05	1°27'53		16501 Jan 18 05:32	0°♎	
max. Earth dist.	16500 Feb 17 21:43	17°♎41'52	1.32786 AU	morning set	16501 Jan 23 18:00	11°♎26'10	
evening rise	16500 Feb 22 19:25	27°♎49'41					
	16500 Feb 23 21:40	0°♎		superior conj	16501 Jan 30 11:24	26°♎15'55	1°36'02
desc. node	16500 Feb 27 01:24	6°♎04'36		minimum elong	16501 Jan 30 12:17	26°♎20'52	1°36'23
	16500 Mar 13 07:23	0°♎		max. Earth dist.	16501 Feb 01 00:14	29°♎39'25	1.31663 AU
evening max el	16500 Mar 28 22:19	19°♎28'17	27°27'53		16501 Feb 01 03:59	0°♎	
retrograde	16500 Apr 11 15:47	27°♎01'45		evening rise	16501 Feb 06 15:58	11°♎47'03	
evening set	16500 Apr 18 09:21	24°♎34'19		desc. node	16501 Feb 13 22:08	26°♎01'00	
min. Earth dist.	16500 Apr 22 04:32	21°♎09'45	0.64276 AU		16501 Feb 16 02:59	0°♎	
asc. node	16500 Apr 23 12:02	19°♎46'58			16501 Mar 09 01:36	0°♎	
inferior conj	16500 Apr 24 19:52	18°♎21'40	0°24'44	evening max el	16501 Mar 11 08:44	2°♎19'15	27°35'46
minimum elong	16500 Apr 24 19:10	18°♎23'32	0°24'02	retrograde	16501 Mar 25 08:14	9°♎48'27	
morning rise	16500 May 01 07:12	13°♎00'23		evening set	16501 Apr 01 03:23	7°♎33'56	
direct	16500 May 03 21:10	12°♎26'27		min. Earth dist.	16501 Apr 04 21:36	4°♎34'25	0.62145 AU
morning max el	16500 May 10 05:10	15°♎41'01	17°50'04	inferior conj	16501 Apr 07 22:36	1°♎41'56	-0°46'51
	16500 May 20 13:12	0°♎		minimum elong	16501 Apr 08 00:13	1°♎38'07	0°46'29
desc. node	16500 May 26 02:09	9°♎12'32			16501 Apr 09 18:48	30°♎	
morning set	16500 May 27 07:09	11°♎14'20		asc. node	16501 Apr 10 09:16	29°♎28'47	
	16500 Jun 07 15:23	0°♎		morning rise	16501 Apr 15 00:10	26°♎37'25	
				direct	16501 Apr 17 06:22	26°♎14'17	
superior conj	16500 Jun 09 16:52	3°♎19'25	-1°41'07	morning max el	16501 Apr 23 22:37	29°♎36'31	17°47'20
minimum elong	16500 Jun 09 08:23	2°♎45'20	1°40'54		16501 Apr 24 08:03	0°♎	
max. Earth dist.	16500 Jun 14 14:57	11°♎08'49	1.45342 AU	morning set	16501 May 09 20:23	24°♎03'25	
evening rise	16500 Jun 25 10:52	27°♎56'19		desc. node	16501 May 12 23:02	29°♎31'51	
	16500 Jun 26 19:17	0°♎			16501 May 13 05:27	0°♎	
greatest brilliancy	16500 Jul 10 02:47	19°♎52'06	-0.6m				

superior conj	16501 May 21 11:43	14° Π 11'09	-1°05'52	max. Earth dist.	16502 May 10 19:41	9° Π 06'07	1.42175 AU
minimum elong	16501 May 21 05:42	13° Π 45'56	1°05'35	evening rise	16502 May 16 03:47	17° Π 48'45	
max. Earth dist.	16501 May 28 07:22	25° Π 23'21	1.44025 AU		16502 May 23 23:41	0° Ξ	
	16501 May 31 04:39	0° Ξ			16502 Jun 14 18:40	0° Ω	
evening rise	16501 Jun 04 23:45	7° Ξ 30'30		evening max el	16502 Jun 18 08:36	3° Ω 52'22	22°30'31
	16501 Jun 20 01:16	0° Ω		asc. node	16502 Jun 24 04:58	8° Ω 29'49	
evening max el	16501 Jul 05 15:09	19° Ω 57'29	21°12'36	retrograde	16502 Jun 28 04:47	9° Ω 37'44	
asc. node	16501 Jul 07 08:04	21° Ω 33'16		evening set	16502 Jul 03 02:13	7° Ω 34'00	
retrograde	16501 Jul 14 07:27	24° Ω 58'20		inferior conj	16502 Jul 08 08:41	1° Ω 13'24	3°04'12
evening set	16501 Jul 18 17:18	23° Ω 11'01		minimum elong	16502 Jul 08 07:54	1° Ω 16'07	3°03'35
inferior conj	16501 Jul 23 22:42	16° Ω 59'27	3°07'58	min. Earth dist.	16502 Jul 08 04:22	1° Ω 28'25	0.69186 AU
minimum elong	16501 Jul 23 22:52	16° Ω 58'54	3°07'29		16502 Jul 09 05:51	30° \mathcal{R} Ξ	
min. Earth dist.	16501 Jul 24 07:34	16° Ω 28'36	0.68939 AU	morning rise	16502 Jul 13 13:26	25° Ξ 00'31	
morning rise	16501 Jul 29 04:10	10° Ω 39'10		direct	16502 Jul 18 03:41	23° Ξ 06'05	
direct	16501 Aug 03 06:33	8° Ω 27'00		desc. node	16502 Jul 26 19:02	27° Ξ 58'27	
desc. node	16501 Aug 08 21:47	10° Ω 33'24		morning max el	16502 Jul 27 04:01	28° Ξ 20'36	21°36'55
morning max el	16501 Aug 13 13:23	14° Ω 33'27	23°03'05		16502 Jul 28 18:03	0° Ω	
	16501 Aug 26 03:06	0° \mathcal{M}			16502 Aug 19 17:26	0° \mathcal{M}	
	16501 Sep 15 00:54	0° $\underline{\Omega}$		morning set	16502 Aug 28 00:41	12° \mathcal{M} 49'10	
morning set	16501 Sep 16 19:49	2° $\underline{\Omega}$ 55'59		max. Earth dist.	16502 Sep 03 08:27	23° \mathcal{M} 00'33	1.42364 AU
max. Earth dist.	16501 Sep 21 03:58	10° $\underline{\Omega}$ 14'02	1.40090 AU		16502 Sep 07 13:07	0° $\underline{\Omega}$	
superior conj	16501 Sep 29 00:39	24° $\underline{\Omega}$ 09'47	-0°37'32	superior conj	16502 Sep 10 22:22	5° $\underline{\Omega}$ 47'19	-1°14'35
minimum elong	16501 Sep 29 03:32	24° $\underline{\Omega}$ 23'00	0°36'49	minimum elong	16502 Sep 11 04:32	6° $\underline{\Omega}$ 14'03	1°13'43
	16501 Oct 02 04:14	0° \mathcal{M}		asc. node	16502 Sep 20 05:41	22° $\underline{\Omega}$ 21'06	
asc. node	16501 Oct 03 08:57	2° \mathcal{M} 15'06		evening rise	16502 Sep 21 23:23	25° $\underline{\Omega}$ 30'57	
evening rise	16501 Oct 08 15:05	12° \mathcal{M} 16'38			16502 Sep 24 10:31	0° \mathcal{M}	
	16501 Oct 18 10:12	0° \mathcal{X}		evening max el	16502 Oct 08 00:13	20° \mathcal{M} 53'21	18°07'07
evening max el	16501 Oct 24 14:32	8° \mathcal{X} 09'19	18°32'24	retrograde	16502 Oct 15 00:36	24° \mathcal{M} 29'20	
retrograde	16501 Nov 01 13:59	12° \mathcal{X} 12'03		evening set	16502 Oct 17 05:25	24° \mathcal{M} 08'29	
evening set	16501 Nov 03 12:54	11° \mathcal{X} 58'15		desc. node	16502 Oct 22 16:28	20° \mathcal{M} 47'26	
desc. node	16501 Nov 04 19:16	11° \mathcal{X} 35'25		inferior conj	16502 Oct 24 09:48	19° \mathcal{M} 17'11	-0°33'02
inferior conj	16501 Nov 11 10:40	7° \mathcal{X} 28'29	-2°08'25	minimum elong	16502 Oct 24 08:39	19° \mathcal{M} 19'45	0°32'09
minimum elong	16501 Nov 11 05:34	7° \mathcal{X} 38'19	2°05'50	min. Earth dist.	16502 Oct 27 14:53	16° \mathcal{M} 25'30	0.59789 AU
min. Earth dist.	16501 Nov 14 15:00	5° \mathcal{X} 02'21	0.57587 AU	morning rise	16502 Oct 31 08:37	13° \mathcal{M} 38'30	
morning rise	16501 Nov 18 18:54	2° \mathcal{X} 23'27		direct	16502 Nov 06 22:48	11° \mathcal{M} 36'22	
direct	16501 Nov 25 00:07	0° \mathcal{X} 46'19		morning max el	16502 Nov 21 04:59	19° \mathcal{M} 21'55	27°47'26
morning max el	16501 Dec 09 05:43	8° \mathcal{X} 14'59	26°56'55		16502 Nov 30 06:34	0° \mathcal{X}	
	16501 Dec 25 14:44	0° Ξ		asc. node	16502 Dec 17 05:56	27° \mathcal{X} 43'58	
asc. node	16501 Dec 30 08:50	8° Ξ 19'13			16502 Dec 18 10:01	0° Ξ	
morning set	16502 Jan 08 03:39	25° Ξ 54'43		morning set	16502 Dec 23 09:25	10° Ξ 08'14	
	16502 Jan 10 00:50	0° \approx		max. Earth dist.	16502 Dec 29 14:31	23° Ξ 42'33	1.31008 AU
superior conj	16502 Jan 14 22:30	10° \approx 54'39	1°38'10	superior conj	16502 Dec 30 09:45	25° Ξ 30'03	1°34'16
minimum elong	16502 Jan 14 22:20	10° \approx 53'45	1°38'41	minimum elong	16502 Dec 30 08:35	25° Ξ 23'30	1°34'47
max. Earth dist.	16502 Jan 15 07:04	11° \approx 42'37	1.31063 AU		16503 Jan 01 09:58	0° \approx	
evening rise	16502 Jan 21 19:06	25° \approx 59'40		evening rise	16503 Jan 06 02:37	10° \approx 21'10	
	16502 Jan 23 16:54	0° \mathcal{H}			16503 Jan 15 23:49	0° \mathcal{H}	
desc. node	16502 Jan 31 18:52	15° \mathcal{H} 34'57		desc. node	16503 Jan 18 15:39	4° \mathcal{H} 37'06	
	16502 Feb 09 16:49	0° \mathcal{Y}		evening max el	16503 Feb 03 12:07	25° \mathcal{H} 40'56	26°08'30
evening max el	16502 Feb 21 14:16	14° \mathcal{Y} 26'44	27°09'36		16503 Feb 08 22:41	0° \mathcal{Y}	
retrograde	16502 Mar 07 15:25	21° \mathcal{Y} 45'26		retrograde	16503 Feb 17 11:23	2° \mathcal{Y} 46'37	
evening set	16502 Mar 14 06:24	19° \mathcal{Y} 50'59		evening set	16503 Feb 23 14:57	1° \mathcal{Y} 17'18	
min. Earth dist.	16502 Mar 18 04:34	17° \mathcal{Y} 08'05	0.59884 AU		16503 Feb 25 23:50	30° \mathcal{R} \mathcal{H}	
inferior conj	16502 Mar 21 10:02	14° \mathcal{Y} 28'06	-2°11'34	min. Earth dist.	16503 Feb 28 01:16	28° \mathcal{H} 39'17	0.57701 AU
minimum elong	16502 Mar 21 15:02	14° \mathcal{Y} 17'45	2°09'42	inferior conj	16503 Mar 03 02:22	26° \mathcal{H} 28'51	-3°43'27
asc. node	16502 Mar 28 06:31	9° \mathcal{Y} 59'01		minimum elong	16503 Mar 03 10:51	26° \mathcal{H} 13'42	3°40'29
morning rise	16502 Mar 29 03:13	9° \mathcal{Y} 42'57		morning rise	16503 Mar 11 09:59	22° \mathcal{H} 05'20	
direct	16502 Mar 31 03:47	9° \mathcal{Y} 26'59		direct	16503 Mar 13 08:57	21° \mathcal{H} 52'51	
morning max el	16502 Apr 07 13:10	13° \mathcal{Y} 08'07	18°03'11	asc. node	16503 Mar 15 03:49	22° \mathcal{H} 03'42	
	16502 Apr 18 22:29	0° \mathcal{B}		morning max el	16503 Mar 21 20:52	26° \mathcal{H} 03'51	18°39'20
morning set	16502 Apr 23 03:03	7° \mathcal{B} 40'16			16503 Mar 25 06:30	0° \mathcal{Y}	
desc. node	16502 Apr 29 19:53	19° \mathcal{B} 59'21		morning set	16503 Apr 06 21:55	21° \mathcal{Y} 48'55	
					16503 Apr 11 03:24	0° \mathcal{B}	
superior conj	16502 May 03 05:44	26° \mathcal{B} 05'31	-0°28'03	superior conj	16503 Apr 15 19:45	8° \mathcal{B} 53'18	0°07'23
minimum elong	16502 May 03 03:23	25° \mathcal{B} 55'07	0°28'08	minimum elong	16503 Apr 15 20:14	8° \mathcal{B} 55'33	0°06'57
	16502 May 05 11:15	0° Π					

behind sun begin	16503 Apr 15 13:55	8°♄26'01		minimum elong	16504 Mar 29 03:28	22°♄32'34	0°37'15
behind sun end	16503 Apr 16 02:34	9°♄25'01			16504 Apr 02 00:18	0°♄	
desc. node	16503 Apr 16 16:41	10°♄30'33		desc. node	16504 Apr 02 13:26	1°♄01'54	
max. Earth dist.	16503 Apr 23 03:48	22°♄07'44	1.39975 AU	max. Earth dist.	16504 Apr 04 09:51	4°♄28'31	1.37668 AU
evening rise	16503 Apr 27 04:44	29°♄02'02		evening rise	16504 Apr 08 02:17	11°♄07'22	
	16503 Apr 27 18:36	0°♄			16504 Apr 19 11:26	0°♄	
	16503 May 17 10:36	0°♄			16504 May 11 20:17	0°♄	
evening max el	16503 May 31 22:57	17°♄47'36	23°52'13	evening max el	16504 May 13 12:17	1°♄42'11	25°10'56
asc. node	16503 Jun 11 01:56	24°♄11'43		retrograde	16504 May 25 14:05	8°♄43'26	
retrograde	16503 Jun 11 23:22	24°♄15'05		asc. node	16504 May 27 22:59	8°♄20'15	
evening set	16503 Jun 17 08:31	21°♄57'26		evening set	16504 May 31 10:29	6°♄15'45	
min. Earth dist.	16503 Jun 22 00:47	16°♄29'29	0.68933 AU	min. Earth dist.	16504 Jun 04 18:46	1°♄24'56	0.68196 AU
inferior conj	16503 Jun 22 18:12	15°♄30'05	2°50'01		16504 Jun 05 20:45	30°♄	
minimum elong	16503 Jun 22 16:37	15°♄35'27	2°49'09	inferior conj	16504 Jun 06 01:19	29°♄45'03	2°25'06
morning rise	16503 Jun 28 00:46	9°♄26'02		minimum elong	16504 Jun 05 23:13	29°♄51'54	2°23'59
direct	16503 Jul 02 03:06	7°♄51'05		morning rise	16504 Jun 11 12:20	23°♄50'53	
morning max el	16503 Jul 10 00:34	12°♄18'35	20°20'11	direct	16504 Jun 15 03:19	22°♄35'27	
desc. node	16503 Jul 13 16:15	16°♄20'37		morning max el	16504 Jun 22 04:19	26°♄26'28	19°17'02
	16503 Jul 23 18:57	0°♄			16504 Jun 25 09:48	0°♄	
morning set	16503 Aug 07 10:23	21°♄55'58		desc. node	16504 Jun 29 13:24	5°♄24'38	
	16503 Aug 12 15:01	0°♄		greatest brilliancy	16504 Jul 04 21:28	13°♄04'51	-0.7m
max. Earth dist.	16503 Aug 16 19:46	6°♄38'32	1.44220 AU		16504 Jul 16 01:13	0°♄	
				morning set	16504 Jul 16 15:31	0°♄54'58	
superior conj	16503 Aug 22 21:09	16°♄27'02	-1°47'42	max. Earth dist.	16504 Jul 29 12:11	20°♄51'58	1.45472 AU
minimum elong	16503 Aug 23 05:08	16°♄59'48	1°47'10				
	16503 Aug 30 23:10	0°♄		superior conj	16504 Aug 01 21:21	26°♄11'33	-2°09'38
evening rise	16503 Sep 04 15:33	8°♄03'36		minimum elong	16504 Aug 02 02:27	26°♄31'41	2°09'49
asc. node	16503 Sep 07 02:25	12°♄18'16			16504 Aug 04 06:57	0°♄	
	16503 Sep 18 02:27	0°♄		evening rise	16504 Aug 16 10:07	19°♄39'56	
evening max el	16503 Sep 21 14:20	4°♄07'38	18°01'21		16504 Aug 22 17:10	0°♄	
retrograde	16503 Sep 28 02:12	7°♄30'19		asc. node	16504 Aug 23 23:09	2°♄01'21	
evening set	16503 Sep 30 14:49	6°♄58'46		evening max el	16504 Sep 04 05:11	17°♄42'10	18°13'56
inferior conj	16503 Oct 07 03:25	1°♄48'21	0°44'48	retrograde	16504 Sep 10 14:01	21°♄04'29	
minimum elong	16503 Oct 07 04:41	1°♄45'05	0°44'37	evening set	16504 Sep 13 11:23	20°♄19'06	
	16503 Oct 08 21:30	30°♄		inferior conj	16504 Sep 19 11:22	14°♄52'23	1°43'37
desc. node	16503 Oct 09 13:44	29°♄18'56		minimum elong	16504 Sep 19 13:35	14°♄46'00	1°43'01
min. Earth dist.	16503 Oct 10 00:59	28°♄51'03	0.62082 AU	min. Earth dist.	16504 Sep 21 21:08	12°♄07'47	0.64238 AU
morning rise	16503 Oct 13 15:59	25°♄44'28		desc. node	16504 Sep 25 11:02	8°♄39'05	
direct	16503 Oct 20 08:31	23°♄22'35		morning rise	16504 Sep 25 14:02	8°♄33'08	
	16503 Nov 02 02:19	0°♄		direct	16504 Oct 02 03:40	5°♄59'16	
morning max el	16503 Nov 03 11:15	1°♄19'00	27°58'22	morning max el	16504 Oct 15 21:29	13°♄56'45	27°32'34
	16503 Nov 24 12:22	0°♄			16504 Oct 28 22:22	0°♄	
asc. node	16503 Dec 04 02:58	17°♄28'57			16504 Nov 16 03:10	0°♄	
morning set	16503 Dec 07 09:14	24°♄02'22		asc. node	16504 Nov 19 23:56	7°♄27'36	
	16503 Dec 10 05:31	0°♄		morning set	16504 Nov 20 00:37	7°♄30'58	
max. Earth dist.	16503 Dec 12 18:45	5°♄30'29	1.31515 AU	max. Earth dist.	16504 Nov 24 15:49	16°♄58'26	1.32591 AU
superior conj	16503 Dec 14 19:20	9°♄57'29	1°24'16	superior conj	16504 Nov 28 01:10	24°♄11'25	1°08'05
minimum elong	16503 Dec 14 17:22	9°♄46'36	1°24'41	minimum elong	16504 Nov 27 22:47	23°♄58'38	1°08'20
evening rise	16503 Dec 21 12:42	24°♄47'28			16504 Nov 30 17:24	0°♄	
	16503 Dec 23 23:19	0°♄		evening rise	16504 Dec 04 23:28	9°♄13'57	
desc. node	16504 Jan 05 12:30	22°♄56'05			16504 Dec 15 13:41	0°♄	
	16504 Jan 10 14:06	0°♄		desc. node	16504 Dec 22 09:25	10°♄16'28	
evening max el	16504 Jan 16 01:32	6°♄04'49	24°38'53	evening max el	16504 Dec 27 10:56	16°♄00'58	22°55'42
retrograde	16504 Jan 29 18:42	12°♄55'35		retrograde	16505 Jan 09 13:05	22°♄29'10	
evening set	16504 Feb 04 01:49	11°♄53'39		evening set	16505 Jan 13 15:16	21°♄52'49	
min. Earth dist.	16504 Feb 09 13:31	9°♄04'18	0.55866 AU	min. Earth dist.	16505 Jan 20 20:42	18°♄32'45	0.54678 AU
inferior conj	16504 Feb 11 21:24	7°♄37'16	-5°07'15	inferior conj	16505 Jan 21 21:30	17°♄57'28	-5°57'38
minimum elong	16504 Feb 12 06:34	7°♄22'59	5°04'52	minimum elong	16505 Jan 22 01:01	17°♄52'26	5°56'57
morning rise	16504 Feb 20 13:35	3°♄34'26		morning rise	16505 Jan 30 11:59	14°♄07'52	
direct	16504 Feb 22 18:19	3°♄21'23		direct	16505 Feb 02 09:40	13°♄48'14	
asc. node	16504 Mar 01 01:08	5°♄56'06		morning max el	16505 Feb 13 23:40	19°♄24'28	20°59'34
morning max el	16504 Mar 03 17:32	8°♄12'14	19°37'49	asc. node	16505 Feb 15 22:26	21°♄26'18	
	16504 Mar 17 21:00	0°♄			16505 Feb 22 05:53	0°♄	
morning set	16504 Mar 21 01:02	6°♄17'37		morning set	16505 Mar 05 09:24	20°♄57'40	
					16505 Mar 09 17:06	0°♄	
superior conj	16504 Mar 29 01:25	22°♄22'31	0°37'48				

superior conj	16505 Mar 12 18:40	6° Υ 21'55	1°02'11	morning set	16506 Feb 17 20:33	5° H 41'16	
minimum elong	16505 Mar 12 21:11	6° Υ 34'51	1°01'47				
max. Earth dist.	16505 Mar 17 18:31	16° Υ 23'33	1.35499 AU	superior conj	16506 Feb 24 20:04	20° H 41'01	1°20'14
desc. node	16505 Mar 20 10:11	21° Υ 29'45		minimum elong	16506 Feb 24 22:17	20° H 52'53	1°20'09
evening rise	16505 Mar 21 17:25	23° Υ 56'19		max. Earth dist.	16506 Feb 28 09:52	28° H 12'07	1.33657 AU
	16505 Mar 25 01:15	0° B			16506 Mar 01 06:50	0° Υ	
	16505 Apr 13 02:12	0° Π		evening rise	16506 Mar 04 22:26	7° Υ 18'07	
evening max el	16505 Apr 26 01:54	15° Π 32'43	26°19'20	desc. node	16506 Mar 07 06:53	11° Υ 49'16	
retrograde	16505 May 08 23:56	22° Π 55'36			16506 Mar 17 15:55	0° B	
asc. node	16505 May 14 20:04	20° Π 43'36		evening max el	16506 Apr 08 15:40	29° B 10'00	27°09'51
evening set	16505 May 15 06:22	20° Π 23'08			16506 Apr 09 12:42	0° Π	
min. Earth dist.	16505 May 19 08:19	16° Π 07'53	0.66997 AU	retrograde	16506 Apr 22 03:44	6° Π 42'00	
inferior conj	16505 May 21 03:57	13° Π 54'03	1°48'39	evening set	16506 Apr 28 18:04	4° Π 11'04	
minimum elong	16505 May 21 01:48	14° Π 00'39	1°47'25	asc. node	16506 May 01 17:14	1° Π 27'59	
morning rise	16505 May 26 22:09	8° Π 10'58		min. Earth dist.	16506 May 02 15:17	0° Π 28'55	0.65377 AU
direct	16505 May 30 02:41	7° Π 13'35			16506 May 03 01:45	30° R B	
morning max el	16505 Jun 05 14:45	10° Π 40'42	18°29'49	inferior conj	16506 May 04 23:39	27° B 50'13	0°59'24
desc. node	16505 Jun 16 10:30	24° Π 59'41		minimum elong	16506 May 04 22:09	27° B 54'28	0°58'22
	16505 Jun 19 16:33	0° B		morning rise	16506 May 11 03:54	22° B 20'04	
morning set	16505 Jun 26 11:47	10° B 39'53		direct	16506 May 13 22:56	21° B 38'20	
	16505 Jul 08 20:01	0° Ω		morning max el	16506 May 20 06:00	24° B 53'59	17°59'32
					16506 May 24 13:51	0° Π	
superior conj	16505 Jul 12 07:48	5° Ω 26'27	-2°13'25	desc. node	16506 Jun 03 07:30	14° Π 56'51	
minimum elong	16505 Jul 12 05:22	5° Ω 17'01	2°13'55	morning set	16506 Jun 07 10:20	21° Π 40'33	
max. Earth dist.	16505 Jul 12 07:37	5° Ω 25'44	1.46017 AU		16506 Jun 12 13:00	0° B	
evening rise	16505 Jul 28 03:32	0° H 12'37					
	16505 Jul 28 00:20	0° H		superior conj	16506 Jun 21 20:27	14° B 52'51	-1°57'25
greatest brilliancy	16505 Aug 05 12:08	13° H 20'28	-0.8m	minimum elong	16506 Jun 21 12:26	14° B 21'16	1°57'28
asc. node	16505 Aug 10 19:54	21° H 24'52		max. Earth dist.	16506 Jun 25 04:04	20° B 05'33	1.45807 AU
	16505 Aug 17 07:51	0° B			16506 Jul 01 12:58	0° Ω	
evening max el	16505 Aug 18 17:47	1° B 29'28	18°43'59	evening rise	16506 Jul 07 22:53	9° Ω 52'51	
retrograde	16505 Aug 25 08:18	5° B 04'13			16506 Jul 21 05:59	0° H	
evening set	16505 Aug 28 15:05	4° B 02'34		greatest brilliancy	16506 Jul 21 06:25	0° H 01'36	-0.7m
	16505 Sep 01 21:40	30° R H		asc. node	16506 Jul 28 16:39	10° H 21'33	
inferior conj	16505 Sep 03 05:53	28° H 21'30	2°25'03	evening max el	16506 Aug 02 01:44	15° H 23'03	19°30'31
minimum elong	16505 Sep 03 08:04	28° H 14'41	2°24'27	retrograde	16506 Aug 09 06:03	19° H 22'48	
min. Earth dist.	16505 Sep 05 02:03	26° H 04'17	0.66103 AU	evening set	16506 Aug 12 22:57	18° H 03'24	
morning rise	16505 Sep 09 00:00	21° H 55'28		inferior conj	16506 Aug 18 07:48	12° H 09'27	2°51'34
desc. node	16505 Sep 12 08:21	19° H 51'26		minimum elong	16506 Aug 18 09:23	12° H 04'13	2°51'05
direct	16505 Sep 15 06:40	19° H 18'21		min. Earth dist.	16506 Aug 19 14:00	10° H 29'38	0.67567 AU
morning max el	16505 Sep 28 08:53	27° H 02'51	26°37'12	morning rise	16506 Aug 23 19:16	5° H 42'44	
	16505 Oct 01 03:26	0° B		direct	16506 Aug 29 16:03	3° H 10'40	
	16505 Oct 22 13:46	0° M		desc. node	16506 Aug 30 05:39	3° H 11'56	
morning set	16505 Nov 03 04:28	20° M 27'10		morning max el	16506 Sep 10 20:03	10° H 26'45	25°21'21
asc. node	16505 Nov 06 20:50	27° M 35'04			16506 Sep 26 09:53	0° B	
max. Earth dist.	16505 Nov 07 03:15	28° M 06'53	1.34221 AU		16506 Oct 15 04:37	0° M	
	16505 Nov 08 01:55	0° X		morning set	16506 Oct 16 17:08	2° M 42'43	
				max. Earth dist.	16506 Oct 20 06:04	9° M 12'02	1.36318 AU
superior conj	16505 Nov 12 00:52	8° X 05'54	0°45'38	asc. node	16506 Oct 24 17:39	17° M 47'06	
minimum elong	16505 Nov 11 22:43	7° X 54'43	0°45'48				
evening rise	16505 Nov 19 09:03	23° X 36'17		superior conj	16506 Oct 26 15:34	21° M 33'52	0°17'10
	16505 Nov 22 11:04	0° B		minimum elong	16506 Oct 26 14:31	21° M 28'40	0°17'26
evening max el	16505 Dec 09 01:43	26° B 06'40	21°16'57		16506 Oct 30 19:41	0° X	
desc. node	16505 Dec 09 06:23	26° B 18'04		evening rise	16506 Nov 03 15:20	7° X 49'26	
	16505 Dec 14 00:54	0° \approx			16506 Nov 15 17:17	0° B	
retrograde	16505 Dec 20 22:45	1° \approx 58'53		evening max el	16506 Nov 21 05:31	6° B 52'38	19°55'34
evening set	16505 Dec 23 19:31	1° \approx 39'52		desc. node	16506 Nov 26 03:25	10° B 37'21	
	16505 Dec 28 10:49	30° R B		retrograde	16506 Dec 01 12:07	12° B 00'12	
inferior conj	16506 Jan 01 12:15	27° B 50'02	-5°50'43	evening set	16506 Dec 03 14:34	11° B 48'20	
minimum elong	16506 Jan 01 06:27	27° B 58'11	5°49'28	inferior conj	16506 Dec 12 08:16	7° B 49'02	-4°45'46
min. Earth dist.	16506 Jan 02 01:57	27° B 30'43	0.54378 AU	minimum elong	16506 Dec 11 22:16	8° B 04'18	4°42'25
morning rise	16506 Jan 09 17:41	23° B 59'40		min. Earth dist.	16506 Dec 14 08:22	6° B 35'38	0.55018 AU
direct	16506 Jan 13 17:22	23° B 25'15		morning rise	16506 Dec 20 04:51	3° B 39'21	
morning max el	16506 Jan 26 15:24	29° B 43'01	22°41'17	direct	16506 Dec 25 05:58	2° B 43'38	
	16506 Jan 26 22:27	0° \approx		morning max el	16507 Jan 07 23:47	9° B 33'42	24°31'31
asc. node	16506 Feb 02 19:42	8° \approx 15'43		asc. node	16507 Jan 20 16:56	26° B 06'22	
	16506 Feb 15 03:20	0° H			16507 Jan 23 00:16	0° \approx	

morning set	16507 Feb 02 08:33	20° \approx 23'13	direct	16507 Dec 06 07:01	12° \approx 18'01	
	16507 Feb 06 18:06	0° H	morning max el	16507 Dec 20 10:37	19° \approx 34'08	26°11'33
				16507 Dec 29 07:09	0° \approx	
superior conj	16507 Feb 09 02:57	5° H 12'46	1°32'01	asc. node	16508 Jan 07 14:06	14° \approx 42'20
minimum elong	16507 Feb 09 04:24	5° H 20'45	1°32'15		16508 Jan 15 11:25	0° \approx
max. Earth dist.	16507 Feb 11 09:01	10° H 07'14	1.32255 AU	morning set	16508 Jan 17 19:35	4° \approx 57'58
evening rise	16507 Feb 16 14:08	21° H 04'47				
	16507 Feb 21 02:57	0° Y		superior conj	16508 Jan 24 13:04	19° \approx 50'19
desc. node	16507 Feb 22 03:36	1° Y 56'01		minimum elong	16508 Jan 24 13:32	19° \approx 52'50
	16507 Mar 11 14:18	0° B		max. Earth dist.	16508 Jan 25 13:56	22° \approx 08'40
evening max el	16507 Mar 22 04:03	12° B 22'02	27°35'03		16508 Jan 29 03:45	0° H
retrograde	16507 Apr 05 00:22	19° B 53'30		evening rise	16508 Jan 31 13:45	5° H 09'09
evening set	16507 Apr 11 19:16	17° B 30'53		desc. node	16508 Feb 09 00:20	21° H 43'57
min. Earth dist.	16507 Apr 15 13:46	14° B 17'44	0.63407 AU		16508 Feb 13 18:20	0° Y
inferior conj	16507 Apr 18 09:33	11° B 26'13	-0°03'51	evening max el	16508 Mar 03 12:38	24° Y 55'39
minimum elong	16507 Apr 18 09:40	11° B 25'53	0°04'10		16508 Mar 10 00:10	0° B
transit middle	16507 Apr 18 09:40	11° B 25'53	0°04'10	retrograde	16508 Mar 17 12:53	2° B 20'40
transit begin	16507 Apr 18 06:37	11° B 33'41		evening set	16508 Mar 24 07:20	0° B 13'38
transit end	16507 Apr 18 12:44	11° B 18'06			16508 Mar 24 15:58	30° R Y
asc. node	16507 Apr 18 14:26	11° B 13'47		min. Earth dist.	16508 Mar 28 02:23	27° Y 22'43
morning rise	16507 Apr 25 02:38	6° B 11'29		inferior conj	16508 Mar 31 06:15	24° Y 33'21
direct	16507 Apr 27 13:14	5° B 42'25		minimum elong	16508 Mar 31 09:11	24° Y 26'46
morning max el	16507 May 03 23:31	8° B 58'36	17°46'38	asc. node	16508 Apr 04 11:41	21° Y 08'40
	16507 May 18 04:05	0° II		morning rise	16508 Apr 07 14:25	19° Y 36'59
morning set	16507 May 20 10:55	3° II 54'47		direct	16508 Apr 09 18:00	19° Y 17'17
desc. node	16507 May 21 04:25	5° II 09'46		morning max el	16508 Apr 16 16:14	22° Y 45'43
					16508 Apr 22 08:42	0° B
superior conj	16507 Jun 02 02:07	25° II 08'21	-1°26'53	morning set	16508 May 02 08:17	17° B 06'41
minimum elong	16507 Jun 01 18:20	24° II 36'32	1°26'33	desc. node	16508 May 07 01:19	25° B 33'31
	16507 Jun 05 02:06	0° B			16508 May 09 13:36	0° II
max. Earth dist.	16507 Jun 07 23:10	4° B 36'02	1.44866 AU			
evening rise	16507 Jun 17 09:14	19° B 16'56		superior conj	16508 May 13 07:07	6° II 28'16
	16507 Jun 24 11:10	0° Q		minimum elong	16508 May 13 02:41	6° II 09'15
asc. node	16507 Jul 15 13:27	28° Q 41'55		max. Earth dist.	16508 May 20 14:14	18° II 40'01
evening max el	16507 Jul 16 03:40	29° Q 18'03	20°31'46	evening rise	16508 May 27 03:19	29° II 07'22
	16507 Jul 16 21:01	0° P			16508 May 27 16:47	0° B
retrograde	16507 Jul 24 05:06	3° P 54'12			16508 Jun 17 02:41	0° Q
evening set	16507 Jul 28 08:40	2° P 16'41		evening max el	16508 Jun 27 23:44	13° Q 13'00
	16507 Jul 30 16:05	30° R Q		asc. node	16508 Jul 01 10:19	16° Q 14'03
inferior conj	16507 Aug 02 14:33	26° Q 11'01	3°05'17	retrograde	16508 Jul 07 03:39	18° Q 33'03
minimum elong	16507 Aug 02 15:15	26° Q 08'35	3°04'50	evening set	16508 Jul 11 18:25	16° Q 38'20
min. Earth dist.	16507 Aug 03 07:00	25° Q 14'27	0.68577 AU	inferior conj	16508 Jul 16 23:57	10° Q 22'27
morning rise	16507 Aug 07 21:33	19° Q 47'41		minimum elong	16508 Jul 16 23:43	10° Q 23'18
direct	16507 Aug 13 06:48	17° Q 27'06		min. Earth dist.	16508 Jul 17 03:07	10° Q 11'25
desc. node	16507 Aug 17 02:57	18° Q 25'58		morning rise	16508 Jul 22 04:50	4° Q 05'07
morning max el	16507 Aug 24 07:06	24° Q 01'28	23°54'27	direct	16508 Jul 27 01:55	2° Q 00'27
	16507 Aug 29 15:13	0° P		desc. node	16508 Aug 03 00:12	5° Q 10'19
	16507 Sep 19 19:17	0° Q		morning max el	16508 Aug 05 19:48	7° Q 44'59
morning set	16507 Sep 28 10:26	14° Q 07'51			16508 Aug 23 03:41	0° P
max. Earth dist.	16507 Oct 02 05:02	20° Q 40'24	1.38698 AU	morning set	16508 Sep 08 04:59	24° P 35'57
	16507 Oct 07 08:48	0° M			16508 Sep 11 12:07	0° Q
				max. Earth dist.	16508 Sep 13 06:06	2° Q 55'12
superior conj	16507 Oct 09 17:37	4° M 25'56	-0°16'31			1.41092 AU
minimum elong	16507 Oct 09 18:46	4° M 31'24	0°16'00	superior conj	16508 Sep 21 02:56	16° Q 33'33
behind sun begin	16507 Oct 09 17:48	4° M 26'46		minimum elong	16508 Sep 21 07:14	16° Q 52'46
behind sun end	16507 Oct 09 19:45	4° M 36'02		asc. node	16508 Sep 27 11:11	28° Q 09'03
asc. node	16507 Oct 11 14:25	7° M 59'24			16508 Sep 28 10:58	0° M
evening rise	16507 Oct 18 15:46	21° M 46'21		evening rise	16508 Oct 01 07:10	5° M 19'35
	16507 Oct 22 21:42	0° A			16508 Oct 16 09:33	0° A
evening max el	16507 Nov 03 23:30	18° A 28'14	18°56'20	evening max el	16508 Oct 17 04:40	0° A 50'06
retrograde	16507 Nov 12 17:02	22° A 52'33		retrograde	16508 Oct 24 17:15	4° A 40'13
desc. node	16507 Nov 13 00:31	22° A 52'13		evening set	16508 Oct 26 18:07	4° A 24'01
evening set	16507 Nov 14 14:30	22° A 40'55		desc. node	16508 Oct 29 21:40	3° A 01'35
inferior conj	16507 Nov 22 21:29	18° A 23'03	-3°07'54	inferior conj	16508 Nov 03 08:29	29° M 44'58
minimum elong	16507 Nov 22 13:51	18° A 36'30	3°04'29	minimum elong	16508 Nov 03 05:13	29° M 51'42
min. Earth dist.	16507 Nov 25 19:30	16° A 20'10	0.56472 AU		16508 Nov 03 01:10	30° R M
morning rise	16507 Nov 30 10:24	13° A 39'14		min. Earth dist.	16508 Nov 06 14:27	27° M 05'21
						0.58491 AU

morning rise	16508 Nov 10 12:50	24° \mathbb{M} 24'24		transit middle	16509 Oct 16 16:02	11° \mathbb{M} 52'28	0°02'40
direct	16508 Nov 16 22:31	22° \mathbb{M} 36'10		transit begin	16509 Oct 16 12:48	12° \mathbb{M} 00'09	
	16508 Nov 30 23:41	0° \mathbb{X}		transit end	16509 Oct 16 19:16	11° \mathbb{M} 44'46	
morning max el	16508 Dec 01 05:16	0° \mathbb{X} 13'28	27°23'13	desc. node	16509 Oct 16 18:53	11° \mathbb{M} 45'40	
	16508 Dec 22 08:51	0° \mathbb{Z}		min. Earth dist.	16509 Oct 19 18:47	8° \mathbb{M} 55'50	0.60769 AU
asc. node	16508 Dec 24 11:14	3° \mathbb{Z} 51'55		morning rise	16509 Oct 23 10:25	6° \mathbb{M} 02'02	
morning set	16509 Jan 01 03:49	19° \mathbb{Z} 20'40		direct	16509 Oct 30 02:29	3° \mathbb{M} 50'14	
	16509 Jan 06 00:34	0° \approx		morning max el	16509 Nov 13 07:44	11° \mathbb{M} 42'03	27°56'51
					16509 Nov 27 18:19	0° \mathbb{X}	
superior conj	16509 Jan 08 00:29	4° \approx 28'09	1°37'16	asc. node	16509 Dec 11 08:19	23° \mathbb{X} 26'11	
minimum elong	16509 Jan 07 23:52	4° \approx 24'47	1°37'48		16509 Dec 14 15:22	0° \mathbb{Z}	
max. Earth dist.	16509 Jan 07 21:22	4° \approx 10'43	1.30964 AU	morning set	16509 Dec 16 07:21	3° \mathbb{Z} 26'45	
evening rise	16509 Jan 14 18:58	19° \approx 25'40		max. Earth dist.	16509 Dec 22 03:43	16° \mathbb{Z} 05'44	1.31145 AU
	16509 Jan 19 21:59	0° \mathbb{X}					
desc. node	16509 Jan 25 21:06	11° \mathbb{X} 05'30		superior conj	16509 Dec 23 11:17	19° \mathbb{Z} 01'14	1°30'48
	16509 Feb 07 12:58	0° \mathbb{Y}		minimum elong	16509 Dec 23 09:45	18° \mathbb{Z} 52'38	1°31'16
evening max el	16509 Feb 13 14:56	6° \mathbb{Y} 40'17	26°47'40		16509 Dec 28 09:42	0° \approx	
retrograde	16509 Feb 27 15:56	13° \mathbb{Y} 54'39		evening rise	16509 Dec 30 03:49	3° \approx 49'58	
evening set	16509 Mar 06 03:00	12° \mathbb{Y} 10'08		desc. node	16510 Jan 12 17:55	29° \approx 51'06	
min. Earth dist.	16509 Mar 10 04:50	9° \mathbb{Y} 31'08	0.58925 AU		16510 Jan 12 20:07	0° \mathbb{X}	
inferior conj	16509 Mar 13 09:58	7° \mathbb{Y} 01'20	-2°50'21	evening max el	16510 Jan 26 09:11	17° \mathbb{X} 32'37	25°33'20
minimum elong	16509 Mar 13 16:33	6° \mathbb{Y} 48'31	2°47'53	retrograde	16510 Feb 09 07:03	24° \mathbb{X} 32'43	
morning rise	16509 Mar 21 09:43	2° \mathbb{Y} 25'38		evening set	16510 Feb 15 02:44	23° \mathbb{X} 15'16	
asc. node	16509 Mar 22 09:00	2° \mathbb{Y} 15'20		min. Earth dist.	16510 Feb 19 22:03	20° \mathbb{X} 34'23	0.56849 AU
direct	16509 Mar 23 08:49	2° \mathbb{Y} 11'43		inferior conj	16510 Feb 22 17:25	18° \mathbb{X} 41'03	-4°21'18
morning max el	16509 Mar 31 04:29	6° \mathbb{Y} 04'15	18°16'01	minimum elong	16510 Feb 23 02:45	18° \mathbb{X} 25'19	4°18'20
	16509 Apr 15 08:14	0° \mathbb{Z}		morning rise	16510 Mar 03 05:41	14° \mathbb{X} 26'31	
morning set	16509 Apr 15 20:43	0° \mathbb{Z} 58'52		direct	16510 Mar 05 05:43	14° \mathbb{X} 14'29	
desc. node	16509 Apr 23 22:08	16° \mathbb{Z} 03'16		asc. node	16510 Mar 09 06:18	15° \mathbb{X} 06'11	
				morning max el	16510 Mar 14 08:04	18° \mathbb{X} 41'58	19°01'21
superior conj	16509 Apr 25 10:14	18° \mathbb{Z} 47'27	-0°12'34		16510 Mar 22 15:02	0° \mathbb{Y}	
minimum elong	16509 Apr 25 09:14	18° \mathbb{Z} 42'55	0°12'50	morning set	16510 Mar 30 19:35	15° \mathbb{Y} 17'53	
behind sun begin	16509 Apr 25 04:45	18° \mathbb{Z} 22'40			16510 Apr 07 07:32	0° \mathbb{Z}	
behind sun end	16509 Apr 25 13:42	19° \mathbb{Z} 03'08					
	16509 May 01 18:59	0° \mathbb{I}		superior conj	16510 Apr 08 07:29	1° \mathbb{Z} 54'46	0°20'57
max. Earth dist.	16509 May 03 00:13	2° \mathbb{I} 04'35	1.41263 AU	minimum elong	16510 Apr 08 08:46	2° \mathbb{Z} 00'57	0°20'25
evening rise	16509 May 07 15:59	9° \mathbb{I} 49'00		desc. node	16510 Apr 10 18:56	6° \mathbb{Z} 35'23	
	16509 May 20 16:41	0° \mathbb{E}		max. Earth dist.	16510 Apr 15 06:50	14° \mathbb{Z} 47'32	1.38994 AU
evening max el	16509 Jun 10 15:29	27° \mathbb{E} 07'51	23°05'09	evening rise	16510 Apr 19 02:06	21° \mathbb{Z} 26'24	
	16509 Jun 13 19:49	0° \mathbb{Q}			16510 Apr 24 05:10	0° \mathbb{I}	
asc. node	16509 Jun 18 07:16	2° \mathbb{Q} 41'24			16510 May 14 16:16	0° \mathbb{E}	
retrograde	16509 Jun 21 00:07	3° \mathbb{Q} 12'32		evening max el	16510 May 24 05:20	11° \mathbb{E} 03'56	24°26'28
evening set	16509 Jun 26 02:26	1° \mathbb{Q} 02'34		retrograde	16510 Jun 04 17:11	17° \mathbb{E} 46'55	
	16509 Jun 27 04:40	30° \mathbb{R} \mathbb{E}		asc. node	16510 Jun 05 04:16	17° \mathbb{E} 46'02	
inferior conj	16509 Jul 01 10:00	24° \mathbb{E} 38'32	2°59'27	evening set	16510 Jun 10 07:06	15° \mathbb{E} 24'45	
minimum elong	16509 Jul 01 08:52	24° \mathbb{E} 42'28	2°58'45	min. Earth dist.	16510 Jun 14 19:53	10° \mathbb{E} 12'26	0.68684 AU
min. Earth dist.	16509 Jul 01 00:08	25° \mathbb{E} 12'45	0.69136 AU	inferior conj	16510 Jun 15 18:46	8° \mathbb{E} 55'30	2°40'48
morning rise	16509 Jul 06 15:12	18° \mathbb{E} 29'02		minimum elong	16510 Jun 15 16:56	9° \mathbb{E} 01'40	2°39'50
direct	16509 Jul 11 00:15	16° \mathbb{E} 42'50		morning rise	16510 Jun 21 02:53	2° \mathbb{E} 55'14	
morning max el	16509 Jul 19 12:42	21° \mathbb{E} 36'55	21°02'44	direct	16510 Jun 25 00:21	1° \mathbb{E} 28'31	
desc. node	16509 Jul 20 21:27	23° \mathbb{E} 01'54		morning max el	16510 Jul 02 12:09	5° \mathbb{E} 39'02	19°51'19
	16509 Jul 26 16:12	0° \mathbb{Q}		desc. node	16510 Jul 07 18:40	11° \mathbb{E} 43'31	
	16509 Aug 16 08:55	0° \mathbb{P}			16510 Jul 20 15:16	0° \mathbb{Q}	
morning set	16509 Aug 19 00:33	4° \mathbb{P} 06'26		morning set	16510 Jul 29 05:51	13° \mathbb{Q} 03'01	
max. Earth dist.	16509 Aug 26 12:54	16° \mathbb{P} 02'42	1.43217 AU	max. Earth dist.	16510 Aug 09 02:23	29° \mathbb{Q} 56'50	1.44843 AU
					16510 Aug 09 03:12	0° \mathbb{P}	
superior conj	16509 Sep 02 15:10	27° \mathbb{P} 46'56	-1°29'31	superior conj	16510 Aug 14 03:55	8° \mathbb{P} 02'00	-1°58'52
minimum elong	16509 Sep 02 22:28	28° \mathbb{P} 17'47	1°28'43	minimum elong	16510 Aug 14 11:23	8° \mathbb{P} 32'08	1°58'36
	16509 Sep 03 22:32	0° \mathbb{L}			16510 Aug 27 10:17	0° \mathbb{L}	
evening rise	16509 Sep 14 09:13	18° \mathbb{L} 17'37		evening rise	16510 Aug 27 16:46	0° \mathbb{L} 27'24	
asc. node	16509 Sep 14 07:55	18° \mathbb{L} 11'49		asc. node	16510 Sep 01 04:38	8° \mathbb{L} 03'27	
	16509 Sep 21 00:43	0° \mathbb{M}		evening max el	16510 Sep 14 07:39	27° \mathbb{L} 12'42	18°04'35
evening max el	16509 Sep 30 16:45	13° \mathbb{M} 48'25	18°02'24		16510 Sep 18 04:08	0° \mathbb{M}	
retrograde	16509 Oct 07 10:36	17° \mathbb{M} 16'59		retrograde	16510 Sep 20 16:56	0° \mathbb{M} 33'14	
evening set	16509 Oct 09 18:34	16° \mathbb{M} 52'04		evening set	16510 Sep 23 09:18	29° \mathbb{L} 56'02	
inferior conj	16509 Oct 16 15:57	11° \mathbb{M} 52'41	0°02'19		16510 Sep 23 05:44	30° \mathbb{R} \mathbb{L}	
minimum elong	16509 Oct 16 16:02	11° \mathbb{M} 52'28	0°02'40				

inferior conj	16510 Sep 29 16:07	24° Ω 38'28	1°12'02	evening max el	16511 Aug 28 21:55	10° Ω 54'03	18°24'36
minimum elong	16510 Sep 29 17:57	24° Ω 33'31	1°11'36	retrograde	16511 Sep 04 07:59	14° Ω 19'57	
min. Earth dist.	16510 Oct 02 09:03	21° Ω 44'37	0.63033 AU	evening set	16511 Sep 07 09:22	13° Ω 27'43	
desc. node	16510 Oct 03 16:10	20° Ω 27'07		inferior conj	16511 Sep 13 05:00	7° Ω 54'26	2°03'11
morning rise	16510 Oct 06 00:23	18° Ω 27'13		minimum elong	16511 Sep 13 07:18	7° Ω 47'34	2°02'33
direct	16510 Oct 12 16:29	15° Ω 59'06		min. Earth dist.	16511 Sep 15 08:59	5° Ω 20'19	0.65078 AU
morning max el	16510 Oct 26 15:45	23° Ω 56'46	27°51'31	morning rise	16511 Sep 19 03:51	1° Ω 31'32	
	16510 Nov 01 02:56	0° \mathbb{M}		desc. node	16511 Sep 20 13:28	0° Ω 30'27	
	16510 Nov 21 02:57	0° \mathbb{A}			16511 Sep 21 10:25	30° \mathbb{R} \mathbb{M}	
asc. node	16510 Nov 28 05:19	13° \mathbb{A} 17'33		direct	16511 Sep 25 14:53	28° \mathbb{M} 55'34	
morning set	16510 Nov 30 03:51	17° \mathbb{A} 10'22			16511 Sep 30 03:25	0° Ω	
max. Earth dist.	16510 Dec 05 05:13	27° \mathbb{A} 45'18	1.31902 AU	morning max el	16511 Oct 09 02:48	6° Ω 48'33	27°12'11
	16510 Dec 06 06:10	0° \mathbb{B}			16511 Oct 27 00:40	0° \mathbb{M}	
					16511 Nov 13 09:20	0° \mathbb{A}	
superior conj	16510 Dec 07 19:31	3° \mathbb{B} 23'37	1°18'11	morning set	16511 Nov 13 14:41	0° \mathbb{A} 26'02	
minimum elong	16510 Dec 07 17:19	3° \mathbb{B} 11'34	1°18'31	asc. node	16511 Nov 15 02:14	3° \mathbb{A} 20'36	
evening rise	16510 Dec 14 14:24	18° \mathbb{B} 16'57		max. Earth dist.	16511 Nov 17 22:39	9° \mathbb{A} 05'49	1.33226 AU
	16510 Dec 20 05:52	0° \approx					
desc. node	16510 Dec 30 14:47	17° \approx 47'12		superior conj	16511 Nov 21 23:01	17° \mathbb{A} 30'02	0°59'19
evening max el	16511 Jan 07 20:10	27° \approx 41'20	23°55'41	minimum elong	16511 Nov 21 20:39	17° \mathbb{A} 17'26	0°59'32
	16511 Jan 10 11:37	0° \mathbb{H}			16511 Nov 27 18:31	0° \mathbb{B}	
retrograde	16511 Jan 21 08:11	4° \mathbb{H} 23'01		evening rise	16511 Nov 29 00:53	2° \mathbb{B} 42'31	
evening set	16511 Jan 26 03:52	3° \mathbb{H} 32'42			16511 Dec 13 22:12	0° \approx	
min. Earth dist.	16511 Feb 01 07:43	0° \mathbb{H} 32'50	0.55265 AU	desc. node	16511 Dec 17 11:41	4° \approx 36'37	
	16511 Feb 02 05:54	30° \mathbb{R} \approx		evening max el	16511 Dec 20 06:29	7° \approx 36'02	22°12'06
inferior conj	16511 Feb 03 03:41	29° \approx 27'31	-5°34'22	retrograde	16512 Jan 01 21:34	13° \approx 50'34	
minimum elong	16511 Feb 03 11:19	29° \approx 16'10	5°32'45	evening set	16512 Jan 05 10:52	13° \approx 22'38	
morning rise	16511 Feb 11 20:25	25° \approx 31'20		inferior conj	16512 Jan 13 22:04	9° \approx 31'27	-6°02'28
direct	16511 Feb 14 07:08	25° \approx 16'14		minimum elong	16512 Jan 13 21:35	9° \approx 32'09	6°01'56
asc. node	16511 Feb 24 03:37	29° \approx 41'39		min. Earth dist.	16512 Jan 13 13:11	9° \approx 43'53	0.54439 AU
	16511 Feb 24 11:38	0° \mathbb{H}		morning rise	16512 Jan 22 09:13	5° \approx 44'05	
morning max el	16511 Feb 24 22:42	0° \mathbb{H} 26'19	20°09'46	direct	16512 Jan 25 17:31	5° \approx 19'10	
morning set	16511 Mar 15 01:16	29° \mathbb{H} 52'17		morning max el	16512 Feb 06 22:11	11° \approx 13'14	21°40'57
	16511 Mar 15 02:46	0° \mathbb{Y}		asc. node	16512 Feb 11 00:54	15° \approx 47'20	
					16512 Feb 20 03:22	0° \mathbb{H}	
superior conj	16511 Mar 22 18:29	15° \mathbb{Y} 37'35	0°48'53	morning set	16512 Feb 27 11:02	14° \mathbb{H} 34'15	
minimum elong	16511 Mar 22 20:50	15° \mathbb{Y} 49'24	0°48'23				
max. Earth dist.	16511 Mar 28 13:40	26° \mathbb{Y} 56'00	1.36721 AU	superior conj	16512 Mar 05 15:30	29° \mathbb{H} 45'51	1°10'37
desc. node	16511 Mar 28 15:41	27° \mathbb{Y} 05'28		minimum elong	16512 Mar 05 17:58	29° \mathbb{H} 58'45	1°10'21
	16511 Mar 30 05:00	0° \mathbb{B}			16512 Mar 05 18:13	0° \mathbb{Y}	
evening rise	16511 Apr 01 07:33	3° \mathbb{B} 51'17		max. Earth dist.	16512 Mar 10 01:00	8° \mathbb{Y} 46'29	1.34666 AU
	16511 Apr 17 05:01	0° \mathbb{I}		evening rise	16512 Mar 14 04:55	16° \mathbb{Y} 54'24	
evening max el	16511 May 06 18:54	24° \mathbb{I} 58'17	25°41'44	desc. node	16512 Mar 14 12:23	17° \mathbb{Y} 29'49	
	16511 May 12 21:55	0° \mathbb{E}			16512 Mar 21 10:23	0° \mathbb{B}	
retrograde	16511 May 19 05:47	2° \mathbb{E} 09'24			16512 Apr 10 13:35	0° \mathbb{I}	
asc. node	16511 May 23 01:20	1° \mathbb{E} 10'46		evening max el	16512 Apr 18 08:34	8° \mathbb{I} 43'43	26°43'26
	16511 May 24 20:28	30° \mathbb{R} \mathbb{I}		retrograde	16512 May 01 13:02	16° \mathbb{I} 11'39	
evening set	16511 May 25 06:42	29° \mathbb{I} 39'08		evening set	16512 May 07 23:20	13° \mathbb{I} 38'45	
min. Earth dist.	16511 May 29 12:11	25° \mathbb{I} 03'44	0.67748 AU	asc. node	16512 May 08 22:28	12° \mathbb{I} 49'07	
inferior conj	16511 May 31 00:15	23° \mathbb{I} 08'44	2°11'09	min. Earth dist.	16512 May 11 23:00	9° \mathbb{I} 38'20	0.66357 AU
minimum elong	16511 May 30 22:04	23° \mathbb{I} 15'42	2°09'57	inferior conj	16512 May 14 00:13	7° \mathbb{I} 12'31	1°29'26
morning rise	16511 Jun 05 13:59	17° \mathbb{I} 19'04		minimum elong	16512 May 13 22:14	7° \mathbb{I} 18'23	1°28'13
direct	16511 Jun 09 00:31	16° \mathbb{I} 11'21		morning rise	16512 May 19 22:22	1° \mathbb{I} 34'58	
morning max el	16511 Jun 15 18:51	19° \mathbb{I} 50'14	18°54'54	direct	16512 May 22 22:46	0° \mathbb{I} 44'33	
	16511 Jun 23 22:30	0° \mathbb{E}		morning max el	16512 May 29 07:40	4° \mathbb{I} 05'01	18°14'55
desc. node	16511 Jun 24 15:48	1° \mathbb{E} 02'00		desc. node	16512 Jun 10 12:51	20° \mathbb{I} 47'08	
greatest brilliancy	16511 Jun 29 03:01	7° \mathbb{E} 39'21	-0.7m		16512 Jun 16 08:06	0° \mathbb{E}	
morning set	16511 Jul 08 15:25	22° \mathbb{E} 16'43		morning set	16512 Jun 17 22:16	2° \mathbb{E} 32'27	
	16511 Jul 13 14:59	0° \mathbb{Q}					
max. Earth dist.	16511 Jul 22 20:59	14° \mathbb{Q} 23'25	1.45803 AU	superior conj	16512 Jul 03 05:55	26° \mathbb{E} 44'10	-2°08'52
				minimum elong	16512 Jul 03 00:28	26° \mathbb{E} 22'55	2°09'14
superior conj	16511 Jul 24 20:41	17° \mathbb{Q} 29'58	-2°13'43	max. Earth dist.	16512 Jul 04 17:33	29° \mathbb{E} 03'12	1.46018 AU
minimum elong	16511 Jul 24 22:52	17° \mathbb{Q} 38'33	2°14'08		16512 Jul 05 08:08	0° \mathbb{Q}	
	16511 Aug 01 18:47	0° \mathbb{M}		evening rise	16512 Jul 19 08:02	21° \mathbb{Q} 45'37	
evening rise	16511 Aug 09 00:52	11° \mathbb{M} 37'34			16512 Jul 24 15:26	0° \mathbb{M}	
asc. node	16511 Aug 19 01:21	27° \mathbb{M} 39'15		greatest brilliancy	16512 Jul 29 23:14	8° \mathbb{M} 10'10	-0.8m
	16511 Aug 20 14:01	0° Ω		asc. node	16512 Aug 04 22:05	16° \mathbb{M} 52'28	

evening max el	16512 Aug 11 08:42	24° \cap 44'28	19°01'44	retrograde	16513 Aug 02 02:50	12° \cap 53'29	
retrograde	16512 Aug 18 04:12	28° \cap 28'39		evening set	16513 Aug 06 00:05	11° \cap 26'33	
evening set	16512 Aug 21 15:10	27° \cap 19'34		inferior conj	16513 Aug 11 07:21	5° \cap 27'26	2°58'49
inferior conj	16512 Aug 27 03:02	21° \cap 32'36	2°37'59	minimum elong	16513 Aug 11 08:35	5° \cap 23'17	2°58'21
minimum elong	16512 Aug 27 05:01	21° \cap 26'14	2°37'26	min. Earth dist.	16513 Aug 12 07:42	4° \cap 05'16	0.68055 AU
min. Earth dist.	16512 Aug 28 17:10	19° \cap 30'27	0.66777 AU		16513 Aug 15 16:16	30° \Re 0	
morning rise	16512 Sep 01 18:04	15° \cap 05'26		morning rise	16513 Aug 16 16:37	29° Ω 01'27	
desc. node	16512 Sep 06 10:48	12° \cap 37'36		direct	16513 Aug 22 08:35	26° Ω 33'26	
direct	16512 Sep 07 20:38	12° \cap 29'48		desc. node	16513 Aug 24 08:07	26° Ω 49'07	
morning max el	16512 Sep 20 14:28	20° \cap 04'24	26°06'53		16513 Aug 30 03:17	0° \cap	
	16512 Sep 29 03:19	0° Ξ		morning max el	16513 Sep 03 01:33	3° \cap 33'56	24°45'03
	16512 Oct 19 03:15	0° \cap			16513 Sep 23 08:10	0° Ξ	
morning set	16512 Oct 26 12:33	13° \cap 05'57		morning set	16513 Oct 08 17:32	25° Ξ 01'33	
max. Earth dist.	16512 Oct 30 06:14	20° \cap 10'42	1.35068 AU		16513 Oct 11 12:32	0° \cap	
asc. node	16512 Oct 31 23:05	23° \cap 30'16		max. Earth dist.	16513 Oct 12 06:15	1° \cap 20'24	1.37312 AU
	16512 Nov 04 04:48	0° \times		asc. node	16513 Oct 18 19:52	13° \cap 42'46	
superior conj	16512 Nov 04 19:14	1° \times 13'38	0°34'14	superior conj	16513 Oct 19 05:02	14° \cap 27'23	0°03'26
minimum elong	16512 Nov 04 17:26	1° \times 04'26	0°34'26	minimum elong	16513 Oct 19 04:48	14° \cap 26'11	0°03'47
evening rise	16512 Nov 12 09:20	17° \times 01'23		behind sun begin	16513 Oct 18 22:19	13° \cap 54'38	
	16512 Nov 18 21:08	0° Ξ		behind sun end	16513 Oct 19 11:16	14° \cap 57'48	
evening max el	16512 Dec 01 02:02	17° Ξ 55'17	20°39'41		16513 Oct 26 23:55	0° \times	
desc. node	16512 Dec 03 08:40	19° Ξ 57'24		evening rise	16513 Oct 27 13:29	1° \times 08'14	
retrograde	16512 Dec 12 07:35	23° Ξ 29'42		evening max el	16513 Nov 13 12:08	29° \times 02'28	19°27'35
evening set	16512 Dec 14 18:33	23° Ξ 14'54			16513 Nov 14 12:19	0° Ξ	
inferior conj	16512 Dec 23 13:12	19° Ξ 22'14	-5°29'09	desc. node	16513 Nov 20 05:45	3° Ξ 25'39	
minimum elong	16512 Dec 23 04:40	19° Ξ 34'35	5°26'57	retrograde	16513 Nov 23 02:22	3° Ξ 50'39	
min. Earth dist.	16512 Dec 24 18:34	18° Ξ 39'46	0.54534 AU	evening set	16513 Nov 25 01:09	3° Ξ 39'39	
morning rise	16512 Dec 31 14:35	15° Ξ 25'47			16513 Dec 02 23:08	30° \Re \times	
direct	16513 Jan 05 01:17	14° Ξ 43'12		inferior conj	16513 Dec 03 15:31	29° \times 33'36	-4°06'19
morning max el	16513 Jan 18 09:46	21° Ξ 16'04	23°28'18	minimum elong	16513 Dec 03 05:58	29° \times 49'01	4°02'37
	16513 Jan 25 19:31	0° \approx		min. Earth dist.	16513 Dec 06 02:58	27° \times 57'41	0.55549 AU
asc. node	16513 Jan 27 22:09	3° \approx 04'38		morning rise	16513 Dec 11 08:46	25° \times 10'12	
morning set	16513 Feb 10 22:45	29° \approx 17'49		direct	16513 Dec 16 19:03	24° \times 03'43	
	16513 Feb 11 06:38	0° \times			16513 Dec 29 13:17	0° Ξ	
superior conj	16513 Feb 17 19:33	14° \times 11'26	1°26'00	morning max el	16513 Dec 30 18:09	1° Ξ 06'23	25°16'31
minimum elong	16513 Feb 17 21:29	14° \times 21'54	1°26'03	asc. node	16514 Jan 14 19:21	21° Ξ 16'04	
max. Earth dist.	16513 Feb 20 19:33	20° \times 36'11	1.32993 AU		16514 Jan 19 15:04	0° \approx	
	16513 Feb 25 09:17	0° Υ		morning set	16514 Jan 26 10:32	13° \approx 56'54	
evening rise	16513 Feb 25 14:49	0° Υ 27'34		superior conj	16514 Feb 02 04:04	28° \approx 46'19	1°35'10
desc. node	16513 Mar 01 09:04	7° Υ 44'29		minimum elong	16514 Feb 02 05:07	28° \approx 52'06	1°35'30
	16513 Mar 14 10:56	0° \times			16514 Feb 02 17:24	0° \times	
evening max el	16513 Mar 31 21:45	22° \times 11'12	27°24'06	max. Earth dist.	16514 Feb 03 21:14	2° \times 33'02	1.31797 AU
retrograde	16513 Apr 14 14:07	29° \times 44'56		evening rise	16514 Feb 09 10:11	14° \times 22'28	
evening set	16513 Apr 21 06:56	27° \times 16'18		desc. node	16514 Feb 16 05:46	27° \times 43'46	
min. Earth dist.	16513 Apr 25 02:32	23° \times 47'20	0.64569 AU		16514 Feb 17 11:31	0° Υ	
asc. node	16513 Apr 25 19:39	23° \times 01'57			16514 Mar 09 12:54	0° \times	
inferior conj	16513 Apr 27 16:08	21° \times 01'09	0°34'21	evening max el	16514 Mar 14 08:50	5° \times 08'19	27°36'42
minimum elong	16513 Apr 27 15:11	21° \times 03'43	0°33'33	retrograde	16514 Mar 28 07:45	12° \times 38'17	
morning rise	16513 May 04 01:33	15° \times 37'31		evening set	16514 Apr 04 02:55	10° \times 21'33	
direct	16513 May 06 16:45	15° \times 01'43		min. Earth dist.	16514 Apr 07 21:07	7° \times 18'39	0.62477 AU
morning max el	16513 May 13 00:19	18° \times 16'18	17°51'59	inferior conj	16514 Apr 10 20:52	4° \times 25'54	-0°35'04
	16513 May 21 18:30	0° \cap		minimum elong	16514 Apr 10 22:03	4° \times 23'03	0°34'53
desc. node	16513 May 28 09:49	10° \cap 51'46		asc. node	16514 Apr 12 16:54	2° \times 42'25	
morning set	16513 May 30 08:23	14° \cap 05'55			16514 Apr 16 07:45	30° \Re Υ	
	16513 Jun 08 23:53	0° Ξ		morning rise	16514 Apr 17 20:09	29° Υ 18'33	
superior conj	16513 Jun 13 00:35	6° Ξ 28'57	-1°45'48	direct	16514 Apr 20 03:26	28° Υ 53'59	
minimum elong	16513 Jun 12 16:02	5° Ξ 54'49	1°45'37		16514 Apr 23 21:15	0° \times	
max. Earth dist.	16513 Jun 17 13:19	13° Ξ 39'35	1.45485 AU	morning max el	16514 Apr 26 17:53	2° \times 14'23	17°46'33
	16513 Jun 28 02:17	0° Ω		morning set	16514 May 12 18:32	26° \times 46'30	
evening rise	16513 Jun 28 21:31	1° Ω 13'35			16514 May 14 14:47	0° \cap	
greatest brilliancy	16513 Jul 13 14:40	23° Ω 16'04	-0.6m	desc. node	16514 May 15 06:43	1° \cap 09'29	
	16513 Jul 18 09:43	0° \cap		superior conj	16514 May 24 15:53	17° \cap 10'51	-1°11'31
asc. node	16513 Jul 22 18:52	5° \cap 35'19		minimum elong	16514 May 24 09:21	16° \cap 43'39	1°11'13
evening max el	16513 Jul 25 14:09	8° \cap 39'03	19°54'49	max. Earth dist.	16514 May 31 06:26	27° \cap 58'30	1.44264 AU

	16514 Jun 01 12:50	0°☿			16515 Jun 15 13:30	0°♊	
evening rise	16514 Jun 08 09:12	10°☿43'45		evening max el	16515 Jun 21 07:39	6°♊29'02	22°18'33
	16514 Jun 21 05:38	0°♊		asc. node	16515 Jun 26 12:39	10°♊43'21	
evening max el	16514 Jul 08 13:34	22°♊34'17	21°01'42	retrograde	16515 Jun 30 23:30	12°♊07'44	
asc. node	16514 Jul 09 15:44	23°♊36'53		evening set	16515 Jul 05 19:15	10°♊06'10	
retrograde	16514 Jul 17 01:50	27°♊28'22		inferior conj	16515 Jul 11 01:24	3°♊46'47	3°05'25
evening set	16514 Jul 21 10:03	25°♊43'35		minimum elong	16515 Jul 11 00:46	3°♊49'01	3°04'51
inferior conj	16514 Jul 26 15:30	19°♊33'36	3°07'34	min. Earth dist.	16515 Jul 10 23:01	3°♊55'08	0.69179 AU
minimum elong	16514 Jul 26 15:49	19°♊32'33	3°07'07		16515 Jul 13 21:30	30°☿☿	
min. Earth dist.	16514 Jul 27 02:21	18°♊55'58	0.68862 AU	morning rise	16515 Jul 16 06:07	27°☿32'48	
morning rise	16514 Jul 31 21:18	13°♊12'30		direct	16515 Jul 20 22:08	25°☿35'41	
direct	16514 Aug 06 01:31	10°♊57'58		desc. node	16515 Jul 29 02:41	29°☿59'06	
desc. node	16514 Aug 11 05:24	12°♊44'13			16515 Jul 29 03:04	0°♊	
morning max el	16514 Aug 16 12:50	17°♊11'42	23°16'22	morning max el	16515 Jul 30 02:53	0°♊57'42	21°49'20
	16514 Aug 27 04:17	0°♎			16515 Aug 20 23:19	0°♎	
	16514 Sep 16 08:53	0°♏		morning set	16515 Aug 31 09:55	16°♎05'25	
morning set	16514 Sep 20 01:33	6°♏03'26		max. Earth dist.	16515 Sep 06 08:58	25°♎44'54	1.42046 AU
max. Earth dist.	16514 Sep 24 05:15	13°♏05'52	1.39734 AU		16515 Sep 08 22:10	0°♏	
superior conj	16514 Oct 02 00:37	27°♏02'34	-0°31'54	superior conj	16515 Sep 14 01:29	8°♏48'10	-1°09'03
minimum elong	16514 Oct 02 03:02	27°♏13'40	0°31'16	minimum elong	16515 Sep 14 07:12	9°♏13'04	1°08'12
	16514 Oct 03 14:49	0°♐		asc. node	16515 Sep 22 13:23	24°♏01'46	
asc. node	16514 Oct 05 16:39	3°♐54'40		evening rise	16515 Sep 24 20:52	28°♏16'16	
evening rise	16514 Oct 11 10:33	14°♐56'31			16515 Sep 25 19:28	0°♐	
	16514 Oct 19 13:41	0°♑		evening max el	16515 Oct 10 20:12	23°♐38'28	18°09'34
evening max el	16514 Oct 27 11:33	10°♑59'55	18°37'54	retrograde	16515 Oct 17 23:26	27°♐17'49	
retrograde	16514 Nov 04 15:17	15°♑07'44		evening set	16515 Oct 20 03:08	26°♐58'17	
evening set	16514 Nov 06 13:42	14°♑54'35		desc. node	16515 Oct 25 00:06	24°♐11'49	
desc. node	16514 Nov 07 02:54	14°♑46'15		inferior conj	16515 Oct 27 10:04	22°♐09'57	-0°46'31
inferior conj	16514 Nov 14 13:57	10°♑27'53	-2°23'54	minimum elong	16515 Oct 27 08:24	22°♐13'35	0°45'23
minimum elong	16514 Nov 14 08:10	10°♑38'46	2°21'03	min. Earth dist.	16515 Oct 30 15:36	19°♐20'52	0.59450 AU
min. Earth dist.	16514 Nov 17 17:04	8°♑07'21	0.57287 AU	morning rise	16515 Nov 03 10:21	16°♐35'41	
morning rise	16514 Nov 21 23:27	5°♑28'27		direct	16515 Nov 09 23:30	14°♐37'07	
direct	16514 Nov 28 02:45	3°♑55'26		morning max el	16515 Nov 24 06:01	22°♐20'31	27°42'25
morning max el	16514 Dec 12 07:51	11°♑20'41	26°46'12		16515 Dec 01 01:00	0°♑	
	16514 Dec 26 18:17	0°♒		asc. node	16515 Dec 19 13:37	29°♑28'48	
asc. node	16515 Jan 01 16:31	10°♒07'52			16515 Dec 19 20:08	0°♒	
morning set	16515 Jan 10 20:37	28°♒27'10		morning set	16515 Dec 26 03:07	12°♒43'14	
	16515 Jan 11 13:49	0°♓		max. Earth dist.	16516 Jan 01 11:24	26°♒37'08	1.30982 AU
superior conj	16515 Jan 17 15:00	13°♓24'49	1°38'15	superior conj	16516 Jan 02 02:22	28°♒00'53	1°35'16
minimum elong	16515 Jan 17 15:00	13°♓24'50	1°38'44	minimum elong	16516 Jan 02 01:21	27°♒55'09	1°35'47
max. Earth dist.	16515 Jan 18 03:45	14°♓36'12	1.31121 AU		16516 Jan 02 23:38	0°♓	
evening rise	16515 Jan 24 12:31	28°♓33'07		evening rise	16516 Jan 08 19:33	12°♓53'24	
	16515 Jan 25 04:59	0°♈			16516 Jan 17 07:36	0°♈	
desc. node	16515 Feb 03 02:32	17°♈21'34		desc. node	16516 Jan 20 23:20	6°♈29'04	
	16515 Feb 10 17:47	0°♉		evening max el	16516 Feb 06 14:20	28°♈44'38	26°19'35
evening max el	16515 Feb 24 15:19	17°♉22'50	27°15'43		16516 Feb 07 23:22	0°♉	
retrograde	16515 Mar 10 16:14	24°♉42'56		retrograde	16516 Feb 20 14:02	5°♉52'38	
evening set	16515 Mar 17 08:22	22°♉45'07		evening set	16516 Feb 26 19:54	4°♉19'12	
min. Earth dist.	16515 Mar 21 05:33	20°♉00'29	0.60226 AU	min. Earth dist.	16516 Mar 02 03:36	1°♉41'31	0.58008 AU
inferior conj	16515 Mar 24 10:50	17°♉17'36	-1°58'05		16516 Mar 04 11:29	30°♈♈	
minimum elong	16515 Mar 24 15:15	17°♉08'13	1°56'26	inferior conj	16516 Mar 05 06:12	29°♈25'33	-3°29'34
asc. node	16515 Mar 30 14:11	13°♉01'10		minimum elong	16516 Mar 05 14:13	29°♈10'52	3°26'42
morning rise	16515 Apr 01 01:40	12°♉29'23		morning rise	16516 Mar 13 11:56	24°♈58'59	
direct	16515 Apr 03 02:57	12°♉12'31		direct	16516 Mar 15 10:46	24°♈46'15	
morning max el	16515 Apr 10 09:05	15°♉49'54	17°59'34	asc. node	16516 Mar 16 11:28	24°♈49'56	
	16515 Apr 20 06:12	0°♊		morning max el	16516 Mar 23 18:07	28°♈51'59	18°32'39
morning set	16515 Apr 25 22:56	10°♊17'08			16516 Mar 24 20:17	0°♉	
desc. node	16515 May 02 03:34	21°♊35'50		morning set	16516 Apr 08 16:18	24°♉22'04	
					16516 Apr 11 14:31	0°♊	
superior conj	16515 May 06 06:35	28°♊56'08	-0°33'42	superior conj	16516 Apr 17 17:58	11°♊37'13	0°02'16
minimum elong	16515 May 06 03:42	28°♊43'31	0°33'44	minimum elong	16516 Apr 17 18:06	11°♊37'50	0°01'52
	16515 May 06 21:11	0°♋		behind sun begin	16516 Apr 17 11:03	11°♊05'09	
max. Earth dist.	16515 May 13 19:37	11°♋47'24	1.42479 AU	behind sun end	16516 Apr 18 01:09	12°♊10'26	
evening rise	16515 May 19 10:22	20°♋53'56		desc. node	16516 Apr 18 00:23	12°♊06'54	
	16515 May 25 06:25	0°♌					

max. Earth dist.	16516 Apr 25 04:18	24°♄55'38	1.40311 AU	max. Earth dist.	16517 Apr 07 10:12	7°♄21'05	1.38005 AU
	16516 Apr 28 03:40	0°♄		evening rise	16517 Apr 11 02:50	13°♄57'29	
evening rise	16516 Apr 29 08:10	1°♄59'12			16517 Apr 20 18:17	0°♄	
	16516 May 17 13:38	0°♄			16517 May 12 10:40	0°♄	
evening max el	16516 Jun 02 22:16	20°♄24'08	23°40'02	evening max el	16517 May 16 11:35	4°♄18'52	24°59'40
asc. node	16516 Jun 12 09:37	26°♄38'00		retrograde	16517 May 28 10:02	11°♄16'03	
retrograde	16516 Jun 13 18:39	26°♄46'03		asc. node	16517 May 30 06:38	11°♄01'43	
evening set	16516 Jun 19 02:03	24°♄30'10		evening set	16517 Jun 03 04:45	8°♄49'37	
inferior conj	16516 Jun 24 11:07	18°♄03'30	2°52'51	min. Earth dist.	16517 Jun 07 14:08	3°♄53'13	0.68336 AU
minimum elong	16516 Jun 24 09:39	18°♄08'31	2°52'02	inferior conj	16517 Jun 08 18:42	2°♄19'03	2°29'38
min. Earth dist.	16516 Jun 23 19:37	18°♄56'36	0.69000 AU	minimum elong	16517 Jun 08 16:40	2°♄25'47	2°28'34
morning rise	16516 Jun 29 17:15	11°♄58'03			16517 Jun 10 13:57	30°♄	
direct	16516 Jul 03 21:17	10°♄20'16		morning rise	16517 Jun 14 04:52	26°♄23'12	
morning max el	16516 Jul 11 22:30	14°♄54'23	20°30'50	direct	16517 Jun 17 21:29	25°♄04'54	
desc. node	16516 Jul 14 23:54	18°♄13'48		morning max el	16517 Jun 25 01:07	29°♄00'46	19°25'25
	16516 Jul 23 22:19	0°♄			16517 Jun 26 00:22	0°♄	
morning set	16516 Aug 09 21:48	25°♄17'21		desc. node	16517 Jul 01 21:03	7°♄12'09	
	16516 Aug 12 22:39	0°♄		greatest brilliancy	16517 Jul 07 17:41	15°♄32'20	-0.7m
max. Earth dist.	16516 Aug 18 19:09	9°♄15'18	1.43977 AU		16517 Jul 17 08:03	0°♄	
				morning set	16517 Jul 20 02:16	4°♄13'36	
superior conj	16516 Aug 25 03:47	19°♄36'20	-1°43'15	max. Earth dist.	16517 Aug 01 10:35	23°♄23'03	1.45332 AU
minimum elong	16516 Aug 25 11:42	20°♄09'09	1°42'35				
	16516 Aug 31 08:07	0°♄		superior conj	16517 Aug 05 06:59	29°♄27'55	-2°07'21
evening rise	16516 Sep 06 15:47	10°♄55'50		minimum elong	16517 Aug 05 12:54	29°♄51'24	2°07'26
asc. node	16516 Sep 08 10:08	14°♄00'30			16517 Aug 05 15:04	0°♄	
	16516 Sep 18 00:54	0°♄		evening rise	16517 Aug 19 13:48	22°♄40'44	
evening max el	16516 Sep 23 09:52	6°♄48'33	18°01'00		16517 Aug 23 23:51	0°♄	
retrograde	16516 Sep 29 23:03	10°♄12'28		asc. node	16517 Aug 26 06:50	3°♄45'47	
evening set	16516 Oct 02 10:23	9°♄42'48		evening max el	16517 Sep 07 00:49	20°♄20'26	18°11'00
inferior conj	16516 Oct 09 01:10	4°♄35'10	0°34'13	retrograde	16517 Sep 13 09:31	23°♄41'52	
minimum elong	16516 Oct 09 02:11	4°♄32'37	0°34'08	evening set	16517 Sep 16 05:32	22°♄58'45	
desc. node	16516 Oct 10 21:21	2°♄43'30		inferior conj	16517 Sep 22 07:12	17°♄34'26	1°35'51
min. Earth dist.	16516 Oct 12 00:16	1°♄37'17	0.61745 AU	minimum elong	16517 Sep 22 09:21	17°♄28'20	1°35'17
	16516 Oct 13 18:59	30°♄		min. Earth dist.	16517 Sep 24 18:56	14°♄46'51	0.63933 AU
morning rise	16516 Oct 15 15:14	28°♄34'15		desc. node	16517 Sep 27 18:38	11°♄50'49	
direct	16516 Oct 22 07:48	26°♄14'43		morning rise	16517 Sep 28 11:16	11°♄16'59	
	16516 Oct 31 16:18	0°♄		direct	16517 Oct 05 01:44	8°♄44'10	
morning max el	16516 Nov 05 11:27	4°♄10'30	27°59'09	morning max el	16517 Oct 18 21:09	16°♄42'22	27°38'30
	16516 Nov 24 18:19	0°♄			16517 Oct 29 22:31	0°♄	
asc. node	16516 Dec 05 10:39	19°♄10'59			16517 Nov 17 13:11	0°♄	
morning set	16516 Dec 09 03:59	26°♄40'29		asc. node	16517 Nov 22 07:36	9°♄07'58	
	16516 Dec 10 18:11	0°♄		morning set	16517 Nov 22 20:46	10°♄13'23	
max. Earth dist.	16516 Dec 14 16:17	8°♄26'53	1.31401 AU	max. Earth dist.	16517 Nov 27 14:31	19°♄57'42	1.32390 AU
superior conj	16516 Dec 16 12:19	12°♄29'44	1°26'12	superior conj	16517 Nov 30 18:51	26°♄46'18	1°10'57
minimum elong	16516 Dec 16 10:27	12°♄19'24	1°26'37	minimum elong	16517 Nov 30 16:30	26°♄33'36	1°11'14
evening rise	16516 Dec 23 05:20	27°♄19'00			16517 Dec 02 06:28	0°♄	
	16516 Dec 24 11:18	0°♄		evening rise	16517 Dec 07 16:06	11°♄45'53	
desc. node	16517 Jan 06 20:10	24°♄55'21			16517 Dec 16 19:08	0°♄	
	16517 Jan 10 07:15	0°♄		desc. node	16517 Dec 24 17:03	12°♄25'59	
evening max el	16517 Jan 18 04:49	9°♄14'56	24°53'32	evening max el	16517 Dec 30 14:26	19°♄13'48	23°11'18
retrograde	16517 Jan 31 23:34	16°♄08'34		retrograde	16518 Jan 12 19:40	25°♄45'50	
evening set	16517 Feb 06 10:10	15°♄02'37		evening set	16518 Jan 17 02:27	25°♄06'08	
min. Earth dist.	16517 Feb 11 17:03	12°♄16'00	0.56098 AU	min. Earth dist.	16518 Jan 24 00:57	21°♄51'52	0.54804 AU
inferior conj	16517 Feb 14 04:23	10°♄41'49	-4°56'04	inferior conj	16518 Jan 25 06:57	21°♄08'46	-5°53'19
minimum elong	16517 Feb 14 13:47	10°♄26'52	4°53'29	minimum elong	16518 Jan 25 11:45	21°♄01'52	5°52'25
morning rise	16517 Feb 22 19:54	6°♄36'12		morning rise	16518 Feb 02 22:20	17°♄17'41	
direct	16517 Feb 24 22:58	6°♄23'38		direct	16518 Feb 05 16:46	16°♄59'30	
asc. node	16517 Mar 03 08:47	8°♄26'11		morning max el	16518 Feb 17 01:08	22°♄29'11	20°45'54
morning max el	16517 Mar 06 16:44	11°♄08'19	19°27'41	asc. node	16518 Feb 18 06:04	23°♄42'42	
	16517 Mar 19 06:35	0°♄			16518 Feb 23 05:43	0°♄	
morning set	16517 Mar 23 18:24	8°♄48'21		morning set	16518 Mar 08 02:08	23°♄27'02	
					16518 Mar 11 05:39	0°♄	
superior conj	16517 Mar 31 21:34	25°♄01'05	0°33'31				
minimum elong	16517 Mar 31 23:27	25°♄10'16	0°33'00	superior conj	16518 Mar 15 13:18	8°♄56'18	0°58'51
	16517 Apr 03 11:36	0°♄		minimum elong	16518 Mar 15 15:48	9°♄09'05	0°58'26
desc. node	16517 Apr 04 21:07	2°♄38'22		max. Earth dist.	16518 Mar 20 18:08	19°♄18'21	1.35809 AU

desc. node	16518 Mar 22 17:50	23° Υ 06'47		minimum elong	16519 Feb 27 15:57	23° Υ 24'50	1°17'45
evening rise	16518 Mar 24 15:34	26° Υ 40'32			16519 Mar 02 19:25	0° Υ	
	16518 Mar 26 11:16	0° Υ		max. Earth dist.	16519 Mar 03 08:30	1° Υ 07'21	1.33911 AU
	16518 Apr 14 04:07	0° Π		evening rise	16519 Mar 07 18:43	9° Υ 57'35	
evening max el	16518 Apr 29 01:13	18° Π 10'29	26°10'05	desc. node	16519 Mar 09 14:33	13° Υ 27'28	
retrograde	16518 May 11 20:37	25° Π 30'39			16519 Mar 18 22:57	0° Υ	
asc. node	16518 May 17 03:43	23° Π 40'47			16519 Apr 09 19:23	0° Π	
evening set	16518 May 18 01:37	22° Π 58'41		evening max el	16519 Apr 11 15:05	1° Π 50'19	27°03'44
min. Earth dist.	16518 May 22 04:29	18° Π 38'10	0.67208 AU	retrograde	16519 Apr 25 01:16	9° Π 21'13	
inferior conj	16518 May 23 22:07	16° Π 29'01	1°55'02	evening set	16519 May 01 14:40	6° Π 49'37	
minimum elong	16518 May 23 19:57	16° Π 35'48	1°53'47	asc. node	16519 May 04 00:53	4° Π 38'03	
morning rise	16518 May 29 15:04	10° Π 44'05		min. Earth dist.	16519 May 05 12:31	3° Π 02'50	0.65646 AU
direct	16518 Jun 01 21:08	9° Π 44'03		inferior conj	16519 May 07 19:01	0° Π 27'14	1°07'47
morning max el	16518 Jun 08 10:34	13° Π 13'49	18°35'44	minimum elong	16519 May 07 17:22	0° Π 32'00	1°06'41
desc. node	16518 Jun 18 18:08	26° Π 42'48			16519 May 08 04:34	30° Υ	
	16518 Jun 20 22:10	0° Υ		morning rise	16519 May 13 21:36	24° Υ 55'03	
morning set	16518 Jun 29 19:14	13° Υ 48'38		direct	16519 May 16 18:01	24° Υ 11'05	
	16518 Jul 10 03:54	0° Ω		morning max el	16519 May 23 01:15	27° Υ 27'31	18°02'58
max. Earth dist.	16518 Jul 15 05:45	7° Ω 54'43	1.45989 AU		16519 May 25 09:15	0° Π	
				desc. node	16519 Jun 05 15:09	16° Π 36'53	
superior conj	16518 Jul 15 18:31	8° Ω 44'28	-2°14'09	morning set	16519 Jun 10 13:44	24° Π 37'49	
minimum elong	16518 Jul 15 17:18	8° Ω 39'42	2°14'40		16519 Jun 13 21:14	0° Υ	
	16518 Jul 29 07:48	0° Π					
evening rise	16518 Jul 31 10:56	3° Π 22'21		superior conj	16519 Jun 25 05:48	18° Υ 06'27	-2°00'58
greatest brilliancy	16518 Aug 07 20:34	15° Π 04'48	-0.9m	minimum elong	16519 Jun 24 22:16	17° Υ 36'50	2°01'05
asc. node	16518 Aug 13 03:33	23° Π 12'22		max. Earth dist.	16519 Jun 28 02:37	22° Υ 36'07	1.45887 AU
	16518 Aug 18 00:04	0° Ω			16519 Jul 02 20:41	0° Ω	
evening max el	16518 Aug 21 13:54	4° Ω 06'06	18°38'29	evening rise	16519 Jul 11 09:05	13° Ω 09'15	
retrograde	16518 Aug 28 02:57	7° Ω 37'59			16519 Jul 22 10:17	0° Π	
evening set	16518 Aug 31 08:21	6° Ω 38'48		greatest brilliancy	16519 Jul 24 00:55	2° Π 23'49	-0.7m
inferior conj	16518 Sep 06 00:18	0° Ω 59'47	2°19'47	asc. node	16519 Jul 31 00:19	12° Π 13'47	
minimum elong	16518 Sep 06 02:32	0° Ω 52'52	2°19'10	evening max el	16519 Aug 04 22:41	17° Π 59'14	19°22'32
	16518 Sep 06 19:39	30° Υ		retrograde	16519 Aug 12 00:24	21° Π 54'28	
min. Earth dist.	16518 Sep 07 22:32	28° Π 37'49	0.65849 AU	evening set	16519 Aug 15 15:46	20° Π 37'40	
morning rise	16518 Sep 11 19:36	24° Π 34'26		inferior conj	16519 Aug 21 01:19	14° Π 45'26	2°48'23
desc. node	16518 Sep 14 15:57	22° Π 43'40		minimum elong	16519 Aug 21 03:01	14° Π 39'51	2°47'53
direct	16518 Sep 18 03:33	21° Π 57'19		min. Earth dist.	16519 Aug 22 09:31	12° Π 59'44	0.67378 AU
morning max el	16518 Oct 01 08:22	29° Π 44'16	26°47'00	morning rise	16519 Aug 26 13:39	8° Π 18'31	
	16518 Oct 01 14:35	0° Ω		direct	16519 Sep 01 11:59	5° Π 45'25	
	16518 Oct 23 20:29	0° Π		desc. node	16519 Sep 01 13:16	5° Π 45'25	
morning set	16518 Nov 06 02:29	23° Π 14'18		morning max el	16519 Sep 13 19:43	13° Π 06'28	25°33'34
asc. node	16518 Nov 09 04:29	29° Π 14'00			16519 Sep 27 12:27	0° Ω	
	16518 Nov 09 13:44	0° Υ			16519 Oct 16 14:08	0° Π	
max. Earth dist.	16518 Nov 10 03:26	1° Υ 08'22	1.33944 AU	morning set	16519 Oct 19 17:39	5° Π 36'02	
				max. Earth dist.	16519 Oct 23 07:28	12° Π 12'49	1.35987 AU
superior conj	16518 Nov 14 19:35	10° Υ 43'43	0°49'26	asc. node	16519 Oct 27 01:18	19° Π 25'14	
minimum elong	16518 Nov 14 17:21	10° Υ 32'01	0°49'38				
evening rise	16518 Nov 22 01:56	26° Υ 08'49		superior conj	16519 Oct 29 11:48	24° Π 15'38	0°21'51
	16518 Nov 23 22:04	0° Υ		minimum elong	16519 Oct 29 10:32	24° Π 09'14	0°22'05
desc. node	16518 Dec 11 14:00	28° Υ 40'46			16519 Nov 01 07:43	0° Υ	
evening max el	16518 Dec 12 03:48	29° Υ 15'25	21°30'51	evening rise	16519 Nov 06 08:52	10° Υ 23'22	
	16518 Dec 12 22:32	0° \approx			16519 Nov 16 17:50	0° Υ	
retrograde	16518 Dec 24 05:46	5° \approx 13'37		evening max el	16519 Nov 24 05:18	9° Υ 53'10	20°06'17
evening set	16518 Dec 27 06:39	4° \approx 52'36		desc. node	16519 Nov 28 11:02	13° Υ 16'28	
inferior conj	16519 Jan 04 22:11	1° \approx 03'01	-5°55'49	retrograde	16519 Dec 04 17:50	15° Υ 07'48	
minimum elong	16519 Jan 04 17:39	1° \approx 09'22	5°54'52	evening set	16519 Dec 06 22:05	14° Υ 55'23	
min. Earth dist.	16519 Jan 05 06:04	0° \approx 51'58	0.54364 AU	inferior conj	16519 Dec 15 16:24	10° Υ 58'00	-4°58'25
	16519 Jan 06 19:34	30° Υ		minimum elong	16519 Dec 15 06:33	11° Υ 12'49	4°55'19
morning rise	16519 Jan 13 05:08	27° Υ 14'04		min. Earth dist.	16519 Dec 17 11:56	9° Υ 52'37	0.54865 AU
direct	16519 Jan 17 00:53	26° Υ 42'18		morning rise	16519 Dec 23 14:10	6° Υ 52'23	
	16519 Jan 26 07:01	0° \approx		direct	16519 Dec 28 11:44	6° Υ 00'17	
morning max el	16519 Jan 29 18:39	2° \approx 54'06	22°25'10	morning max el	16520 Jan 11 03:29	12° Υ 45'56	24°15'23
asc. node	16519 Feb 05 03:20	10° \approx 21'00		asc. node	16520 Jan 23 00:35	28° Υ 02'53	
	16519 Feb 16 14:12	0° Υ			16520 Jan 24 05:14	0° \approx	
morning set	16519 Feb 20 12:59	8° Υ 10'15		morning set	16520 Feb 05 01:00	22° \approx 52'30	
					16520 Feb 08 07:34	0° Υ	
superior conj	16519 Feb 27 13:38	23° Υ 12'36	1°17'54				

superior conj	16520 Feb 11 19:52	7° H 42'33	1°30'39	asc. node	16521 Jan 08 21:46	16° Z 32'28	
minimum elong	16520 Feb 11 21:27	7° H 51'15	1°30'48		16521 Jan 15 23:04	0° \approx	
max. Earth dist.	16520 Feb 14 06:34	13° H 00'52	1.32431 AU	morning set	16521 Jan 19 12:19	7° \approx 28'32	
evening rise	16520 Feb 19 09:00	23° H 40'32					
	16520 Feb 22 13:47	0° Y		superior conj	16521 Jan 26 05:40	22° \approx 19'40	1°37'13
desc. node	16520 Feb 24 11:15	3° Y 36'06		minimum elong	16521 Jan 26 06:17	22° \approx 23'04	1°37'37
	16520 Mar 11 14:03	0° B		max. Earth dist.	16521 Jan 27 10:43	25° \approx 00'57	1.31438 AU
evening max el	16520 Mar 24 03:43	15° B 06'22	27°33'09		16521 Jan 29 17:06	0° H	
retrograde	16520 Apr 06 23:03	22° B 38'36		evening rise	16521 Feb 02 07:37	7° H 42'32	
evening set	16520 Apr 13 17:38	20° B 14'07		desc. node	16521 Feb 10 08:00	23° H 27'13	
min. Earth dist.	16520 Apr 17 12:18	16° B 57'09	0.63718 AU		16521 Feb 14 00:49	0° Y	
asc. node	16520 Apr 19 22:07	14° B 28'33		evening max el	16521 Mar 06 13:00	27° Y 46'31	27°32'02
inferior conj	16520 Apr 20 06:36	14° B 06'31	0°06'40		16521 Mar 09 00:39	0° B	
minimum elong	16520 Apr 20 06:25	14° B 07'01	0°06'12	retrograde	16521 Mar 20 13:06	5° B 13'20	
transit middle	16520 Apr 20 06:25	14° B 07'01	0°06'12	evening set	16521 Mar 27 07:55	3° B 03'26	
transit begin	16520 Apr 20 03:31	14° B 14'31		min. Earth dist.	16521 Mar 31 02:30	0° B 09'49	0.61529 AU
transit end	16520 Apr 20 09:18	13° B 59'32			16521 Mar 31 06:58	30° R Y	
morning rise	16520 Apr 26 21:38	8° B 49'30		inferior conj	16521 Apr 03 05:34	27° Y 18'50	-1°08'45
direct	16520 Apr 29 09:25	8° B 18'46		minimum elong	16521 Apr 03 08:00	27° Y 13'16	1°07'59
morning max el	16520 May 05 18:40	11° B 34'01	17°47'29	asc. node	16521 Apr 06 19:23	24° Y 17'43	
	16520 May 18 12:04	0° II		morning rise	16521 Apr 10 11:24	22° Y 19'40	
morning set	16520 May 22 10:44	6° II 41'44		direct	16521 Apr 12 15:50	21° Y 58'50	
desc. node	16520 May 22 12:05	6° II 47'30		morning max el	16521 Apr 19 11:48	25° Y 24'50	17°49'48
					16521 Apr 23 08:29	0° B	
superior conj	16520 Jun 04 08:23	28° II 13'11	-1°32'07	morning set	16521 May 05 05:26	19° B 46'14	
minimum elong	16520 Jun 04 00:16	27° II 40'15	1°31'49	desc. node	16521 May 09 08:58	27° B 09'45	
	16520 Jun 05 10:47	0° E			16521 May 10 23:34	0° II	
max. Earth dist.	16520 Jun 09 22:03	7° E 08'41	1.45046 AU				
evening rise	16520 Jun 19 19:41	22° E 32'41		superior conj	16521 May 16 09:54	9° II 23'39	-0°55'33
	16520 Jun 24 17:30	0° O		minimum elong	16521 May 16 04:54	9° II 02'22	0°55'21
	16520 Jul 16 06:22	0° np		max. Earth dist.	16521 May 23 13:36	21° II 16'38	1.43562 AU
asc. node	16520 Jul 16 21:09	0° np 40'27			16521 May 29 00:44	0° E	
evening max el	16520 Jul 18 01:33	1° np 54'02	20°21'45	evening rise	16521 May 30 11:42	2° E 16'50	
retrograde	16520 Jul 25 23:30	6° np 24'24			16521 Jun 18 04:51	0° O	
evening set	16520 Jul 30 01:24	4° np 49'35		evening max el	16521 Jun 30 22:25	15° O 48'45	21°33'22
	16520 Aug 03 09:38	30° R O		asc. node	16521 Jul 03 18:03	18° O 20'38	
inferior conj	16520 Aug 04 07:33	28° O 45'28	3°03'54	retrograde	16521 Jul 09 22:15	21° O 02'08	
minimum elong	16520 Aug 04 08:24	28° O 42'34	3°03'29	evening set	16521 Jul 14 11:16	19° O 09'59	
min. Earth dist.	16520 Aug 05 02:00	27° O 42'15	0.68456 AU	inferior conj	16521 Jul 19 16:43	12° O 55'32	3°07'57
morning rise	16520 Aug 09 15:04	22° O 21'20		minimum elong	16521 Jul 19 16:37	12° O 55'53	3°07'28
direct	16520 Aug 15 02:02	19° O 58'46		min. Earth dist.	16521 Jul 19 21:52	12° O 37'33	0.69056 AU
desc. node	16520 Aug 18 10:35	20° O 43'48		morning rise	16521 Jul 24 21:45	6° O 37'02	
morning max el	16520 Aug 26 06:51	26° O 40'20	24°07'42	direct	16521 Jul 29 20:40	4° O 29'44	
	16520 Aug 29 09:00	0° np		desc. node	16521 Aug 05 07:52	7° O 15'38	
	16520 Sep 20 02:09	0° E		morning max el	16521 Aug 08 19:07	10° O 22'07	22°38'36
morning set	16520 Sep 30 14:09	17° E 09'26			16521 Aug 24 07:47	0° np	
max. Earth dist.	16520 Oct 04 06:36	23° E 35'45	1.38340 AU	morning set	16521 Sep 11 12:13	27° np 46'09	
	16520 Oct 07 19:32	0° ml			16521 Sep 12 20:54	0° E	
				max. Earth dist.	16521 Sep 16 06:48	5° E 41'37	1.40748 AU
superior conj	16520 Oct 11 16:02	7° ml 13'29	-0°11'08				
minimum elong	16520 Oct 11 16:47	7° ml 17'03	0°10'41	superior conj	16521 Sep 24 04:08	19° E 28'15	-0°47'42
behind sun begin	16520 Oct 11 11:31	6° ml 51'59		minimum elong	16521 Sep 24 07:55	19° E 45'20	0°46'55
behind sun end	16520 Oct 11 22:02	7° ml 42'10		asc. node	16521 Sep 29 18:52	29° E 47'42	
asc. node	16520 Oct 12 22:06	9° ml 37'35			16521 Sep 29 21:29	0° ml	
evening rise	16520 Oct 20 10:24	24° ml 23'05		evening rise	16521 Oct 04 03:23	8° ml 00'14	
	16520 Oct 23 07:07	0° Z			16521 Oct 16 23:10	0° Z	
evening max el	16520 Nov 05 21:17	21° Z 21'05	19°03'40	evening max el	16521 Oct 20 01:08	3° Z 36'54	18°23'19
desc. node	16520 Nov 14 08:09	25° Z 50'39		retrograde	16521 Oct 27 17:18	7° Z 31'08	
retrograde	16520 Nov 14 20:03	25° Z 51'27		evening set	16521 Oct 29 17:24	7° Z 15'52	
evening set	16520 Nov 16 17:28	25° Z 40'10		desc. node	16521 Nov 01 05:20	6° Z 17'40	
inferior conj	16520 Nov 25 02:36	21° Z 25'28	-3°23'31	inferior conj	16521 Nov 06 10:23	2° Z 40'08	-1°40'58
minimum elong	16520 Nov 24 18:22	21° Z 39'37	3°19'57	minimum elong	16521 Nov 06 06:28	2° Z 48'00	1°38'51
min. Earth dist.	16520 Nov 27 22:22	19° Z 29'06	0.56212 AU	min. Earth dist.	16521 Nov 09 16:04	0° Z 04'44	0.58170 AU
morning rise	16520 Dec 02 16:38	16° Z 46'58			16521 Nov 09 18:32	30° R ml	
direct	16520 Dec 08 10:41	15° Z 29'37		morning rise	16521 Nov 13 16:05	27° ml 24'50	
morning max el	16520 Dec 22 13:32	22° Z 42'40	25°58'12	direct	16521 Nov 20 00:24	25° ml 40'19	
	16520 Dec 29 01:17	0° Z			16521 Nov 30 13:28	0° Z	

morning max el	16521 Dec 04 06:51	3° ♁ 14'55	27°14'49	morning rise	16522 Oct 26 11:02	8° ♁ 55'06	
	16521 Dec 23 16:16	0° ♁		direct	16522 Nov 02 02:39	6° ♁ 46'30	
asc. node	16521 Dec 26 18:53	5° ♁ 37'25		morning max el	16522 Nov 16 08:11	14° ♁ 36'05	27°54'20
morning set	16522 Jan 03 21:04	21° ♁ 53'01			16522 Nov 28 19:33	0° ♁	
	16522 Jan 07 14:15	0° ♁		asc. node	16522 Dec 13 15:56	25° ♁ 08'27	
					16522 Dec 16 03:02	0° ♁	
superior conj	16522 Jan 10 16:59	6° ♁ 57'37	1°37'44	morning set	16522 Dec 19 01:24	6° ♁ 01'49	
minimum elong	16522 Jan 10 16:33	6° ♁ 55'07	1°38'15	max. Earth dist.	16522 Dec 25 00:44	18° ♁ 59'46	1.31087 AU
max. Earth dist.	16522 Jan 10 17:56	7° ♁ 02'52	1.30983 AU				
evening rise	16522 Jan 17 12:08	21° ♁ 57'26		superior conj	16522 Dec 26 03:59	21° ♁ 31'41	1°32'10
	16522 Jan 21 08:59	0° ♁		minimum elong	16522 Dec 26 02:35	21° ♁ 23'48	1°32'40
desc. node	16522 Jan 28 04:46	12° ♁ 53'06			16522 Dec 29 23:06	0° ♁	
	16522 Feb 08 06:32	0° ♁		evening rise	16523 Jan 01 20:33	6° ♁ 20'57	
evening max el	16522 Feb 16 16:27	9° ♁ 38'52	26°56'08		16523 Jan 14 00:27	0° ♁	
retrograde	16522 Mar 02 17:41	16° ♁ 55'01		desc. node	16523 Jan 15 01:35	1° ♁ 44'47	
evening set	16522 Mar 09 06:13	15° ♁ 06'59		evening max el	16523 Jan 29 11:58	20° ♁ 38'32	25°46'10
min. Earth dist.	16522 Mar 13 06:35	12° ♁ 26'50	0.59253 AU	retrograde	16523 Feb 12 10:26	27° ♁ 40'28	
inferior conj	16522 Mar 16 12:02	9° ♁ 53'04	-2°36'25	evening set	16523 Feb 18 09:00	26° ♁ 18'57	
minimum elong	16522 Mar 16 18:03	9° ♁ 41'05	2°34'09	min. Earth dist.	16523 Feb 23 00:58	23° ♁ 39'20	0.57137 AU
morning rise	16522 Mar 24 09:32	5° ♁ 14'03		inferior conj	16523 Feb 25 22:33	21° ♁ 39'52	-4°08'06
asc. node	16522 Mar 24 16:41	5° ♁ 10'03		minimum elong	16523 Feb 26 07:39	21° ♁ 24'11	4°05'06
direct	16522 Mar 26 09:00	4° ♁ 59'32		morning rise	16523 Mar 06 09:20	17° ♁ 22'08	
morning max el	16522 Apr 03 00:56	8° ♁ 47'57	18°11'06	direct	16523 Mar 08 08:50	17° ♁ 10'01	
	16522 Apr 16 18:17	0° ♁		asc. node	16523 Mar 11 13:56	17° ♁ 43'44	
morning set	16522 Apr 18 15:56	3° ♁ 33'10		morning max el	16523 Mar 17 05:58	21° ♁ 31'38	18°53'13
desc. node	16522 Apr 26 05:48	17° ♁ 38'31			16523 Mar 23 18:54	0° ♁	
				morning set	16523 Apr 02 13:27	17° ♁ 48'26	
superior conj	16522 Apr 28 09:54	21° ♁ 34'13	-0°18'03		16523 Apr 08 19:14	0° ♁	
minimum elong	16522 Apr 28 08:26	21° ♁ 27'39	0°18'15				
	16522 May 03 04:52	0° ♁		superior conj	16523 Apr 11 04:40	4° ♁ 34'30	0°16'11
max. Earth dist.	16522 May 06 00:17	4° ♁ 47'12	1.41589 AU	minimum elong	16523 Apr 11 05:42	4° ♁ 39'23	0°15'43
evening rise	16522 May 10 21:17	12° ♁ 50'06		behind sun begin	16523 Apr 11 04:35	4° ♁ 34'08	
	16522 May 21 22:33	0° ♁		behind sun end	16523 Apr 11 06:48	4° ♁ 44'39	
evening max el	16522 Jun 13 14:43	29° ♁ 43'36	22°52'59	desc. node	16523 Apr 13 02:34	8° ♁ 10'04	
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retrograde	16522 Jun 23 19:04	5° ♁ 41'36			16523 Apr 25 13:47	0° ♁	
evening set	16522 Jun 28 19:39	3° ♁ 33'49			16523 May 15 16:35	0° ♁	
	16522 Jul 02 01:06	30° ♁		evening max el	16523 May 27 04:44	13° ♁ 39'29	24°14'36
inferior conj	16522 Jul 04 02:47	27° ♁ 10'57	3°01'22	asc. node	16523 Jun 07 11:59	20° ♁ 17'04	
minimum elong	16522 Jul 04 01:46	27° ♁ 14'27	3°00'42	retrograde	16523 Jun 07 12:36	20° ♁ 17'05	
min. Earth dist.	16522 Jul 03 18:53	27° ♁ 38'23	0.69166 AU	evening set	16523 Jun 13 00:53	17° ♁ 56'25	
morning rise	16522 Jul 09 07:47	21° ♁ 00'10		min. Earth dist.	16523 Jun 17 14:52	12° ♁ 38'41	0.68783 AU
direct	16522 Jul 13 18:38	19° ♁ 11'01		inferior conj	16523 Jun 18 11:49	11° ♁ 27'51	2°44'21
morning max el	16522 Jul 22 11:08	24° ♁ 12'09	21°14'24	minimum elong	16523 Jun 18 10:05	11° ♁ 33'45	2°43'25
desc. node	16522 Jul 23 05:06	24° ♁ 57'57		morning rise	16523 Jun 23 19:21	5° ♁ 26'13	
	16522 Jul 27 14:06	0° ♁		direct	16523 Jun 27 18:31	3° ♁ 56'34	
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morning set	16522 Aug 22 10:54	7° ♁ 24'14		desc. node	16523 Jul 10 02:16	13° ♁ 32'45	
max. Earth dist.	16522 Aug 29 12:40	18° ♁ 41'35	1.42928 AU		16523 Jul 21 20:49	0° ♁	
	16522 Sep 05 07:54	0° ♁		morning set	16523 Aug 01 17:22	16° ♁ 23'20	
					16523 Aug 10 11:25	0° ♁	
superior conj	16522 Sep 05 19:46	0° ♁ 50'24	-1°24'20	max. Earth dist.	16523 Aug 12 01:32	2° ♁ 30'47	1.44640 AU
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asc. node	16522 Sep 16 15:36	19° ♁ 51'55		superior conj	16523 Aug 17 11:58	11° ♁ 13'50	-1°55'10
evening rise	16522 Sep 17 07:44	21° ♁ 04'22		minimum elong	16523 Aug 17 19:44	11° ♁ 45'22	1°54'48
	16522 Sep 22 07:46	0° ♁			16523 Aug 28 18:52	0° ♁	
evening max el	16522 Oct 03 12:30	16° ♁ 30'53	18°03'40	evening rise	16523 Aug 30 18:22	3° ♁ 22'14	
retrograde	16522 Oct 10 08:24	20° ♁ 01'41		asc. node	16523 Sep 03 12:19	9° ♁ 45'36	
evening set	16522 Oct 12 15:15	19° ♁ 38'15		evening max el	16523 Sep 17 03:10	29° ♁ 51'36	18°03'04
desc. node	16522 Oct 19 02:33	15° ♁ 10'37			16523 Sep 17 06:36	0° ♁	
inferior conj	16522 Oct 19 15:02	14° ♁ 41'39	-0°09'55	retrograde	16523 Sep 23 13:07	3° ♁ 12'36	
minimum elong	16522 Oct 19 14:43	14° ♁ 42'24	0°09'24	evening set	16523 Sep 26 04:11	2° ♁ 37'24	
transit middle	16522 Oct 19 14:43	14° ♁ 42'24	0°09'24		16523 Sep 29 22:04	30° ♁	
transit begin	16522 Oct 19 12:01	14° ♁ 48'40		inferior conj	16523 Oct 02 12:57	27° ♁ 22'14	1°02'43
transit end	16522 Oct 19 17:25	14° ♁ 36'07		minimum elong	16523 Oct 02 14:37	27° ♁ 17'49	1°02'20
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
































































































































desc. node	16523 Oct 05 23:49	23° Ω 46'23		inferior conj	16524 Sep 15 00:11	10° Ω 34'11	1°56'29
morning rise	16523 Oct 08 22:43	21° Ω 13'24		minimum elong	16524 Sep 15 02:28	10° Ω 27'26	1°55'53
direct	16523 Oct 15 15:03	18° Ω 47'23		min. Earth dist.	16524 Sep 17 06:11	7° Ω 56'10	0.64793 AU
morning max el	16523 Oct 29 15:37	26° Ω 44'36	27°54'39	morning rise	16524 Sep 21 00:20	4° Ω 12'21	
	16523 Nov 01 17:20	0° \mathbb{M}		desc. node	16524 Sep 21 21:06	3° Ω 33'18	
	16523 Nov 22 11:10	0° \mathcal{A}		direct	16524 Sep 27 12:20	1° Ω 37'00	
asc. node	16523 Nov 30 12:55	14° \mathcal{A} 57'35		morning max el	16524 Oct 11 02:30	9° Ω 31'52	27°19'52
morning set	16523 Dec 02 23:05	19° \mathcal{A} 49'05			16524 Oct 27 04:37	0° \mathbb{M}	
	16523 Dec 07 19:24	0° \mathcal{B}			16524 Nov 13 20:29	0° \mathcal{A}	
max. Earth dist.	16523 Dec 08 03:18	0° \mathcal{B} 42'38	1.31757 AU	morning set	16524 Nov 15 11:33	3° \mathcal{A} 09'17	
				asc. node	16524 Nov 16 09:51	4° \mathcal{A} 59'09	
superior conj	16523 Dec 10 12:42	5° \mathcal{B} 55'48	1°20'30	max. Earth dist.	16524 Nov 19 22:02	12° \mathcal{A} 05'34	1.32992 AU
minimum elong	16523 Dec 10 10:34	5° \mathcal{B} 44'07	1°20'52				
evening rise	16523 Dec 17 06:58	20° \mathcal{B} 47'43		superior conj	16524 Nov 23 17:03	20° \mathcal{A} 04'46	1°02'35
	16523 Dec 21 16:11	0° \approx		minimum elong	16524 Nov 23 14:40	19° \mathcal{A} 52'01	1°02'48
desc. node	16524 Jan 01 22:26	19° \approx 49'20			16524 Nov 28 07:20	0° \mathcal{B}	
	16524 Jan 10 02:34	0° \mathcal{H}		evening rise	16524 Nov 30 17:34	5° \mathcal{B} 13'33	
evening max el	16524 Jan 10 23:40	0° \mathcal{H} 51'55	24°10'56		16524 Dec 13 20:33	0° \approx	
retrograde	16524 Jan 24 13:34	7° \mathcal{H} 36'47		desc. node	16524 Dec 18 19:22	6° \approx 50'19	
evening set	16524 Jan 29 13:29	6° \mathcal{H} 42'27		evening max el	16524 Dec 22 09:24	10° \approx 46'12	22°27'10
min. Earth dist.	16524 Feb 04 11:21	3° \mathcal{H} 46'41	0.55460 AU	retrograde	16525 Jan 04 04:41	17° \approx 05'57	
inferior conj	16524 Feb 06 11:46	2° \mathcal{H} 33'42	-5°25'37	evening set	16525 Jan 07 22:28	16° \approx 35'14	
minimum elong	16524 Feb 06 20:05	2° \mathcal{H} 21'08	5°23'42	min. Earth dist.	16525 Jan 15 17:20	13° \approx 03'22	0.54502 AU
	16524 Feb 11 02:21	30° $\mathcal{R}\approx$		inferior conj	16525 Jan 16 07:56	12° \approx 42'53	-6°02'04
morning rise	16524 Feb 15 04:33	28° \approx 35'23		minimum elong	16525 Jan 16 08:54	12° \approx 41'31	6°01'33
direct	16524 Feb 17 12:58	28° \approx 21'08		morning rise	16525 Jan 24 20:23	8° \approx 55'07	
	16524 Feb 23 12:12	0° \mathcal{H}		direct	16525 Jan 28 00:45	8° \approx 32'16	
asc. node	16524 Feb 26 11:12	2° \mathcal{H} 03'57		morning max el	16525 Feb 09 00:32	14° \approx 20'12	21°26'07
morning max el	16524 Feb 27 22:43	3° \mathcal{H} 24'20	19°58'10	asc. node	16525 Feb 12 08:29	17° \approx 57'29	
	16524 Mar 15 14:22	0° \mathcal{Y}			16525 Feb 20 10:14	0° \mathcal{H}	
morning set	16524 Mar 16 18:16	2° \mathcal{Y} 21'04		morning set	16525 Mar 01 03:34	17° \mathcal{H} 02'32	
					16525 Mar 07 07:07	0° \mathcal{Y}	
superior conj	16524 Mar 24 13:51	18° \mathcal{Y} 12'47	0°45'02	superior conj	16525 Mar 08 09:36	2° \mathcal{Y} 18'13	1°07'44
minimum elong	16524 Mar 24 16:07	18° \mathcal{Y} 24'05	0°44'31	minimum elong	16525 Mar 08 12:06	2° \mathcal{Y} 31'12	1°07'24
desc. node	16524 Mar 29 23:19	28° \mathcal{Y} 40'45		max. Earth dist.	16525 Mar 13 00:09	11° \mathcal{Y} 40'44	1.34947 AU
max. Earth dist.	16524 Mar 30 13:54	29° \mathcal{Y} 49'15	1.37045 AU	desc. node	16525 Mar 16 20:01	19° \mathcal{Y} 06'27	
	16524 Mar 30 16:12	0° \mathcal{B}		evening rise	16525 Mar 17 02:09	19° \mathcal{Y} 35'28	
evening rise	16524 Apr 03 06:56	6° \mathcal{B} 37'10			16525 Mar 22 19:36	0° \mathcal{B}	
	16524 Apr 17 10:35	0° \mathbb{I}			16525 Apr 11 11:18	0° \mathbb{I}	
evening max el	16524 May 08 18:11	27° \mathbb{I} 34'15	25°31'13	evening max el	16525 Apr 21 07:46	11° \mathbb{I} 21'21	26°35'25
	16524 May 11 09:29	0° \mathcal{E}		retrograde	16525 May 04 10:09	18° \mathbb{I} 48'00	
retrograde	16524 May 21 01:56	4° \mathcal{E} 42'05		evening set	16525 May 10 19:09	16° \mathbb{I} 15'03	
asc. node	16524 May 24 09:01	3° \mathcal{E} 57'57		asc. node	16525 May 11 06:08	15° \mathbb{I} 52'02	
evening set	16524 May 27 01:20	2° \mathcal{E} 12'32		min. Earth dist.	16525 May 14 19:33	12° \mathbb{I} 09'34	0.66588 AU
	16524 May 29 06:42	30° $\mathcal{R}\mathbb{I}$		inferior conj	16525 May 16 18:51	9° \mathbb{I} 47'37	1°36'36
min. Earth dist.	16524 May 31 07:45	27° \mathbb{I} 31'52	0.67914 AU	minimum elong	16525 May 16 16:48	9° \mathbb{I} 53'49	1°35'23
inferior conj	16524 Jun 01 17:54	25° \mathbb{I} 41'58	2°16'25	morning rise	16525 May 22 15:33	4° \mathbb{I} 08'11	
minimum elong	16524 Jun 01 15:44	25° \mathbb{I} 48'56	2°15'15	direct	16525 May 25 17:22	3° \mathbb{I} 15'26	
morning rise	16524 Jun 07 06:37	19° \mathbb{I} 50'47		morning max el	16525 Jun 01 03:15	6° \mathbb{I} 37'59	18°19'49
direct	16524 Jun 10 18:44	18° \mathbb{I} 40'22		desc. node	16525 Jun 12 20:26	22° \mathbb{I} 27'59	
morning max el	16524 Jun 17 15:13	22° \mathbb{I} 23'11	19°02'22		16525 Jun 17 15:25	0° \mathcal{E}	
	16524 Jun 23 23:37	0° \mathcal{E}		morning set	16525 Jun 21 04:03	5° \mathcal{E} 35'55	
desc. node	16524 Jun 25 23:23	2° \mathcal{E} 46'23					
greatest brilliancy	16524 Jun 30 16:12	9° \mathcal{E} 39'55	-0.7m	superior conj	16525 Jul 06 16:26	0° \mathbb{O} 00'57	-2°10'55
morning set	16524 Jul 11 01:04	25° \mathcal{E} 31'23		minimum elong	16525 Jul 06 11:59	29° \mathcal{E} 43'36	2°11'19
	16524 Jul 13 22:36	0° \mathbb{O}			16525 Jul 06 16:11	0° \mathbb{O}	
max. Earth dist.	16524 Jul 24 19:36	16° \mathbb{O} 53'57	1.45705 AU	max. Earth dist.	16525 Jul 07 15:42	1° \mathbb{O} 31'37	1.46033 AU
				evening rise	16525 Jul 22 16:54	24° \mathbb{O} 58'33	
superior conj	16524 Jul 27 07:08	20° \mathbb{O} 47'15	-2°12'40		16525 Jul 25 22:09	0° \mathbb{M}	
minimum elong	16524 Jul 27 10:26	21° \mathbb{O} 00'15	2°13'01	greatest brilliancy	16525 Aug 01 13:53	10° \mathbb{M} 18'18	-0.8m
	16524 Aug 02 02:58	0° \mathbb{M}		asc. node	16525 Aug 07 05:49	18° \mathbb{M} 41'43	
evening rise	16524 Aug 11 06:14	14° \mathbb{M} 42'02		evening max el	16525 Aug 14 05:08	27° \mathbb{M} 20'17	18°55'10
asc. node	16524 Aug 20 09:04	29° \mathbb{M} 24'22			16525 Aug 17 13:26	0° \mathcal{A}	
	16524 Aug 20 18:09	0° \mathcal{A}		retrograde	16525 Aug 20 22:47	1° \mathcal{A} 01'00	
evening max el	16524 Aug 30 17:41	13° \mathcal{A} 30'39	18°20'28	evening set	16525 Aug 24 08:14	29° \mathbb{M} 54'35	
retrograde	16524 Sep 06 03:09	16° \mathcal{A} 55'04			16525 Aug 24 04:50	30° $\mathcal{R}\mathbb{M}$	
evening set	16524 Sep 09 03:06	16° \mathcal{A} 05'18					

inferior conj	16525 Aug 29 21:05	24° \cap 09'40	2°33'35	evening set	16526 Aug 08 16:51	13° \cap 59'33	
minimum elong	16525 Aug 29 23:08	24° \cap 03'06	2°33'02	inferior conj	16526 Aug 14 00:38	8° \cap 02'18	2°56'25
min. Earth dist.	16525 Aug 31 13:21	22° \cap 01'59	0.66550 AU	minimum elong	16526 Aug 14 02:00	7° \cap 57'43	2°55'58
morning rise	16525 Sep 04 13:09	17° \cap 42'40		min. Earth dist.	16526 Aug 15 03:02	6° \cap 33'46	0.67894 AU
desc. node	16525 Sep 08 18:24	15° \cap 21'10		morning rise	16526 Aug 19 10:37	1° \cap 35'57	
direct	16525 Sep 10 17:10	15° \cap 06'21			16526 Aug 21 16:49	30° \Re 0	
morning max el	16525 Sep 23 14:09	22° \cap 44'55	26°17'51	direct	16526 Aug 25 04:20	29° Ω 06'19	
	16525 Sep 30 00:12	0° $\underline{\cap}$		desc. node	16526 Aug 26 15:43	29° Ω 15'00	
	16525 Oct 20 11:29	0° \cap			16526 Aug 28 23:00	0° \cap	
morning set	16525 Oct 29 11:38	15° \cap 55'31		morning max el	16526 Sep 06 01:13	6° \cap 12'35	24°57'54
max. Earth dist.	16525 Nov 02 06:56	23° \cap 11'32	1.34759 AU		16526 Sep 24 13:07	0° $\underline{\cap}$	
asc. node	16525 Nov 03 06:45	25° \cap 08'28		morning set	16526 Oct 11 19:25	27° $\underline{\cap}$ 58'23	
	16525 Nov 05 17:02	0° \Re			16526 Oct 12 22:43	0° \cap	
				max. Earth dist.	16526 Oct 15 07:45	4° \cap 18'48	1.36960 AU
superior conj	16525 Nov 07 14:35	3° \Re 52'43	0°38'27	asc. node	16526 Oct 21 03:35	15° \cap 21'03	
minimum elong	16525 Nov 07 12:38	3° \Re 42'42	0°38'38				
evening rise	16525 Nov 15 02:29	19° \Re 34'03		superior conj	16526 Oct 22 02:13	17° \cap 11'47	0°08'28
	16525 Nov 20 05:48	0° \Re		minimum elong	16526 Oct 22 01:40	17° \cap 09'03	0°08'46
evening max el	16525 Dec 04 03:13	21° \Re 00'45	20°52'23	behind sun begin	16526 Oct 21 20:08	16° \cap 41'55	
desc. node	16525 Dec 05 16:22	22° \Re 26'38		behind sun end	16526 Oct 22 07:11	17° \cap 36'13	
retrograde	16525 Dec 15 14:26	26° \Re 41'39			16526 Oct 28 11:24	0° \Re	
evening set	16525 Dec 18 04:31	26° \Re 25'36		evening rise	16526 Oct 30 07:28	3° \Re 43'18	
inferior conj	16525 Dec 26 22:43	22° \Re 34'16	-5°37'59		16526 Nov 14 14:59	0° \Re	
minimum elong	16525 Dec 26 15:00	22° \Re 45'17	5°36'09	evening max el	16526 Nov 16 11:09	2° \Re 00'24	19°36'55
min. Earth dist.	16525 Dec 27 22:46	21° \Re 59'51	0.54456 AU	desc. node	16526 Nov 22 13:26	6° \Re 13'28	
morning rise	16526 Jan 04 01:28	18° \Re 40'16		retrograde	16526 Nov 26 06:58	6° \Re 55'08	
direct	16526 Jan 08 08:19	18° \Re 00'42		evening set	16526 Nov 28 06:48	6° \Re 43'57	
morning max el	16526 Jan 21 13:30	24° \Re 28'42	23°11'42	inferior conj	16526 Dec 06 22:34	2° \Re 40'32	-4°20'52
	16526 Jan 26 12:51	0° \approx		minimum elong	16526 Dec 06 12:45	2° \Re 56'04	4°17'14
asc. node	16526 Jan 30 05:45	5° \approx 05'37		min. Earth dist.	16526 Dec 09 06:24	1° \Re 12'18	0.55347 AU
	16526 Feb 12 19:06	0° \Re			16526 Dec 11 07:09	30° \Re \Re	
morning set	16526 Feb 13 15:10	1° \Re 46'38		morning rise	16526 Dec 14 16:58	28° \Re 22'12	
				direct	16526 Dec 20 00:15	27° \Re 19'29	
superior conj	16526 Feb 20 12:50	16° \Re 42'10	1°24'04		16526 Dec 28 11:01	0° \Re	
minimum elong	16526 Feb 20 14:53	16° \Re 53'12	1°24'02	morning max el	16527 Jan 02 21:37	4° \Re 17'56	25°01'07
max. Earth dist.	16526 Feb 23 17:34	23° \Re 30'02	1.33217 AU	asc. node	16527 Jan 17 02:58	23° \Re 09'48	
	16526 Feb 26 21:22	0° Υ			16527 Jan 20 23:46	0° \approx	
evening rise	16526 Feb 28 10:29	3° Υ 05'20		morning set	16527 Jan 29 03:06	16° \approx 26'49	
desc. node	16526 Mar 03 16:45	9° Υ 23'16			16527 Feb 04 07:04	0° \Re	
	16526 Mar 15 15:52	0° \Re					
evening max el	16526 Apr 03 21:13	24° \Re 52'38	27°19'38	superior conj	16527 Feb 04 20:51	1° \Re 16'04	1°34'10
	16526 Apr 10 05:37	0° Π		minimum elong	16527 Feb 04 22:03	1° \Re 22'41	1°34'27
retrograde	16526 Apr 17 12:18	2° Π 26'05		max. Earth dist.	16527 Feb 06 18:27	5° \Re 26'21	1.31948 AU
evening set	16526 Apr 24 04:15	29° \Re 56'30		evening rise	16527 Feb 12 04:39	16° \Re 57'36	
	16526 Apr 24 02:23	30° \Re \Re		desc. node	16527 Feb 18 13:29	29° \Re 25'26	
min. Earth dist.	16526 Apr 28 00:23	26° \Re 22'58	0.64860 AU		16527 Feb 18 20:57	0° Υ	
asc. node	16526 Apr 28 03:19	26° \Re 15'08			16527 Mar 10 05:22	0° \Re	
inferior conj	16526 Apr 30 12:10	23° \Re 39'06	0°43'37	evening max el	16527 Mar 17 08:52	7° \Re 55'32	27°36'48
minimum elong	16526 Apr 30 11:00	23° \Re 42'18	0°42'44	retrograde	16527 Mar 31 06:58	15° \Re 26'03	
morning rise	16526 May 06 19:43	18° \Re 13'06		evening set	16527 Apr 07 02:08	13° \Re 07'13	
direct	16526 May 09 12:13	17° \Re 35'18		min. Earth dist.	16527 Apr 10 20:25	10° \Re 00'47	0.62808 AU
morning max el	16526 May 15 19:28	20° \Re 50'06	17°54'13	inferior conj	16527 Apr 13 18:49	7° \Re 08'12	-0°23'35
	16526 May 22 22:31	0° Π		minimum elong	16527 Apr 13 19:36	7° \Re 06'17	0°23'36
desc. node	16526 May 30 17:26	12° Π 30'01		asc. node	16527 Apr 15 00:33	5° \Re 56'10	
morning set	16526 Jun 02 10:07	16° Π 57'47		morning rise	16527 Apr 20 15:53	1° \Re 58'07	
	16526 Jun 10 08:37	0° \Re		direct	16527 Apr 23 00:18	1° \Re 32'03	
				morning max el	16527 Apr 29 13:06	4° \Re 50'44	17°46'10
superior conj	16526 Jun 16 08:42	9° \Re 38'27	-1°50'12	morning set	16527 May 15 17:05	29° \Re 29'46	
minimum elong	16526 Jun 16 00:14	9° \Re 04'47	1°50'06		16527 May 16 00:03	0° Π	
max. Earth dist.	16526 Jun 20 11:37	16° \Re 08'55	1.45612 AU	desc. node	16527 May 17 14:21	2° Π 46'15	
	16526 Jun 29 09:46	0° Ω					
evening rise	16526 Jul 02 08:05	4° Ω 29'40		superior conj	16527 May 27 20:35	20° Π 11'03	-1°17'05
greatest brilliancy	16526 Jul 16 16:21	26° Ω 02'47	-0.6m	minimum elong	16527 May 27 13:33	19° Π 42'00	1°16'46
	16526 Jul 19 10:42	0° \cap			16527 Jun 02 21:24	0° \Re	
asc. node	16526 Jul 25 02:38	7° \cap 29'51		max. Earth dist.	16527 Jun 03 05:31	0° \Re 32'29	1.44487 AU
evening max el	16526 Jul 28 11:32	11° \cap 14'46	19°46'02	evening rise	16527 Jun 11 18:58	13° \Re 57'07	
retrograde	16526 Aug 04 21:10	15° \cap 23'48			16527 Jun 22 10:50	0° Ω	

evening max el	16527 Jul 11 11:53	25°Ω10'22	20°51'02	retrograde	16528 Jul 02 18:11	14°Ω37'11	
asc. node	16527 Jul 11 23:28	25°Ω38'43		evening set	16528 Jul 07 12:12	12°Ω37'54	
retrograde	16527 Jul 19 20:12	29°Ω57'55		inferior conj	16528 Jul 12 18:06	6°Ω19'41	3°06'27
evening set	16527 Jul 24 02:48	28°Ω15'38		minimum elong	16528 Jul 12 17:36	6°Ω21'26	3°05'53
inferior conj	16527 Jul 29 08:21	22°Ω07'13	3°06'57	min. Earth dist.	16528 Jul 12 17:37	6°Ω21'20	0.69163 AU
minimum elong	16527 Jul 29 08:48	22°Ω05'40	3°06'30	morning rise	16528 Jul 17 22:49	0°Ω04'34	
min. Earth dist.	16527 Jul 29 21:10	21°Ω22'54	0.68772 AU		16528 Jul 18 00:59	30°R☿	
morning rise	16527 Aug 03 14:32	15°Ω45'20		direct	16528 Jul 22 16:36	28°☿04'49	
direct	16527 Aug 08 20:32	13°Ω28'36			16528 Jul 27 21:24	0°Ω	
desc. node	16527 Aug 13 13:01	14°Ω56'17		desc. node	16528 Jul 30 10:16	2°Ω00'33	
morning max el	16527 Aug 19 12:23	19°Ω49'32	23°29'43	morning max el	16528 Aug 01 01:53	3°Ω34'37	22°01'54
	16527 Aug 28 04:17	0°♊			16528 Aug 21 04:54	0°♊	
	16527 Sep 17 16:45	0°♊		morning set	16528 Sep 02 18:38	19°♊19'48	
morning set	16527 Sep 23 06:47	9°♊08'55		max. Earth dist.	16528 Sep 08 09:33	28°♊29'29	1.41720 AU
max. Earth dist.	16527 Sep 27 06:43	15°♊58'32	1.39376 AU		16528 Sep 09 07:15	0°♊	
superior conj	16527 Oct 05 00:12	29°♊53'34	-0°26'20	superior conj	16528 Sep 16 04:03	11°♊46'51	-1°03'30
minimum elong	16527 Oct 05 02:08	0°♊02'36	0°25'44	minimum elong	16528 Sep 16 09:16	12°♊09'48	1°02'38
	16527 Oct 05 01:35	0°♊		asc. node	16528 Sep 23 21:07	25°♊41'44	
asc. node	16527 Oct 08 00:23	5°♊33'34			16528 Sep 26 05:02	0°♊	
evening rise	16527 Oct 14 05:50	17°♊35'12		evening rise	16528 Sep 26 17:58	0°♊59'51	
	16527 Oct 20 19:39	0°♊		evening max el	16528 Oct 12 16:14	26°♊23'24	18°12'29
evening max el	16527 Oct 30 08:46	13°♊50'34	18°43'50		16528 Oct 18 17:07	0°♊	
retrograde	16527 Nov 07 17:03	18°♊03'51		retrograde	16528 Oct 19 22:33	0°♊06'23	
desc. node	16527 Nov 09 10:34	17°♊53'36			16528 Oct 21 04:19	30°R♊	
evening set	16527 Nov 09 15:03	17°♊51'18		evening set	16528 Oct 22 01:12	29°♊48'07	
inferior conj	16527 Nov 17 17:43	13°♊27'37	-2°39'31	desc. node	16528 Oct 26 07:45	27°♊33'58	
minimum elong	16527 Nov 17 11:16	13°♊39'29	2°36'26	inferior conj	16528 Oct 29 10:42	25°♊02'54	-1°00'20
min. Earth dist.	16527 Nov 20 19:19	11°♊13'00	0.56996 AU	minimum elong	16528 Oct 29 08:30	25°♊07'38	0°58'58
morning rise	16527 Nov 25 04:27	8°♊33'43		min. Earth dist.	16528 Nov 01 16:33	22°♊16'45	0.59111 AU
direct	16527 Dec 01 05:37	7°♊04'50		morning rise	16528 Nov 05 12:25	19°♊33'13	
morning max el	16527 Dec 15 10:12	14°♊26'42	26°34'46	direct	16528 Nov 12 00:25	17°♊38'13	
	16527 Dec 27 20:10	0°♊		morning max el	16528 Nov 26 07:13	25°♊19'37	27°36'33
asc. node	16528 Jan 04 00:09	11°♊56'11			16528 Nov 30 15:31	0°♊	
	16528 Jan 13 02:38	0°♊			16528 Dec 20 05:41	0°♊	
morning set	16528 Jan 13 13:33	0°♊58'38		asc. node	16528 Dec 20 21:15	1°♊13'26	
				morning set	16528 Dec 27 20:42	15°♊17'24	
superior conj	16528 Jan 20 07:32	15°♊54'13	1°38'09	superior conj	16529 Jan 03 18:56	0°♊31'09	1°36'06
minimum elong	16528 Jan 20 07:42	15°♊55'08	1°38'38	minimum elong	16529 Jan 03 18:03	0°♊26'15	1°36'38
max. Earth dist.	16528 Jan 21 00:30	17°♊29'01	1.31188 AU	max. Earth dist.	16529 Jan 03 08:11	29°♊30'57	1.30961 AU
	16528 Jan 26 17:37	0°♊			16529 Jan 03 13:22	0°♊	
evening rise	16528 Jan 27 06:04	1°♊06'02		evening rise	16529 Jan 10 12:29	15°♊25'15	
desc. node	16528 Feb 05 10:14	19°♊06'58			16529 Jan 17 16:29	0°♊	
	16528 Feb 11 20:47	0°♊		desc. node	16529 Jan 22 07:02	8°♊20'01	
evening max el	16528 Feb 27 16:10	20°♊17'01	27°21'04		16529 Feb 06 21:21	0°♊	
retrograde	16528 Mar 12 16:52	27°♊38'46		evening max el	16529 Feb 08 16:21	1°♊47'04	26°30'07
evening set	16528 Mar 19 09:57	25°♊37'39		retrograde	16529 Feb 22 16:32	8°♊57'29	
min. Earth dist.	16528 Mar 23 06:15	22°♊51'06	0.60564 AU	evening set	16529 Mar 01 00:26	7°♊20'01	
inferior conj	16528 Mar 26 11:13	20°♊05'36	-1°44'43	min. Earth dist.	16529 Mar 05 05:47	4°♊42'16	0.58321 AU
minimum elong	16528 Mar 26 15:06	19°♊57'13	1°43'19	inferior conj	16529 Mar 08 09:35	2°♊21'04	-3°15'36
asc. node	16528 Mar 31 21:49	16°♊05'09		minimum elong	16529 Mar 08 17:07	2°♊06'58	3°12'51
morning rise	16528 Apr 02 23:43	15°♊14'29			16529 Mar 11 17:46	30°R♊	
direct	16528 Apr 05 01:48	14°♊56'40		morning rise	16529 Mar 16 13:19	27°♊51'24	
morning max el	16528 Apr 12 04:54	18°♊30'37	17°56'25	direct	16529 Mar 18 12:06	27°♊38'21	
	16528 Apr 20 12:44	0°♊		asc. node	16529 Mar 18 19:05	27°♊38'39	
morning set	16528 Apr 27 19:09	12°♊54'22			16529 Mar 24 17:37	0°♊	
desc. node	16528 May 03 11:13	23°♊11'49		morning max el	16529 Mar 26 15:10	1°♊39'09	18°26'24
	16528 May 07 07:14	0°♊		morning set	16529 Apr 11 10:52	26°♊55'28	
superior conj	16528 May 08 07:55	1°♊47'43	-0°39'26		16529 Apr 13 01:28	0°♊	
minimum elong	16528 May 08 04:30	1°♊32'50	0°39'23	desc. node	16529 Apr 20 08:01	13°♊42'46	
max. Earth dist.	16528 May 15 19:31	14°♊27'33	1.42773 AU	superior conj	16529 Apr 20 16:32	14°♊21'57	-0°03'00
evening rise	16528 May 21 17:27	24°♊00'00		minimum elong	16529 Apr 20 16:17	14°♊20'48	0°03'20
	16528 May 25 13:38	0°♊		behind sun begin	16529 Apr 20 09:12	13°♊48'15	
	16528 Jun 15 11:18	0°♊		behind sun end	16529 Apr 20 23:22	14°♊53'17	
evening max el	16528 Jun 23 06:35	9°♊05'03	22°06'38	max. Earth dist.	16529 Apr 28 04:41	27°♊42'08	1.40649 AU
asc. node	16528 Jun 27 20:21	12°♊54'40					

	16529 Apr 29 12:59	0°♂		evening rise	16530 Apr 14 03:47	16°♂48'33	
evening rise	16529 May 02 12:04	4°♂57'26			16530 Apr 22 01:40	0°♂	
	16529 May 18 17:36	0°♂			16530 May 13 04:53	0°♂	
evening max el	16529 Jun 05 21:29	23°♂00'03	23°27'46	evening max el	16530 May 19 10:56	6°♂55'22	24°48'10
asc. node	16529 Jun 14 17:18	29°♂01'32		retrograde	16530 May 31 05:50	13°♂47'56	
retrograde	16529 Jun 16 13:49	29°♂16'11		asc. node	16530 Jun 01 14:18	13°♂40'19	
evening set	16529 Jun 21 19:27	27°♂02'15		evening set	16530 Jun 05 22:52	11°♂22'56	
min. Earth dist.	16529 Jun 26 14:24	21°♂22'59	0.69063 AU	min. Earth dist.	16530 Jun 10 09:25	6°♂20'54	0.68470 AU
inferior conj	16529 Jun 27 03:56	20°♂36'22	2°55'27	inferior conj	16530 Jun 11 11:58	4°♂52'42	2°33'52
minimum elong	16529 Jun 27 02:35	20°♂41'01	2°54'40	minimum elong	16530 Jun 11 10:00	4°♂59'14	2°32'51
morning rise	16529 Jul 02 09:43	14°♂29'27			16530 Jun 15 14:21	30°♂	
direct	16529 Jul 06 15:26	12°♂48'47		morning rise	16530 Jun 16 21:22	28°♂55'11	
morning max el	16529 Jul 14 20:32	17°♂29'46	20°41'39	direct	16530 Jun 20 15:39	27°♂33'58	
desc. node	16529 Jul 17 07:27	20°♂07'18			16530 Jun 26 03:51	0°♂	
	16529 Jul 25 00:41	0°♂		morning max el	16530 Jun 27 22:01	1°♂34'47	19°34'07
morning set	16529 Aug 13 08:53	28°♂37'17		desc. node	16530 Jul 04 04:37	8°♂59'58	
	16529 Aug 14 06:14	0°♂		greatest brilliancy	16530 Jul 10 17:31	18°♂12'40	-0.6m
max. Earth dist.	16529 Aug 21 18:23	11°♂51'24	1.43724 AU		16530 Jul 18 14:36	0°♂	
				morning set	16530 Jul 23 13:16	7°♂32'48	
superior conj	16529 Aug 28 09:45	22°♂43'23	-1°38'32	max. Earth dist.	16530 Aug 04 09:02	25°♂54'21	1.45177 AU
minimum elong	16529 Aug 28 17:32	23°♂15'51	1°37'50		16530 Aug 06 23:12	0°♂	
	16529 Sep 01 17:17	0°♂					
evening rise	16529 Sep 09 15:25	13°♂45'50		superior conj	16530 Aug 08 16:14	2°♂43'15	-2°04'40
asc. node	16529 Sep 10 17:49	15°♂41'52		minimum elong	16530 Aug 08 22:49	3°♂09'33	2°04'38
	16529 Sep 19 03:02	0°♂		evening rise	16530 Aug 22 16:54	25°♂39'53	
evening max el	16529 Sep 26 05:23	9°♂29'18	18°01'09		16530 Aug 25 07:11	0°♂	
retrograde	16529 Oct 02 20:02	12°♂54'38		asc. node	16530 Aug 28 14:33	5°♂29'48	
evening set	16529 Oct 05 06:08	12°♂26'45		evening max el	16530 Sep 09 20:22	22°♂58'54	18°08'24
inferior conj	16529 Oct 11 23:11	7°♂22'00	0°23'14	retrograde	16530 Sep 16 05:06	26°♂19'44	
minimum elong	16529 Oct 11 23:54	7°♂20'14	0°23'16	evening set	16530 Sep 18 23:49	25°♂38'44	
desc. node	16529 Oct 13 04:58	6°♂08'01		inferior conj	16530 Sep 25 03:13	20°♂16'49	1°27'41
min. Earth dist.	16529 Oct 14 23:42	4°♂24'01	0.61403 AU	minimum elong	16530 Sep 25 05:17	20°♂11'04	1°27'09
morning rise	16529 Oct 18 14:46	1°♂24'25		min. Earth dist.	16530 Sep 27 16:52	17°♂26'40	0.63623 AU
	16529 Oct 21 03:35	30°♂		desc. node	16530 Sep 30 02:13	15°♂04'46	
direct	16529 Oct 25 07:16	29°♂07'22		morning rise	16530 Oct 01 08:45	14°♂01'25	
	16529 Oct 29 15:55	0°♂		direct	16530 Oct 07 23:54	11°♂29'58	
morning max el	16529 Nov 08 11:39	7°♂02'13	27°59'10	morning max el	16530 Oct 21 20:44	19°♂28'16	27°43'43
	16529 Nov 25 23:15	0°♂			16530 Oct 30 20:45	0°♂	
asc. node	16529 Dec 07 18:16	20°♂52'58			16530 Nov 18 22:45	0°♂	
morning set	16529 Dec 11 22:29	29°♂17'51		asc. node	16530 Nov 24 15:14	10°♂48'12	
	16529 Dec 12 06:36	0°♂		morning set	16530 Nov 25 16:38	12°♂54'44	
max. Earth dist.	16529 Dec 17 13:34	11°♂22'30	1.31296 AU	max. Earth dist.	16530 Nov 30 12:58	22°♂56'21	1.32205 AU
superior conj	16529 Dec 19 05:11	15°♂01'37	1°27'59	superior conj	16530 Dec 03 12:21	29°♂20'30	1°13'42
minimum elong	16529 Dec 19 03:26	14°♂51'51	1°28'26	minimum elong	16530 Dec 03 10:03	29°♂07'58	1°13'59
evening rise	16529 Dec 25 21:57	29°♂50'24			16530 Dec 03 19:36	0°♂	
	16529 Dec 25 23:43	0°♂		evening rise	16530 Dec 10 08:40	14°♂17'32	
desc. node	16530 Jan 09 03:52	26°♂53'35			16530 Dec 18 02:18	0°♂	
	16530 Jan 11 04:35	0°♂		desc. node	16530 Dec 27 00:45	14°♂33'48	
evening max el	16530 Jan 21 08:02	12°♂24'34	25°07'55	evening max el	16531 Jan 02 18:00	22°♂26'26	23°26'54
retrograde	16530 Feb 04 04:07	19°♂20'46		retrograde	16531 Jan 16 01:54	29°♂01'55	
evening set	16530 Feb 09 18:02	18°♂10'50		evening set	16531 Jan 20 13:16	28°♂18'41	
min. Earth dist.	16530 Feb 14 20:32	15°♂26'32	0.56347 AU	min. Earth dist.	16531 Jan 27 05:01	25°♂09'50	0.54948 AU
inferior conj	16530 Feb 17 10:57	13°♂45'24	-4°44'15	inferior conj	16531 Jan 28 16:04	24°♂18'56	-5°47'40
minimum elong	16530 Feb 17 20:27	13°♂29'59	4°41'28	minimum elong	16531 Jan 28 22:01	24°♂10'19	5°46'33
morning rise	16530 Feb 26 01:33	9°♂36'47		morning rise	16531 Feb 06 08:08	20°♂26'12	
direct	16530 Feb 28 03:16	9°♂24'33		direct	16531 Feb 08 23:39	20°♂09'13	
asc. node	16530 Mar 05 16:22	10°♂58'29		morning max el	16531 Feb 20 02:11	25°♂32'11	20°32'46
morning max el	16530 Mar 09 15:35	14°♂03'09	19°18'00	asc. node	16531 Feb 20 13:39	26°♂00'32	
	16530 Mar 20 15:05	0°♂			16531 Feb 24 00:50	0°♂	
morning set	16530 Mar 26 11:53	11°♂19'12		morning set	16531 Mar 10 18:55	25°♂56'24	
					16531 Mar 12 18:01	0°♂	
superior conj	16530 Apr 03 17:59	27°♂40'09	0°29'07				
minimum elong	16530 Apr 03 19:41	27°♂48'22	0°28'36	superior conj	16531 Mar 18 08:06	11°♂31'00	0°55'25
	16530 Apr 04 23:02	0°♂		minimum elong	16531 Mar 18 10:34	11°♂43'31	0°54'57
desc. node	16530 Apr 07 04:47	4°♂14'34		max. Earth dist.	16531 Mar 23 17:57	22°♂13'08	1.36124 AU
max. Earth dist.	16530 Apr 10 10:32	10°♂12'38	1.38349 AU	desc. node	16531 Mar 25 01:32	24°♂43'38	

evening rise	16531 Mar 27 14:02	29° Υ 25'19			16532 Mar 03 08:05	0° Υ	
	16531 Mar 27 21:37	0° \mathcal{B}		max. Earth dist.	16532 Mar 05 07:22	4° Υ 03'09	1.34165 AU
	16531 Apr 15 07:13	0° Π		evening rise	16532 Mar 09 15:16	12° Υ 37'54	
evening max el	16531 May 02 00:36	20° Π 48'13	26°00'30	desc. node	16532 Mar 10 22:17	15° Υ 06'01	
retrograde	16531 May 14 17:09	28° Π 05'21			16532 Mar 19 06:32	0° \mathcal{B}	
asc. node	16531 May 19 11:23	26° Π 35'39			16532 Apr 09 08:10	0° Π	
evening set	16531 May 20 20:44	25° Π 33'57		evening max el	16532 Apr 13 14:29	4° Π 30'43	26°57'08
min. Earth dist.	16531 May 25 00:30	21° Π 08'13	0.67405 AU	retrograde	16532 Apr 26 22:43	12° Π 00'39	
inferior conj	16531 May 26 16:10	19° Π 03'55	2°01'03	evening set	16532 May 03 11:08	9° Π 28'27	
minimum elong	16531 May 26 13:59	19° Π 10'49	1°59'51	asc. node	16532 May 05 08:32	7° Π 47'30	
morning rise	16531 Jun 01 07:55	13° Π 17'14		min. Earth dist.	16532 May 07 09:35	5° Π 37'01	0.65903 AU
direct	16531 Jun 04 15:34	12° Π 14'30		inferior conj	16532 May 09 14:15	3° Π 04'39	1°15'50
morning max el	16531 Jun 11 06:31	15° Π 47'12	18°42'06	minimum elong	16532 May 09 12:28	3° Π 09'51	1°14'43
desc. node	16531 Jun 21 01:43	28° Π 26'25			16532 May 12 09:47	30° \mathcal{R} \mathcal{B}	
	16531 Jun 22 02:51	0° \mathcal{E}		morning rise	16532 May 15 15:13	27° \mathcal{B} 30'33	
morning set	16531 Jul 03 03:23	16° \mathcal{E} 59'48		direct	16532 May 18 13:03	26° \mathcal{B} 44'20	
	16531 Jul 11 11:40	0° \mathcal{Q}			16532 May 24 19:53	0° Π	
max. Earth dist.	16531 Jul 18 04:14	10° \mathcal{Q} 25'18	1.45942 AU	morning max el	16532 May 24 20:38	0° Π 01'49	18°06'49
				desc. node	16532 Jun 06 22:46	18° Π 17'40	
superior conj	16531 Jul 19 05:21	12° \mathcal{Q} 03'17	-2°14'26	morning set	16532 Jun 12 17:49	27° Π 37'37	
minimum elong	16531 Jul 19 05:21	12° \mathcal{Q} 03'18	2°14'55		16532 Jun 14 05:07	0° \mathcal{E}	
	16531 Jul 30 15:21	0° \mathcal{M}					
evening rise	16531 Aug 03 17:55	6° \mathcal{M} 31'41		superior conj	16532 Jun 27 15:36	21° \mathcal{E} 21'58	-2°04'09
greatest brilliancy	16531 Aug 09 17:57	16° \mathcal{M} 05'19	-0.9m	minimum elong	16532 Jun 27 08:41	20° \mathcal{E} 54'52	2°04'21
asc. node	16531 Aug 15 11:18	25° \mathcal{M} 00'00		max. Earth dist.	16532 Jun 30 01:13	25° \mathcal{E} 07'19	1.45949 AU
	16531 Aug 18 21:32	0° \mathcal{Q}			16532 Jul 03 04:22	0° \mathcal{Q}	
evening max el	16531 Aug 24 09:58	6° \mathcal{Q} 43'27	18°33'15	evening rise	16532 Jul 13 19:05	16° \mathcal{Q} 25'57	
retrograde	16531 Aug 30 21:45	10° \mathcal{Q} 12'50			16532 Jul 22 15:14	0° \mathcal{M}	
evening set	16531 Sep 03 01:46	9° \mathcal{Q} 16'05		greatest brilliancy	16532 Jul 25 18:22	4° \mathcal{M} 42'55	-0.7m
inferior conj	16531 Sep 08 18:56	3° \mathcal{Q} 39'03	2°14'07	asc. node	16532 Aug 01 08:05	14° \mathcal{M} 06'09	
minimum elong	16531 Sep 08 21:13	3° \mathcal{Q} 32'06	2°13'30	evening max el	16532 Aug 06 19:33	20° \mathcal{M} 36'08	19°14'53
min. Earth dist.	16531 Sep 10 19:11	1° \mathcal{Q} 12'40	0.65591 AU	retrograde	16532 Aug 13 18:54	24° \mathcal{M} 27'14	
	16531 Sep 11 20:19	30° \mathcal{R} \mathcal{M}		evening set	16532 Aug 17 08:44	23° \mathcal{M} 13'06	
morning rise	16531 Sep 14 15:27	27° \mathcal{M} 14'28		inferior conj	16532 Aug 22 19:01	17° \mathcal{M} 22'36	2°44'52
desc. node	16531 Sep 16 23:32	25° \mathcal{M} 39'28		minimum elong	16532 Aug 22 20:50	17° \mathcal{M} 16'42	2°44'22
direct	16531 Sep 21 00:34	24° \mathcal{M} 37'39		min. Earth dist.	16532 Aug 24 05:16	15° \mathcal{M} 31'06	0.67181 AU
	16531 Oct 01 17:55	0° \mathcal{Q}		morning rise	16532 Aug 28 08:16	10° \mathcal{M} 55'30	
morning max el	16531 Oct 04 07:56	2° \mathcal{Q} 26'47	26°56'16	desc. node	16532 Sep 02 20:50	8° \mathcal{M} 22'20	
	16531 Oct 25 02:27	0° \mathcal{M}		direct	16532 Sep 03 08:06	8° \mathcal{M} 21'28	
morning set	16531 Nov 09 00:12	26° \mathcal{M} 00'39		morning max el	16532 Sep 15 19:29	15° \mathcal{M} 47'23	25°45'28
	16531 Nov 11 01:23	0° \mathcal{J}			16532 Sep 27 13:41	0° \mathcal{Q}	
asc. node	16531 Nov 11 12:09	0° \mathcal{J} 53'13		morning set	16532 Oct 16 23:12	0° \mathcal{M}	
max. Earth dist.	16531 Nov 13 03:28	4° \mathcal{J} 09'59	1.33683 AU	max. Earth dist.	16532 Oct 21 17:48	8° \mathcal{M} 28'57	
				asc. node	16532 Oct 25 08:46	15° \mathcal{M} 14'27	1.35663 AU
superior conj	16531 Nov 17 14:07	13° \mathcal{J} 21'02	0°53'08		16532 Oct 28 09:02	21° \mathcal{M} 04'07	
minimum elong	16531 Nov 17 11:49	13° \mathcal{J} 08'55	0°53'18				
evening rise	16531 Nov 24 18:47	28° \mathcal{J} 41'18		superior conj	16532 Oct 31 07:50	26° \mathcal{M} 57'10	0°26'24
	16531 Nov 25 09:40	0° \mathcal{B}		minimum elong	16532 Oct 31 06:20	26° \mathcal{M} 49'39	0°26'37
	16531 Dec 12 23:46	0° \approx			16532 Nov 01 19:48	0° \mathcal{J}	
desc. node	16531 Dec 13 21:43	1° \approx 01'12		evening rise	16532 Nov 08 02:19	12° \mathcal{J} 57'33	
evening max el	16531 Dec 15 06:06	2° \approx 24'40	21°44'59		16532 Nov 16 21:31	0° \mathcal{B}	
retrograde	16531 Dec 27 12:49	8° \approx 28'43		evening max el	16532 Nov 26 05:24	12° \mathcal{B} 55'11	20°17'27
evening set	16531 Dec 30 17:58	8° \approx 05'28		desc. node	16532 Nov 29 18:43	15° \mathcal{B} 53'10	
inferior conj	16532 Jan 08 08:05	4° \approx 15'43	-5°59'28	retrograde	16532 Dec 06 23:56	18° \mathcal{B} 16'53	
minimum elong	16532 Jan 08 04:56	4° \approx 20'07	5°58'45	evening set	16532 Dec 09 06:14	18° \mathcal{B} 03'48	
min. Earth dist.	16532 Jan 08 10:08	4° \approx 12'52	0.54369 AU	inferior conj	16532 Dec 18 00:54	14° \mathcal{B} 08'13	-5°10'13
morning rise	16532 Jan 16 16:33	0° \approx 27'46		minimum elong	16532 Dec 17 15:21	14° \mathcal{B} 22'22	5°07'25
	16532 Jan 19 13:01	30° \mathcal{R} \mathcal{B}		min. Earth dist.	16532 Dec 19 15:43	13° \mathcal{B} 10'47	0.54730 AU
direct	16532 Jan 20 08:18	29° \mathcal{B} 58'32		morning rise	16532 Dec 25 23:53	10° \mathcal{B} 06'12	
	16532 Jan 21 03:28	0° \approx		direct	16532 Dec 30 17:43	9° \mathcal{B} 17'36	
morning max el	16532 Feb 01 21:40	6° \approx 04'13	22°09'27	morning max el	16533 Jan 13 07:15	15° \mathcal{B} 58'55	23°59'06
asc. node	16532 Feb 07 10:56	12° \approx 27'28		asc. node	16533 Jan 24 08:11	0° \approx 00'43	
	16532 Feb 18 00:12	0° \mathcal{H}			16533 Jan 24 08:00	0° \approx	
morning set	16532 Feb 23 05:29	10° \mathcal{H} 39'35		morning set	16533 Feb 06 17:26	25° \approx 22'22	
					16533 Feb 08 20:44	0° \mathcal{H}	
superior conj	16532 Mar 01 07:22	25° \mathcal{H} 44'49	1°15'25				
minimum elong	16532 Mar 01 09:44	25° \mathcal{H} 57'20	1°15'13	superior conj	16533 Feb 13 12:53	10° \mathcal{H} 13'17	1°29'06

minimum elong	16533 Feb 13 14:36	10°  22'40	1°29'13	superior conj	16534 Jan 28 22:17	24°  49'56	1°36'36
max. Earth dist.	16533 Feb 16 04:14	15°  55'07	1.32612 AU	minimum elong	16534 Jan 28 23:03	24°  54'13	1°36'59
evening rise	16533 Feb 21 04:04	26°  17'24		max. Earth dist.	16534 Jan 30 07:32	27°  54'04	1.31550 AU
	16533 Feb 23 00:55	0° 			16534 Jan 31 06:25	0° 	
desc. node	16533 Feb 25 19:00	5°  16'56		evening rise	16534 Feb 05 01:36	10°  17'09	
	16533 Mar 12 15:19	0° 		desc. node	16534 Feb 12 15:44	25°  11'06	
evening max el	16533 Mar 27 03:19	17°  50'54	27°30'38		16534 Feb 15 08:07	0° 	
retrograde	16533 Apr 09 21:42	25°  23'57			16534 Mar 08 22:01	0° 	
evening set	16533 Apr 16 15:48	22°  57'47		evening max el	16534 Mar 09 13:13	0°  36'56	27°34'23
min. Earth dist.	16533 Apr 20 10:40	19°  36'52	0.64021 AU	retrograde	16534 Mar 23 13:03	8°  05'13	
asc. node	16533 Apr 22 05:45	17°  44'41		evening set	16534 Mar 30 08:05	5°  52'45	
inferior conj	16533 Apr 23 03:26	16°  47'22	0°16'55	min. Earth dist.	16534 Apr 03 02:25	2°  56'03	0.61862 AU
minimum elong	16533 Apr 23 02:57	16°  48'39	0°16'19	inferior conj	16534 Apr 06 04:27	0°  04'01	-0°56'23
morning rise	16533 Apr 29 16:27	11°  28'05		minimum elong	16534 Apr 06 06:25	29°  59'26	0°55'52
direct	16533 May 02 05:26	10°  55'38			16534 Apr 06 06:10	30°  00'00	
morning max el	16533 May 08 13:53	14°  10'20	17°48'41	asc. node	16534 Apr 09 02:57	27°  28'56	
	16533 May 19 19:07	0° 		morning rise	16534 Apr 13 07:58	25°  01'58	
desc. node	16533 May 24 19:44	8°  26'13		direct	16534 Apr 15 13:19	24°  39'57	
morning set	16533 May 25 11:04	9°  31'03		morning max el	16534 Apr 22 07:14	28°  03'48	17°48'17
	16533 Jun 06 19:16	0° 			16534 Apr 24 02:19	0° 	
				morning set	16534 May 08 02:52	22°  27'17	
superior conj	16533 Jun 07 15:12	1°  20'31	-1°37'11	desc. node	16534 May 11 16:39	28°  46'56	
minimum elong	16533 Jun 07 06:51	0°  46'48	1°36'55		16534 May 12 09:16	0° 	
max. Earth dist.	16533 Jun 12 20:48	9°  41'27	1.45213 AU				
evening rise	16533 Jun 23 06:18	25°  49'48		superior conj	16534 May 19 13:08	12°  20'52	-1°01'18
	16533 Jun 26 00:00	0° 		minimum elong	16534 May 19 07:34	11°  57'24	1°01'03
	16533 Jul 16 22:52	0° 		max. Earth dist.	16534 May 26 12:45	23°  52'45	1.43819 AU
asc. node	16533 Jul 19 04:55	2°  38'46			16534 May 30 08:41	0° 	
evening max el	16533 Jul 20 23:18	4°  30'46	20°12'02	evening rise	16534 Jun 02 20:28	5°  28'04	
retrograde	16533 Jul 28 17:55	8°  55'27			16534 Jun 19 07:52	0° 	
evening set	16533 Aug 01 18:10	7°  23'24		evening max el	16534 Jul 03 21:00	18°  25'20	21°22'06
inferior conj	16533 Aug 07 00:39	1°  20'57	3°02'18	asc. node	16534 Jul 06 01:45	20°  26'36	
minimum elong	16533 Aug 07 01:38	1°  17'35	3°01'51	retrograde	16534 Jul 12 16:46	23°  23'58	
min. Earth dist.	16533 Aug 07 21:09	0°  11'01	0.68326 AU	evening set	16534 Jul 17 04:04	21°  24'25	
	16533 Aug 08 00:24	30°  00'00		inferior conj	16534 Jul 22 09:28	15°  29'29	3°08'02
morning rise	16533 Aug 12 08:44	24°  25'00		minimum elong	16534 Jul 22 09:31	15°  29'20	3°07'33
direct	16533 Aug 17 21:25	22°  23'30		min. Earth dist.	16534 Jul 22 16:38	15°  04'31	0.68999 AU
desc. node	16533 Aug 20 18:08	23°  20'41		morning rise	16534 Jul 27 14:43	9°  20'57	
morning max el	16533 Aug 29 06:38	29°  20'03	24°20'50	direct	16534 Aug 01 15:29	7°  20'00	
	16533 Aug 29 22:13	0° 		desc. node	16534 Aug 07 15:25	9°  23'07	
	16533 Sep 21 08:24	0° 		morning max el	16534 Aug 11 18:27	13°  20'05	22°51'41
morning set	16533 Oct 03 17:24	20°  21'04			16534 Aug 25 10:46	0° 	
max. Earth dist.	16533 Oct 07 08:09	26°  32'39	1.37978 AU		16534 Sep 14 05:15	0° 	
	16533 Oct 09 05:57	0° 		morning set	16534 Sep 14 18:56	0°  56'05	
				max. Earth dist.	16534 Sep 19 07:37	8°  30'14	1.40396 AU
superior conj	16533 Oct 14 14:07	10°  01'05	-0°05'52				
minimum elong	16533 Oct 14 14:29	10°  02'51	0°05'26	superior conj	16534 Sep 27 04:54	22°  22'58	-0°42'03
behind sun begin	16533 Oct 14 08:00	9°  31'44		minimum elong	16534 Sep 27 08:11	22°  23'55	0°41'18
behind sun end	16533 Oct 14 20:58	10°  34'03			16534 Oct 01 07:55	0° 	
asc. node	16533 Oct 15 05:52	11°  36'58		asc. node	16534 Oct 02 02:37	1°  27'43	
evening rise	16533 Oct 23 04:52	27°  00'17		evening rise	16534 Oct 06 23:20	10°  41'16	
	16533 Oct 24 17:08	0° 			16534 Oct 17 20:15	0° 	
evening max el	16533 Nov 08 19:25	24°  16'20	19°11'32	evening max el	16534 Oct 22 21:48	6°  25'55	18°28'00
desc. node	16533 Nov 16 15:47	28°  47'16		retrograde	16534 Oct 30 17:46	10°  47'24	
retrograde	16533 Nov 17 23:30	28°  52'49		evening set	16534 Nov 01 17:12	10°  47'10	
evening set	16533 Nov 19 21:08	28°  41'46		desc. node	16534 Nov 03 12:55	9°  32'56	
inferior conj	16533 Nov 28 08:16	24°  30'14	-3°38'59	inferior conj	16534 Nov 09 12:46	5°  37'37	-1°56'02
minimum elong	16533 Nov 27 23:30	24°  44'59	3°35'19	minimum elong	16534 Nov 09 08:12	5°  46'35	1°53'40
min. Earth dist.	16533 Dec 01 01:27	22°  40'44	0.55966 AU	min. Earth dist.	16534 Nov 12 17:50	3°  47'01	0.57855 AU
morning rise	16533 Dec 05 23:24	19°  45'04		morning rise	16534 Nov 16 19:48	0° 	
direct	16533 Dec 11 14:52	18°  43'32			16534 Nov 17 18:41	30°  00'00	
morning max el	16533 Dec 25 16:39	25°  53'17	25°44'07	direct	16534 Nov 23 02:35	28°  47'10	
	16533 Dec 29 13:50	0° 			16534 Nov 28 13:25	0° 	
asc. node	16534 Jan 11 05:23	18°  24'18		morning max el	16534 Dec 07 08:35	6°  18'38	27°05'33
	16534 Jan 17 09:53	0° 			16534 Dec 24 22:13	0° 	
morning set	16534 Jan 22 04:57	9°  59'43		asc. node	16534 Dec 29 02:31	7°  24'43	
				morning set	16535 Jan 06 14:10	24°  26'02	

	16535 Jan 09 03:34	0°♊		max. Earth dist.	16535 Dec 27 21:41	21°♊54'31	1.31041 AU
superior conj	16535 Jan 13 09:29	9°♊27'59	1°38'02	superior conj	16535 Dec 28 20:37	24°♊02'36	1°33'25
minimum elong	16535 Jan 13 09:12	9°♊26'24	1°38'33	minimum elong	16535 Dec 28 19:20	23°♊55'27	1°33'55
max. Earth dist.	16535 Jan 13 14:29	9°♊56'04	1.31020 AU		16535 Dec 31 12:32	0°♊	
evening rise	16535 Jan 20 05:22	24°♊30'28		evening rise	16536 Jan 04 13:19	8°♊52'44	
	16535 Jan 22 20:20	0°♋			16536 Jan 15 06:13	0°♋	
desc. node	16535 Jan 30 12:29	14°♋41'06		desc. node	16536 Jan 17 09:16	3°♋38'21	
	16535 Feb 09 03:27	0°♌		evening max el	16536 Feb 01 14:33	23°♋44'11	25°58'25
evening max el	16535 Feb 19 17:44	12°♌36'54	27°03'43		16536 Feb 11 00:49	0°♌	
retrograde	16535 Mar 05 19:01	19°♌54'32		retrograde	16536 Feb 15 13:29	0°♌48'03	
evening set	16535 Mar 12 08:53	18°♌03'05			16536 Feb 20 01:39	30°♌♋	
min. Earth dist.	16535 Mar 16 08:01	15°♌21'31	0.59589 AU	evening set	16536 Feb 21 14:46	29°♋22'23	
inferior conj	16535 Mar 19 13:34	12°♌44'14	-2°22'36	min. Earth dist.	16536 Feb 26 03:37	26°♋43'46	0.57434 AU
minimum elong	16535 Mar 19 19:01	12°♌33'08	2°20'34	inferior conj	16536 Feb 29 03:12	24°♋38'20	-3°54'39
morning rise	16535 Mar 27 08:45	8°♌01'55		minimum elong	16536 Feb 29 11:59	24°♋22'53	3°51'38
asc. node	16535 Mar 27 00:13	8°♌07'42		morning rise	16536 Mar 08 12:21	20°♋17'29	
direct	16535 Mar 29 08:46	7°♌46'39		direct	16536 Mar 10 11:29	20°♋05'12	
morning max el	16535 Apr 05 21:06	11°♌31'05	18°06'40	asc. node	16536 Mar 12 21:31	20°♋24'44	
	16535 Apr 18 03:30	0°♍		morning max el	16536 Mar 19 03:35	24°♋21'04	18°45'34
morning set	16535 Apr 21 11:20	6°♍08'40			16536 Mar 23 19:10	0°♌	
desc. node	16535 Apr 28 13:30	19°♍14'51		morning set	16536 Apr 04 07:26	20°♌20'19	
					16536 Apr 09 06:39	0°♍	
superior conj	16535 May 01 09:55	24°♍22'35	-0°23'35	superior conj	16536 Apr 13 02:09	7°♍16'04	0°11'19
minimum elong	16535 May 01 07:58	24°♍13'55	0°23'44	minimum elong	16536 Apr 13 02:53	7°♍19'31	0°10'52
	16535 May 04 14:42	0°♎		behind sun begin	16536 Apr 12 21:48	6°♍55'40	
max. Earth dist.	16535 May 09 00:12	7°♎29'31	1.41905 AU	behind sun end	16536 Apr 13 07:57	7°♍43'19	
evening rise	16535 May 14 02:59	15°♎53'05		desc. node	16536 Apr 14 10:16	9°♍46'04	
	16535 May 23 04:38	0°♏		max. Earth dist.	16536 Apr 20 07:53	20°♍25'32	1.39678 AU
	16535 Jun 14 08:25	0°♐		evening rise	16536 Apr 24 06:42	27°♍13'28	
evening max el	16535 Jun 16 13:54	2°♐20'27	22°40'54		16536 Apr 25 22:29	0°♎	
asc. node	16535 Jun 22 22:37	7°♐15'24			16536 May 15 17:59	0°♏	
retrograde	16535 Jun 26 13:51	8°♐11'38		evening max el	16536 May 29 04:05	16°♏15'58	24°02'36
evening set	16535 Jul 01 12:45	6°♐06'02		asc. node	16536 Jun 08 19:35	22°♏46'59	
inferior conj	16535 Jul 06 19:30	29°♏44'24	3°03'03	retrograde	16536 Jun 09 07:56	22°♏48'06	
minimum elong	16535 Jul 06 18:37	29°♏47'28	3°02'25	evening set	16536 Jun 14 18:33	20°♏28'59	
min. Earth dist.	16535 Jul 06 13:33	0°♐05'06	0.69181 AU	min. Earth dist.	16536 Jun 19 09:45	15°♏05'48	0.68870 AU
	16535 Jul 06 15:01	30°♑♏		inferior conj	16536 Jun 20 04:48	14°♏01'05	2°47'37
morning rise	16535 Jul 12 00:21	23°♏32'27		minimum elong	16536 Jun 20 03:09	14°♏06'42	2°46'44
direct	16535 Jul 16 13:02	21°♏40'25		morning rise	16536 Jun 25 11:47	7°♏58'10	
morning max el	16535 Jul 25 09:41	26°♏48'39	21°26'25	direct	16536 Jun 29 12:40	6°♏25'39	
desc. node	16535 Jul 25 12:41	26°♏56'09		morning max el	16536 Jul 07 07:04	10°♏47'43	20°11'14
	16535 Jul 28 08:30	0°♒		desc. node	16536 Jul 11 09:52	15°♏23'54	
	16535 Aug 18 22:34	0°♓			16536 Jul 22 01:29	0°♐	
morning set	16535 Aug 25 20:55	10°♓42'21		morning set	16536 Aug 04 04:58	19°♐45'00	
max. Earth dist.	16535 Sep 01 12:44	21°♓23'11	1.42631 AU		16536 Aug 10 19:18	0°♑	
	16535 Sep 06 17:00	0°♑		max. Earth dist.	16536 Aug 14 00:53	5°♑06'46	1.44424 AU
superior conj	16535 Sep 08 23:50	3°♑53'39	-1°18'58	superior conj	16536 Aug 19 19:32	14°♑25'28	-1°51'10
minimum elong	16535 Sep 09 06:22	4°♑21'45	1°18'06	minimum elong	16536 Aug 20 03:28	14°♑57'54	1°50'42
asc. node	16535 Sep 18 23:20	21°♑33'02			16536 Aug 29 03:28	0°♑	
evening rise	16535 Sep 20 05:51	23°♑51'06		evening rise	16536 Sep 01 19:29	6°♑16'44	
	16535 Sep 23 15:35	0°♒		asc. node	16536 Sep 04 20:03	11°♑28'27	
evening max el	16535 Oct 06 08:18	19°♒14'43	18°05'20		16536 Sep 16 16:24	0°♒	
retrograde	16535 Oct 13 06:30	22°♒48'10		evening max el	16536 Sep 18 22:41	2°♒31'38	18°01'57
evening set	16535 Oct 15 12:15	22°♒26'09		retrograde	16536 Sep 25 09:33	5°♒53'25	
desc. node	16535 Oct 21 10:07	18°♒36'07		evening set	16536 Sep 27 23:18	5°♒20'13	
inferior conj	16535 Oct 22 14:30	17°♒32'20	-0°22'37	inferior conj	16536 Oct 04 10:07	0°♒07'31	0°52'53
minimum elong	16535 Oct 22 13:44	17°♒34'04	0°21'54	minimum elong	16536 Oct 04 11:34	0°♒03'42	0°52'37
min. Earth dist.	16535 Oct 25 19:02	14°♒38'48	0.60087 AU		16536 Oct 04 12:59	30°♒♑	
morning rise	16535 Oct 29 12:01	11°♒50'00		desc. node	16536 Oct 07 07:23	27°♑08'21	
direct	16535 Nov 05 02:57	9°♒44'47		min. Earth dist.	16536 Oct 07 06:19	27°♑11'00	0.62374 AU
morning max el	16535 Nov 19 08:47	17°♒32'03	27°50'58	morning rise	16536 Oct 10 21:22	24°♑01'14	
	16535 Nov 29 18:33	0°♓		direct	16536 Oct 17 13:52	21°♑37'24	
asc. node	16535 Dec 15 23:36	26°♓52'21		morning max el	16536 Oct 31 15:38	29°♑34'12	27°56'59
	16535 Dec 17 14:05	0°♔			16536 Nov 01 01:56	0°♒	
morning set	16535 Dec 21 19:17	8°♔37'10					

	16536 Nov 22 18:30	0°♊			16537 Oct 28 07:16	0°♎		
asc. node	16536 Dec 01 20:37	16°♊39'04			16537 Nov 15 07:11	0°♊		
morning set	16536 Dec 04 18:08	22°♊27'59		morning set	16537 Nov 18 08:13	5°♊52'40		
	16536 Dec 08 08:23	0°♊		asc. node	16537 Nov 18 17:35	6°♊38'58		
max. Earth dist.	16536 Dec 10 01:11	3°♊40'06	1.31620 AU	max. Earth dist.	16537 Nov 22 21:12	15°♊05'32	1.32768 AU	
superior conj	16536 Dec 12 05:49	8°♊28'23	1°22'41	superior conj	16537 Nov 26 10:59	22°♊39'56	1°05'44	
minimum elong	16536 Dec 12 03:46	8°♊17'07	1°23'04	minimum elong	16537 Nov 26 08:36	22°♊27'08	1°05'57	
evening rise	16536 Dec 18 23:33	23°♊19'10			16537 Nov 29 20:16	0°♊		
	16536 Dec 22 03:08	0°♊		evening rise	16537 Dec 03 10:16	7°♊45'16		
desc. node	16537 Jan 03 06:07	21°♊51'04			16537 Dec 14 22:13	0°♊		
	16537 Jan 09 07:59	0°♊		desc. node	16537 Dec 21 03:02	9°♊02'52		
evening max el	16537 Jan 13 03:10	4°♊03'12	24°26'08	evening max el	16537 Dec 25 12:36	13°♊57'52	22°42'30	
retrograde	16537 Jan 26 18:53	10°♊51'20		retrograde	16538 Jan 07 11:43	20°♊22'24		
evening set	16537 Jan 31 22:46	9°♊52'54		evening set	16538 Jan 11 10:03	19°♊48'42		
min. Earth dist.	16537 Feb 06 15:00	7°♊00'49	0.55668 AU	min. Earth dist.	16538 Jan 18 21:37	16°♊23'21	0.54585 AU	
inferior conj	16537 Feb 08 19:34	5°♊40'13	-5°15'53	inferior conj	16538 Jan 19 17:45	15°♊54'53	-6°00'15	
minimum elong	16537 Feb 09 04:25	5°♊26'38	5°13'42	minimum elong	16538 Jan 19 20:09	15°♊51'29	5°59'40	
morning rise	16537 Feb 17 12:10	1°♊39'35		morning rise	16538 Jan 28 07:24	12°♊06'17		
direct	16537 Feb 19 18:27	1°♊26'03		direct	16538 Jan 31 08:01	11°♊45'18		
asc. node	16537 Feb 27 18:49	4°♊29'46		morning max el	16538 Feb 12 02:41	17°♊27'03	21°11'39	
morning max el	16537 Mar 01 22:31	6°♊22'33	19°47'01	asc. node	16538 Feb 14 16:08	20°♊10'20		
	16537 Mar 17 01:14	0°♊			16538 Feb 21 14:59	0°♊		
morning set	16537 Mar 19 11:24	4°♊51'10		morning set	16538 Mar 03 20:13	19°♊31'37		
					16538 Mar 08 19:55	0°♊		
superior conj	16537 Mar 27 09:31	20°♊49'50	0°41'02	superior conj	16538 Mar 11 03:57	4°♊51'47	1°04'39	
minimum elong	16537 Mar 27 11:40	21°♊00'28	0°40'30	minimum elong	16538 Mar 11 06:28	5°♊04'46	1°04'18	
desc. node	16537 Apr 01 07:01	0°♊17'12		max. Earth dist.	16538 Mar 15 23:30	14°♊35'30	1.35240 AU	
	16537 Apr 01 03:22	0°♊		desc. node	16538 Mar 19 03:45	20°♊43'46		
max. Earth dist.	16537 Apr 02 14:13	2°♊43'00	1.37378 AU	evening rise	16538 Mar 19 23:47	22°♊18'05		
evening rise	16537 Apr 06 06:44	9°♊25'07			16538 Mar 24 05:09	0°♊		
	16537 Apr 18 16:36	0°♊			16538 Apr 12 10:53	0°♊		
evening max el	16537 May 11 17:27	0°♊10'38	25°20'21	evening max el	16538 Apr 24 07:02	13°♊59'11	26°26'55	
	16537 May 11 13:09	0°♊		retrograde	16538 May 07 07:10	21°♊24'01		
retrograde	16537 May 23 22:02	7°♊15'04		evening set	16538 May 13 14:48	18°♊51'14		
asc. node	16537 May 26 16:39	6°♊43'30		asc. node	16538 May 13 13:46	18°♊53'20		
evening set	16537 May 29 19:51	4°♊46'25		min. Earth dist.	16538 May 17 16:00	14°♊40'33	0.66814 AU	
min. Earth dist.	16537 Jun 03 03:14	0°♊00'19	0.68074 AU	inferior conj	16538 May 19 13:21	12°♊22'49	1°43'28	
	16537 Jun 03 03:20	30°♊11		minimum elong	16538 May 19 11:14	12°♊29'15	1°42'15	
inferior conj	16537 Jun 04 11:27	28°♊15'44	2°21'24	morning rise	16538 May 25 08:41	6°♊41'25		
minimum elong	16537 Jun 04 09:20	28°♊22'39	2°20'16	direct	16538 May 28 11:56	5°♊46'11		
morning rise	16537 Jun 09 23:14	22°♊22'57		morning max el	16538 Jun 03 22:56	9°♊11'06	18°25'01	
direct	16537 Jun 13 12:54	21°♊09'51		desc. node	16538 Jun 15 04:05	24°♊09'50		
morning max el	16537 Jun 20 11:45	24°♊56'56	19°10'06		16538 Jun 18 22:13	0°♊		
	16537 Jun 24 21:55	0°♊		morning set	16538 Jun 24 10:24	8°♊41'12		
desc. node	16537 Jun 28 07:01	4°♊32'11			16538 Jul 08 00:12	0°♊		
greatest brilliancy	16537 Jul 03 07:46	11°♊50'01	-0.7m					
morning set	16537 Jul 14 11:08	28°♊47'47		superior conj	16538 Jul 10 03:06	3°♊18'22	-2°12'29	
	16537 Jul 15 05:53	0°♊		minimum elong	16538 Jul 09 23:44	3°♊05'16	2°12'57	
max. Earth dist.	16537 Jul 27 18:04	19°♊24'40	1.45592 AU	max. Earth dist.	16538 Jul 10 13:46	3°♊59'56	1.46031 AU	
superior conj	16537 Jul 30 17:20	24°♊04'34	-2°11'11	evening rise	16538 Jul 26 01:18	28°♊10'33		
minimum elong	16537 Jul 30 21:40	24°♊21'40	2°11'26		16538 Jul 27 05:12	0°♊		
	16537 Aug 03 11:07	0°♊		greatest brilliancy	16538 Aug 04 03:20	12°♊22'11	-0.8m	
evening rise	16537 Aug 14 11:01	17°♊45'31		asc. node	16538 Aug 09 13:32	20°♊30'32		
	16537 Aug 21 23:23	0°♊		evening max el	16538 Aug 17 01:31	29°♊56'43	18°48'59	
asc. node	16537 Aug 22 16:47	1°♊09'34			16538 Aug 17 02:51	0°♊		
evening max el	16537 Sep 02 13:24	16°♊08'08	18°16'45	retrograde	16538 Aug 23 17:24	3°♊34'07		
retrograde	16537 Sep 08 22:28	19°♊31'20		evening set	16538 Aug 27 01:24	2°♊30'19		
evening set	16537 Sep 11 20:59	18°♊43'59			16538 Aug 29 22:29	30°♊11		
inferior conj	16537 Sep 17 19:36	13°♊15'09	1°49'26	inferior conj	16538 Sep 01 15:16	26°♊47'30	2°28'55	
minimum elong	16537 Sep 17 21:52	13°♊08'34	1°48'50	minimum elong	16538 Sep 01 17:25	26°♊40'46	2°28'20	
min. Earth dist.	16537 Sep 20 03:39	10°♊33'28	0.64499 AU	min. Earth dist.	16538 Sep 03 09:40	24°♊34'32	0.66312 AU	
morning rise	16537 Sep 23 21:06	6°♊54'35		morning rise	16538 Sep 07 08:26	20°♊20'55		
desc. node	16537 Sep 24 04:41	6°♊39'53		desc. node	16538 Sep 11 01:59	18°♊08'16		
direct	16537 Sep 30 10:00	4°♊19'56		direct	16538 Sep 13 13:54	17°♊44'05		
morning max el	16537 Oct 14 02:13	12°♊16'23	27°26'57	morning max el	16538 Sep 26 13:47	25°♊26'04	26°28'26	

	16538 Sep 30 18:12	0°♄		morning max el	16539 Sep 09 00:52	8°♄51'33	25°10'35
	16538 Oct 21 19:10	0°♍			16539 Sep 25 17:13	0°♄	
morning set	16538 Nov 01 10:24	18°♍44'33			16539 Oct 14 08:40	0°♍	
max. Earth dist.	16538 Nov 05 07:29	26°♍12'50	1.34465 AU	morning set	16539 Oct 14 20:48	0°♍54'01	
asc. node	16538 Nov 05 14:29	26°♍47'21		max. Earth dist.	16539 Oct 18 09:16	7°♍18'18	1.36616 AU
	16538 Nov 07 05:06	0°♎		asc. node	16539 Oct 23 11:18	16°♍59'28	
superior conj	16538 Nov 10 09:46	6°♎31'39	0°42'32	superior conj	16539 Oct 24 23:03	19°♍55'21	0°13'22
minimum elong	16538 Nov 10 07:41	6°♎20'56	0°42'42	minimum elong	16539 Oct 24 22:13	19°♍51'13	0°13'38
evening rise	16538 Nov 17 19:35	22°♎06'52		behind sun begin	16539 Oct 24 18:46	19°♍34'05	
	16538 Nov 21 15:34	0°♏		behind sun end	16539 Oct 25 01:41	20°♍08'21	
evening max el	16538 Dec 07 04:44	24°♏07'20	21°05'25		16539 Oct 29 23:08	0°♎	
desc. node	16538 Dec 08 00:01	24°♏53'21		evening rise	16539 Nov 02 01:17	6°♎18'01	
retrograde	16538 Dec 18 21:19	29°♏54'19			16539 Nov 15 06:14	0°♏	
evening set	16538 Dec 21 14:53	29°♏36'47		evening max el	16539 Nov 19 10:25	4°♏59'13	19°46'41
inferior conj	16538 Dec 30 08:22	25°♏46'26	-5°45'32	desc. node	16539 Nov 24 21:04	8°♏58'04	
minimum elong	16538 Dec 30 01:39	25°♏55'58	5°44'02	retrograde	16539 Nov 29 11:57	10°♏00'41	
min. Earth dist.	16538 Dec 31 02:57	25°♏20'06	0.54405 AU	evening set	16539 Dec 01 13:06	9°♏49'10	
morning rise	16539 Jan 07 12:33	21°♏54'32		inferior conj	16539 Dec 10 06:00	5°♏48'02	-4°34'46
direct	16539 Jan 11 15:36	21°♏17'47		minimum elong	16539 Dec 09 20:01	6°♏03'31	4°31'18
morning max el	16539 Jan 24 17:04	27°♏40'30	22°55'16	min. Earth dist.	16539 Dec 12 09:51	4°♏27'41	0.55166 AU
	16539 Jan 26 23:21	0°♐		morning rise	16539 Dec 18 01:33	1°♏34'31	
asc. node	16539 Feb 01 13:25	7°♐08'00		direct	16539 Dec 23 05:39	0°♏35'32	
	16539 Feb 14 07:09	0°♑		morning max el	16540 Jan 06 01:09	7°♏29'28	24°45'22
morning set	16539 Feb 16 07:36	4°♑15'14		asc. node	16540 Jan 19 10:38	25°♏04'25	
					16540 Jan 22 07:18	0°♐	
superior conj	16539 Feb 23 06:13	19°♑12'55	1°21'58	morning set	16540 Jan 31 19:35	18°♐56'09	
minimum elong	16539 Feb 23 08:22	19°♑24'26	1°21'54		16540 Feb 05 20:45	0°♑	
max. Earth dist.	16539 Feb 26 15:48	26°♑24'00	1.33450 AU	superior conj	16540 Feb 07 13:38	3°♑45'27	1°33'02
	16539 Feb 28 09:44	0°♒		minimum elong	16540 Feb 07 14:59	3°♑52'50	1°33'15
evening rise	16539 Mar 03 06:21	5°♒43'26		max. Earth dist.	16540 Feb 09 15:45	8°♑19'20	1.32105 AU
desc. node	16539 Mar 06 00:29	11°♒01'52		evening rise	16540 Feb 14 23:13	19°♑32'34	
	16539 Mar 16 21:47	0°♓			16540 Feb 20 07:00	0°♒	
evening max el	16539 Apr 06 20:40	27°♓33'32	27°14'39	desc. node	16540 Feb 20 21:13	1°♒06'31	
	16539 Apr 09 13:21	0°♔			16540 Mar 10 01:18	0°♓	
retrograde	16539 Apr 20 10:14	5°♔06'19		evening max el	16540 Mar 19 08:48	10°♓41'43	27°36'16
evening set	16539 Apr 27 01:20	2°♔35'58		retrograde	16540 Apr 02 06:00	18°♓12'49	
	16539 Apr 29 22:26	30°♔♊		evening set	16540 Apr 09 01:04	15°♓51'56	
asc. node	16539 Apr 30 10:57	29°♓27'25		min. Earth dist.	16540 Apr 12 19:25	12°♓41'59	0.63129 AU
min. Earth dist.	16539 Apr 30 22:02	28°♓57'48	0.65141 AU	inferior conj	16540 Apr 15 16:27	9°♓49'47	-0°12'25
inferior conj	16539 May 03 07:59	26°♓16'34	0°52'35	minimum elong	16540 Apr 15 16:52	9°♓48'46	0°12'37
minimum elong	16539 May 03 06:37	26°♓20'23	0°51'37	transit middle	16540 Apr 15 16:52	9°♓48'46	0°12'37
morning rise	16539 May 09 13:44	20°♓48'18		transit begin	16540 Apr 15 14:54	9°♓53'42	
direct	16539 May 12 07:34	20°♓08'25		transit end	16540 Apr 15 18:49	9°♓43'52	
morning max el	16539 May 18 14:39	23°♓23'35	17°56'53	asc. node	16540 Apr 16 08:10	9°♓10'40	
	16539 May 24 00:18	0°♕		morning rise	16540 Apr 22 11:21	4°♓37'10	
desc. node	16539 Jun 02 01:05	14°♕08'55		direct	16540 Apr 24 20:56	4°♓09'29	
morning set	16539 Jun 05 12:25	19°♕51'21		morning max el	16540 May 01 08:16	7°♓26'41	17°46'15
	16539 Jun 11 17:15	0°♖			16540 May 16 08:54	0°♕	
superior conj	16539 Jun 19 17:14	12°♖49'12	-1°54'19	morning set	16540 May 17 16:03	2°♕14'19	
minimum elong	16539 Jun 19 08:58	12°♖16'28	1°54'17	desc. node	16540 May 18 22:02	4°♕23'30	
max. Earth dist.	16539 Jun 23 09:59	18°♖38'30	1.45722 AU	superior conj	16540 May 30 01:48	23°♕12'49	-1°22'35
	16539 Jun 30 17:22	0°♗		minimum elong	16540 May 29 18:20	22°♕42'09	1°22'14
evening rise	16539 Jul 05 18:32	7°♗45'50			16540 Jun 03 06:03	0°♖	
greatest brilliancy	16539 Jul 19 14:28	28°♗37'06	-0.6m	max. Earth dist.	16540 Jun 05 04:37	3°♖06'17	1.44696 AU
	16539 Jul 20 13:17	0°♘		evening rise	16540 Jun 14 05:00	17°♖11'21	
asc. node	16539 Jul 27 10:19	9°♘23'25			16540 Jun 22 16:33	0°♗	
evening max el	16539 Jul 31 08:46	13°♘50'40	19°37'33	asc. node	16540 Jul 13 07:08	27°♗38'58	
retrograde	16539 Aug 07 15:29	17°♘54'34		evening max el	16540 Jul 13 10:00	27°♗46'08	20°40'32
evening set	16539 Aug 11 09:39	16°♘32'56			16540 Jul 15 21:45	0°♘	
inferior conj	16539 Aug 16 17:59	10°♘37'28	2°53'47	retrograde	16540 Jul 21 14:31	2°♘27'24	
minimum elong	16539 Aug 16 19:28	10°♘32'31	2°53'18	evening set	16540 Jul 25 19:30	0°♙	
min. Earth dist.	16539 Aug 17 22:25	9°♙02'49	0.67722 AU		16540 Jul 26 17:13	30°♙♊	
morning rise	16539 Aug 22 04:45	4°♙10'54		inferior conj	16540 Jul 31 01:13	24°♙40'44	3°06'03
direct	16539 Aug 28 00:09	1°♙39'54		minimum elong	16540 Jul 31 01:48	24°♙38'40	3°05'37
desc. node	16539 Aug 28 23:18	1°♙43'37					

min. Earth dist.	16540 Jul 31 15:59	23° Ω 49'47	0.68674 AU	min. Earth dist.	16541 Jul 15 12:14	8° Ω 47'06	0.69138 AU
morning rise	16540 Aug 05 07:49	18° Ω 18'02		morning rise	16541 Jul 20 15:34	2° Ω 35'55	
direct	16540 Aug 10 15:34	15° Ω 59'13		direct	16541 Jul 25 11:07	0° Ω 33'33	
desc. node	16540 Aug 14 20:34	17° Ω 10'00		desc. node	16541 Aug 01 17:50	4° Ω 02'56	
morning max el	16540 Aug 21 11:57	22° Ω 27'21	23°43'01	morning max el	16541 Aug 04 01:01	6° Ω 11'16	22°14'35
	16540 Aug 28 02:33	0° \mathbb{M}			16541 Aug 22 10:07	0° \mathbb{M}	
	16540 Sep 18 00:18	0° $\underline{\mathbf{A}}$		morning set	16541 Sep 06 02:48	22° \mathbb{M} 32'11	
morning set	16540 Sep 25 11:23	12° $\underline{\mathbf{A}}$ 12'27			16541 Sep 10 16:20	0° $\underline{\mathbf{A}}$	
max. Earth dist.	16540 Sep 29 08:14	18° $\underline{\mathbf{A}}$ 51'59	1.39015 AU	max. Earth dist.	16541 Sep 11 10:03	1° $\underline{\mathbf{A}}$ 13'52	1.41384 AU
	16540 Oct 05 12:23	0° \mathbb{M}					
superior conj	16540 Oct 06 23:16	2° \mathbb{M} 42'47	-0°20'50	superior conj	16541 Sep 19 06:04	14° $\underline{\mathbf{A}}$ 43'29	-0°57'53
minimum elong	16540 Oct 07 00:46	2° \mathbb{M} 49'48	0°20'17	minimum elong	16541 Sep 19 10:47	15° $\underline{\mathbf{A}}$ 04'25	0°57'03
asc. node	16540 Oct 09 08:04	7° \mathbb{M} 11'58		asc. node	16541 Sep 26 04:49	27° $\underline{\mathbf{A}}$ 20'52	
evening rise	16540 Oct 16 00:47	20° \mathbb{M} 12'42		evening rise	16541 Sep 27 15:05	0° \mathbb{M}	
	16540 Oct 21 03:16	0° \mathbf{x}		evening max el	16541 Sep 29 14:42	3° \mathbb{M} 41'51	
evening max el	16540 Nov 01 06:06	16° \mathbf{x} 41'32	18°50'18	evening max el	16541 Oct 15 12:23	29° \mathbb{M} 08'34	18°15'53
retrograde	16540 Nov 09 19:15	21° \mathbf{x} 00'40		retrograde	16541 Oct 16 10:09	0° \mathbf{x}	
desc. node	16540 Nov 10 18:09	20° \mathbf{x} 57'36		evening set	16541 Oct 22 22:00	2° \mathbf{x} 55'21	
evening set	16540 Nov 11 16:55	20° \mathbf{x} 48'38		desc. node	16541 Oct 24 23:38	2° \mathbf{x} 38'15	
inferior conj	16540 Nov 19 21:56	16° \mathbf{x} 28'02	-2°55'09	desc. node	16541 Oct 28 15:17	0° \mathbf{x} 54'02	
minimum elong	16540 Nov 19 14:50	16° \mathbf{x} 40'48	2°51'53	inferior conj	16541 Oct 29 22:07	30° \mathbb{R} \mathbb{M}	
min. Earth dist.	16540 Nov 22 21:45	14° \mathbf{x} 19'34	0.56713 AU	inferior conj	16541 Nov 01 11:45	27° \mathbb{M} 56'21	-1°14'34
morning rise	16540 Nov 27 09:50	11° \mathbf{x} 39'34		minimum elong	16541 Nov 01 08:58	28° \mathbb{M} 02'12	1°12'56
direct	16540 Dec 03 08:38	10° \mathbf{x} 14'47		min. Earth dist.	16541 Nov 04 17:44	25° \mathbb{M} 13'33	0.58772 AU
morning max el	16540 Dec 17 12:44	17° \mathbf{x} 33'29	26°22'36	morning rise	16541 Nov 08 14:51	22° \mathbb{M} 31'31	
	16540 Dec 27 19:45	0° \mathbf{Z}		direct	16541 Nov 15 01:41	20° \mathbb{M} 40'07	
asc. node	16541 Jan 05 07:47	13° \mathbf{Z} 45'04		morning max el	16541 Nov 29 08:32	28° \mathbb{M} 19'28	27°29'48
	16541 Jan 13 15:02	0° \approx			16541 Dec 01 00:14	0° \mathbf{x}	
morning set	16541 Jan 15 06:21	3° \approx 29'31			16541 Dec 21 14:30	0° \mathbf{Z}	
superior conj	16541 Jan 22 00:02	18° \approx 23'12	1°37'57	asc. node	16541 Dec 23 04:54	2° \mathbf{Z} 58'28	
minimum elong	16541 Jan 22 00:21	18° \approx 25'02	1°38'24	morning set	16541 Dec 30 14:07	17° \mathbf{Z} 50'49	
max. Earth dist.	16541 Jan 22 21:14	20° \approx 21'30	1.31265 AU		16542 Jan 05 03:08	0° \approx	
	16541 Jan 27 06:36	0° \mathbf{X}		superior conj	16542 Jan 06 11:27	3° \approx 01'01	1°36'50
evening rise	16541 Jan 28 23:41	3° \mathbf{X} 38'46		minimum elong	16542 Jan 06 10:44	2° \approx 56'59	1°37'21
desc. node	16541 Feb 06 17:56	20° \mathbf{X} 51'30		max. Earth dist.	16542 Jan 06 04:52	2° \approx 24'07	1.30957 AU
	16541 Feb 12 01:19	0° \mathbf{Y}		evening rise	16542 Jan 13 05:30	17° \approx 56'54	
evening max el	16541 Mar 01 16:49	23° \mathbf{Y} 09'45	27°25'39	evening rise	16542 Jan 19 02:19	0° \mathbf{X}	
	16541 Mar 12 03:10	0° \mathbf{B}		desc. node	16542 Jan 24 14:42	10° \mathbf{X} 09'26	
retrograde	16541 Mar 15 17:16	0° \mathbf{B} 33'17			16542 Feb 07 05:46	0° \mathbf{Y}	
	16541 Mar 19 04:59	30° \mathbb{R} \mathbf{Y}		evening max el	16542 Feb 11 18:06	4° \mathbf{Y} 47'35	26°39'51
evening set	16541 Mar 22 11:09	28° \mathbf{Y} 28'56		retrograde	16542 Feb 25 18:46	12° \mathbf{Y} 00'14	
min. Earth dist.	16541 Mar 26 06:42	25° \mathbf{Y} 40'12	0.60902 AU	evening set	16542 Mar 04 04:26	10° \mathbf{Y} 18'55	
inferior conj	16541 Mar 29 11:11	22° \mathbf{Y} 52'25	-1°31'38	min. Earth dist.	16542 Mar 08 07:48	7° \mathbf{Y} 40'36	0.58644 AU
minimum elong	16541 Mar 29 14:32	22° \mathbf{Y} 45'02	1°30'28	inferior conj	16542 Mar 11 12:26	5° \mathbf{Y} 14'36	-3°01'37
asc. node	16541 Apr 03 05:25	19° \mathbf{Y} 10'53		minimum elong	16542 Mar 11 19:27	5° \mathbf{Y} 01'10	2°59'00
morning rise	16541 Apr 05 21:20	17° \mathbf{Y} 58'28		morning rise	16542 Mar 19 14:04	0° \mathbf{Y} 41'43	
direct	16541 Apr 08 00:13	17° \mathbf{Y} 39'39		asc. node	16542 Mar 21 02:41	0° \mathbf{Y} 28'55	
morning max el	16541 Apr 15 00:35	21° \mathbf{Y} 10'29	17°53'45	direct	16542 Mar 21 12:57	0° \mathbf{Y} 28'15	
	16541 Apr 21 17:27	0° \mathbf{B}		morning max el	16542 Mar 29 11:57	4° \mathbf{Y} 24'27	18°20'37
morning set	16541 Apr 30 15:39	15° \mathbf{B} 32'11		morning set	16542 Apr 14 05:38	29° \mathbf{Y} 28'24	
desc. node	16541 May 05 18:54	24° \mathbf{B} 47'59			16542 Apr 14 12:17	0° \mathbf{B}	
	16541 May 08 17:19	0° \mathbb{I}		desc. node	16542 Apr 22 15:45	15° \mathbf{B} 18'15	
superior conj	16541 May 11 09:46	4° \mathbb{I} 40'30	-0°45'11	superior conj	16542 Apr 23 15:27	17° \mathbf{B} 06'41	-0°08'18
minimum elong	16541 May 11 05:47	4° \mathbb{I} 23'20	0°45'05	minimum elong	16542 Apr 23 14:48	17° \mathbf{B} 03'40	0°08'36
max. Earth dist.	16541 May 18 19:18	17° \mathbb{I} 06'31	1.43058 AU	behind sun begin	16542 Apr 23 08:34	16° \mathbf{B} 35'15	
evening rise	16541 May 25 01:02	27° \mathbb{I} 07'10		behind sun end	16542 Apr 23 21:02	17° \mathbf{B} 32'03	
	16541 May 26 21:13	0° \mathbf{E}			16542 Apr 30 22:42	0° \mathbb{I}	
	16541 Jun 16 11:12	0° Ω		max. Earth dist.	16542 May 01 04:47	0° \mathbb{I} 25'56	1.40983 AU
evening max el	16541 Jun 26 05:23	11° Ω 40'36	21°54'47	evening rise	16542 May 05 16:26	7° \mathbb{I} 55'57	
asc. node	16541 Jun 30 04:00	15° Ω 03'49			16542 May 19 22:33	0° \mathbf{E}	
retrograde	16541 Jul 05 12:49	17° Ω 06'09		evening max el	16542 Jun 08 20:41	25° \mathbf{E} 35'15	23°15'33
evening set	16541 Jul 10 05:06	15° Ω 09'15			16542 Jun 14 04:31	0° Ω	
inferior conj	16541 Jul 15 10:46	8° Ω 52'15	3°07'10	asc. node	16542 Jun 17 00:56	1° Ω 22'11	
minimum elong	16541 Jul 15 10:25	8° Ω 53'29	3°06'39	retrograde	16542 Jun 19 08:54	1° Ω 45'20	
					16542 Jun 23 23:52	30° \mathbb{R} \mathbf{E}	

evening set	16542 Jun 24 12:46	29°☾33'29		asc. node	16543 Jun 03 21:57	16°☾15'45	
inferior conj	16542 Jun 29 20:44	23°☾08'32	2°57'46	evening set	16543 Jun 08 16:54	13°☾55'16	
minimum elong	16542 Jun 29 19:30	23°☾12'48	2°57'03	min. Earth dist.	16543 Jun 13 04:38	8°☾47'42	0.68587 AU
min. Earth dist.	16542 Jun 29 09:10	23°☾48'30	0.69109 AU	inferior conj	16543 Jun 14 05:12	7°☾25'31	2°37'53
morning rise	16542 Jul 05 02:11	17°☾00'10		minimum elong	16543 Jun 14 03:18	7°☾31'52	2°36'54
direct	16542 Jul 09 09:40	15°☾16'33		morning rise	16543 Jun 19 13:53	1°☾26'30	
morning max el	16542 Jul 17 18:42	20°☾04'32	20°52'50	direct	16543 Jun 23 09:52	0°☾02'18	
desc. node	16542 Jul 19 15:06	22°☾01'17		morning max el	16543 Jun 30 19:06	4°☾08'17	19°43'15
	16542 Jul 26 01:51	0°♊		desc. node	16543 Jul 06 12:17	10°☾48'09	
	16542 Aug 15 13:47	0°♊			16543 Jul 19 20:57	0°♊	
morning set	16542 Aug 16 19:49	1°♊56'16		morning set	16543 Jul 27 00:36	10°♊52'31	
max. Earth dist.	16542 Aug 24 17:43	14°♊27'38	1.43456 AU	max. Earth dist.	16543 Aug 07 07:53	28°♊26'45	1.45004 AU
					16543 Aug 08 07:29	0°♊	
superior conj	16542 Aug 31 15:17	25°♊48'52	-1°33'39	superior conj	16543 Aug 12 01:11	5°♊57'25	-2°01'37
minimum elong	16542 Aug 31 22:50	26°♊20'35	1°32'52	minimum elong	16543 Aug 12 08:19	6°♊26'04	2°01'26
	16542 Sep 03 02:40	0°♊		evening rise	16543 Aug 25 19:32	28°♊37'22	
evening rise	16542 Sep 12 14:40	16°♊34'14			16543 Aug 26 15:11	0°♊	
asc. node	16542 Sep 13 01:32	17°♊22'20		asc. node	16543 Aug 30 22:16	7°♊12'38	
	16542 Sep 20 07:40	0°♊		evening max el	16543 Sep 12 15:59	25°♊37'20	18°06'09
evening max el	16542 Sep 29 00:58	12°♊10'14	18°01'41	retrograde	16543 Sep 19 00:54	28°♊57'50	
retrograde	16542 Oct 05 17:17	15°♊37'16		evening set	16543 Sep 21 18:21	28°♊18'54	
evening set	16542 Oct 08 02:12	15°♊11'02		inferior conj	16543 Sep 27 23:35	22°♊59'20	1°19'06
inferior conj	16542 Oct 14 21:34	10°♊09'10	0°11'45	minimum elong	16543 Sep 28 01:31	22°♊54'00	1°18'37
minimum elong	16542 Oct 14 21:57	10°♊08'15	0°11'58	min. Earth dist.	16543 Sep 30 15:02	20°♊07'02	0.63310 AU
transit middle	16542 Oct 14 21:57	10°♊08'15	0°11'58	desc. node	16543 Oct 02 09:49	18°♊20'35	
transit begin	16542 Oct 14 19:45	10°♊13'33		morning rise	16543 Oct 04 06:35	16°♊46'06	
transit end	16542 Oct 15 00:08	10°♊02'57		direct	16543 Oct 10 22:19	14°♊16'21	
desc. node	16542 Oct 15 12:32	9°♊32'46		morning max el	16543 Oct 24 20:28	22°♊14'19	27°48'11
min. Earth dist.	16542 Oct 17 23:23	7°♊11'36	0.61059 AU		16543 Oct 31 16:52	0°♊	
morning rise	16542 Oct 21 14:41	4°♊15'16			16543 Nov 20 08:01	0°♊	
direct	16542 Oct 28 07:01	2°♊00'55		asc. node	16543 Nov 26 22:57	12°♊28'02	
morning max el	16542 Nov 11 11:54	9°♊54'18	27°58'20	morning set	16543 Nov 28 12:17	15°♊34'27	
	16542 Nov 27 03:04	0°♊		max. Earth dist.	16543 Dec 03 11:17	25°♊53'46	1.32036 AU
asc. node	16542 Dec 10 01:57	22°♊35'01			16543 Dec 05 08:57	0°♊	
	16542 Dec 13 18:49	0°♊		superior conj	16543 Dec 06 05:46	1°♊53'22	1°16'16
morning set	16542 Dec 14 16:51	1°♊54'10		minimum elong	16543 Dec 06 03:31	1°♊41'04	1°16'35
max. Earth dist.	16542 Dec 20 10:46	14°♊17'15	1.31207 AU	evening rise	16543 Dec 13 01:16	16°♊48'13	
superior conj	16542 Dec 21 22:00	17°♊32'46	1°29'38		16543 Dec 19 11:01	0°♊	
minimum elong	16542 Dec 21 20:22	17°♊23'39	1°30'05	desc. node	16543 Dec 29 08:23	16°♊38'34	
	16542 Dec 27 12:38	0°♊		evening max el	16544 Jan 05 21:38	25°♊37'57	23°42'27
evening rise	16542 Dec 28 14:36	2°♊21'23			16544 Jan 11 13:07	0°♊	
desc. node	16543 Jan 11 11:30	28°♊49'38		retrograde	16544 Jan 19 07:52	2°♊16'46	
	16543 Jan 12 05:14	0°♊		evening set	16544 Jan 23 23:44	1°♊29'48	
evening max el	16543 Jan 24 11:08	15°♊32'46	25°21'48		16544 Jan 27 12:37	30°♊	
retrograde	16543 Feb 07 08:17	22°♊31'08		min. Earth dist.	16544 Jan 30 08:58	28°♊25'58	0.55110 AU
evening set	16543 Feb 13 01:21	21°♊17'12		inferior conj	16544 Feb 01 00:54	27°♊27'19	-5°40'51
min. Earth dist.	16543 Feb 17 23:52	18°♊34'50	0.56614 AU	minimum elong	16544 Feb 01 07:50	27°♊17'07	5°39'28
inferior conj	16543 Feb 20 17:04	16°♊47'02	-4°31'46	morning rise	16544 Feb 09 17:27	23°♊32'47	
minimum elong	16543 Feb 21 02:32	16°♊31'21	4°28'53	direct	16544 Feb 12 06:15	23°♊16'53	
morning rise	16543 Mar 01 06:31	12°♊35'14		asc. node	16544 Feb 22 21:19	28°♊19'35	
direct	16543 Mar 03 07:13	12°♊23'10		morning max el	16544 Feb 23 02:54	28°♊32'59	20°20'10
asc. node	16543 Mar 07 24:00	13°♊32'14			16544 Feb 24 12:40	0°♊	
morning max el	16543 Mar 12 14:08	16°♊55'46	19°08'48	morning set	16544 Mar 12 11:49	28°♊25'12	
	16543 Mar 21 22:20	0°♊			16544 Mar 13 06:16	0°♊	
morning set	16543 Mar 29 05:29	13°♊49'22		superior conj	16544 Mar 20 03:07	14°♊05'25	0°51'48
	16543 Apr 06 10:45	0°♊		minimum elong	16544 Mar 20 05:32	14°♊17'36	0°51'20
superior conj	16543 Apr 06 14:39	0°♊18'46	0°24'36	max. Earth dist.	16544 Mar 25 18:02	25°♊07'28	1.36443 AU
minimum elong	16543 Apr 06 16:08	0°♊25'54	0°24'05	desc. node	16544 Mar 26 09:14	26°♊19'34	
desc. node	16543 Apr 09 12:31	5°♊49'58			16544 Mar 28 08:27	0°♊	
max. Earth dist.	16543 Apr 13 10:52	13°♊02'19	1.38696 AU	evening rise	16544 Mar 29 12:51	2°♊10'06	
evening rise	16543 Apr 17 05:08	19°♊39'30			16544 Apr 15 11:30	0°♊	
	16543 Apr 23 09:43	0°♊		evening max el	16544 May 04 00:00	23°♊25'02	25°50'34
	16543 May 14 02:06	0°♊			16544 May 13 04:44	0°♊	
evening max el	16543 May 22 10:22	9°♊31'12	24°36'36	retrograde	16544 May 16 13:32	0°♊38'58	
retrograde	16543 Jun 03 01:34	16°♊18'46					

	16544 May 19 17:03	30°♊		evening max el	16545 Apr 16 13:48	7°♊09'40	26°49'56
asc. node	16544 May 20 19:03	29°♊27'28		retrograde	16545 Apr 29 20:02	14°♊38'35	
evening set	16544 May 22 15:43	28°♊08'07		evening set	16545 May 06 07:22	12°♊05'56	
min. Earth dist.	16544 May 26 20:25	23°♊37'13	0.67594 AU	asc. node	16545 May 07 16:11	10°♊54'18	
inferior conj	16544 May 28 10:08	21°♊37'53	2°06'51	min. Earth dist.	16545 May 10 06:26	8°♊09'43	0.66156 AU
minimum elong	16544 May 28 07:56	21°♊44'50	2°05'39	inferior conj	16545 May 12 09:16	5°♊40'44	1°23'37
morning rise	16544 Jun 03 00:45	15°♊49'34		minimum elong	16545 May 12 07:22	5°♊46'20	1°22'26
direct	16544 Jun 06 09:58	14°♊44'08		morning rise	16545 May 18 08:41	0°♊04'48	
morning max el	16544 Jun 13 02:39	18°♊20'01	18°48'50		16545 May 18 12:20	30°♊	
desc. node	16544 Jun 22 09:24	0°♊10'08		direct	16545 May 21 07:56	29°♊16'19	
	16544 Jun 22 06:38	0°♊			16545 May 24 04:46	0°♊	
greatest brilliancy	16544 Jun 26 19:22	6°♊46'25	-0.8m	morning max el	16545 May 27 16:06	2°♊35'11	18°10'59
morning set	16544 Jul 05 12:06	20°♊11'52		desc. node	16545 Jun 09 06:27	19°♊58'09	
	16544 Jul 11 19:31	0°♊		morning set	16545 Jun 15 22:25	0°♊37'52	
max. Earth dist.	16544 Jul 20 02:50	12°♊55'41	1.45876 AU		16545 Jun 15 12:59	0°♊	
superior conj	16544 Jul 21 16:07	15°♊21'18	-2°14'13	superior conj	16545 Jul 01 01:38	24°♊37'09	-2°06'55
minimum elong	16544 Jul 21 17:21	15°♊26'06	2°14'42	minimum elong	16545 Jun 30 19:29	24°♊13'05	2°07'13
	16544 Jul 30 23:18	0°♊		max. Earth dist.	16545 Jul 02 23:36	27°♊36'36	1.45998 AU
evening rise	16544 Aug 06 00:23	9°♊39'05			16545 Jul 04 12:24	0°♊	
asc. node	16544 Aug 16 19:00	26°♊46'04		evening rise	16545 Jul 17 04:41	19°♊40'31	
	16544 Aug 18 22:29	0°♊			16545 Jul 23 21:07	0°♊	
evening max el	16544 Aug 26 05:59	9°♊20'14	18°28'23	greatest brilliancy	16545 Jul 28 10:58	6°♊58'02	-0.7m
retrograde	16544 Sep 01 16:44	12°♊47'34		asc. node	16545 Aug 03 15:46	15°♊56'17	
evening set	16544 Sep 04 19:20	11°♊53'15		evening max el	16545 Aug 09 16:13	23°♊11'42	19°07'37
inferior conj	16544 Sep 10 13:48	6°♊18'11	2°08'07	retrograde	16545 Aug 16 13:26	26°♊58'59	
minimum elong	16544 Sep 10 16:06	6°♊11'15	2°07'29	evening set	16545 Aug 20 01:42	25°♊47'34	
min. Earth dist.	16544 Sep 12 16:03	3°♊47'36	0.65323 AU	inferior conj	16545 Aug 25 12:49	19°♊58'55	2°41'06
morning rise	16544 Sep 16 11:34	29°♊54'27		minimum elong	16545 Aug 25 14:43	19°♊52'44	2°40'33
	16544 Sep 16 08:54	30°♊		min. Earth dist.	16545 Aug 27 01:09	18°♊01'37	0.66970 AU
desc. node	16544 Sep 18 07:08	28°♊37'34		morning rise	16545 Aug 31 03:00	13°♊31'41	
direct	16544 Sep 22 21:45	27°♊18'03		desc. node	16545 Sep 05 04:28	11°♊00'40	
	16544 Sep 30 06:23	0°♊		direct	16545 Sep 06 04:17	10°♊56'48	
morning max el	16544 Oct 06 07:35	5°♊09'13	27°05'00	morning max el	16545 Sep 18 19:13	18°♊27'29	25°57'05
	16544 Oct 25 07:50	0°♊			16545 Sep 28 13:45	0°♊	
morning set	16544 Nov 10 21:38	28°♊45'27			16545 Oct 18 08:05	0°♊	
	16544 Nov 11 12:59	0°♊		morning set	16545 Oct 24 17:34	11°♊20'14	
asc. node	16544 Nov 12 19:52	2°♊31'50		max. Earth dist.	16545 Oct 28 09:54	18°♊15'35	1.35339 AU
max. Earth dist.	16544 Nov 15 03:20	7°♊10'35	1.33432 AU	asc. node	16545 Oct 30 16:43	22°♊42'11	
superior conj	16544 Nov 19 08:31	15°♊56'59	0°56'38	superior conj	16545 Nov 03 03:36	29°♊37'20	0°30'50
minimum elong	16544 Nov 19 06:10	15°♊44'33	0°56'50	minimum elong	16545 Nov 03 01:56	29°♊28'50	0°31'02
	16544 Nov 25 21:55	0°♊			16545 Nov 03 08:03	0°♊	
evening rise	16544 Nov 26 11:36	1°♊12'53		evening rise	16545 Nov 10 19:40	15°♊30'46	
	16544 Dec 12 12:45	0°♊			16545 Nov 18 03:37	0°♊	
desc. node	16544 Dec 15 05:19	3°♊18'20		evening max el	16545 Nov 29 05:51	15°♊57'59	20°29'10
evening max el	16544 Dec 17 08:39	5°♊33'49	21°59'28	desc. node	16545 Dec 02 02:20	18°♊26'34	
retrograde	16544 Dec 29 19:58	11°♊43'40		retrograde	16545 Dec 10 06:21	21°♊26'38	
evening set	16545 Jan 02 05:29	11°♊17'57		evening set	16545 Dec 12 15:02	21°♊12'41	
inferior conj	16545 Jan 10 18:03	7°♊27'41	-6°01'47	inferior conj	16545 Dec 21 09:47	17°♊18'48	-5°21'04
minimum elong	16545 Jan 10 16:20	7°♊30'05	6°01'12	minimum elong	16545 Dec 21 00:43	17°♊32'03	5°18'35
min. Earth dist.	16545 Jan 10 14:14	7°♊33'01	0.54392 AU	min. Earth dist.	16545 Dec 22 19:38	16°♊29'20	0.54612 AU
morning rise	16545 Jan 19 04:00	3°♊40'18		morning rise	16545 Dec 29 10:01	13°♊19'56	
direct	16545 Jan 22 15:40	3°♊13'29		direct	16546 Jan 03 00:02	12°♊34'40	
morning max el	16545 Feb 04 00:30	9°♊13'04	21°54'02	morning max el	16546 Jan 16 11:03	19°♊11'39	23°42'38
asc. node	16545 Feb 08 18:36	14°♊35'05			16546 Jan 25 08:10	0°♊	
	16545 Feb 18 09:17	0°♊		asc. node	16546 Jan 26 15:51	1°♊59'29	
morning set	16545 Feb 24 22:01	13°♊08'22		morning set	16546 Feb 09 09:51	27°♊51'27	
					16546 Feb 10 09:45	0°♊	
superior conj	16545 Mar 04 01:15	28°♊16'51	1°12'46	superior conj	16546 Feb 16 05:58	12°♊43'40	1°27'25
minimum elong	16545 Mar 04 03:40	28°♊29'37	1°12'32	minimum elong	16546 Feb 16 07:49	12°♊53'40	1°27'29
	16545 Mar 04 20:56	0°♊		max. Earth dist.	16546 Feb 19 01:59	18°♊48'47	1.32808 AU
max. Earth dist.	16545 Mar 08 06:24	6°♊58'27	1.34428 AU	evening rise	16546 Feb 23 23:18	28°♊54'08	
evening rise	16545 Mar 12 12:04	15°♊18'14			16546 Feb 24 12:31	0°♊	
desc. node	16545 Mar 13 05:57	16°♊43'23		desc. node	16546 Feb 28 02:39	6°♊56'14	
	16545 Mar 20 14:53	0°♊			16546 Mar 13 18:16	0°♊	
	16545 Apr 10 01:25	0°♊					

evening max el	16546 Mar 30 02:46	20°♄33'38	27°27'23	max. Earth dist.	16547 Feb 02 04:22	0°♄46'18	1.31677 AU
retrograde	16546 Apr 12 20:08	28°♄07'14		evening rise	16547 Feb 07 19:41	12°♄51'17	
evening set	16546 Apr 19 13:35	25°♄39'37		desc. node	16547 Feb 14 23:22	26°♄53'14	
min. Earth dist.	16546 Apr 23 08:48	22°♄14'30	0.64321 AU		16547 Feb 16 16:26	0°♄	
asc. node	16546 Apr 24 13:22	20°♄59'18			16547 Mar 09 05:39	0°♄	
inferior conj	16546 Apr 25 23:55	19°♄26'33	0°26'48	evening max el	16547 Mar 12 13:18	3°♄25'32	27°35'58
minimum elong	16546 Apr 25 23:10	19°♄28'34	0°26'06	retrograde	16547 Mar 26 12:44	10°♄54'55	
morning rise	16546 May 02 10:58	14°♄04'57		evening set	16547 Apr 02 07:52	8°♄40'08	
direct	16546 May 05 01:08	13°♄30'44		min. Earth dist.	16547 Apr 06 02:05	5°♄40'09	0.62192 AU
morning max el	16546 May 11 09:02	16°♄45'14	17°50'15	inferior conj	16547 Apr 09 02:57	2°♄47'31	-0°44'25
	16546 May 21 01:22	0°♄		minimum elong	16547 Apr 09 04:27	2°♄43'55	0°44'05
desc. node	16546 May 27 03:24	10°♄04'28		asc. node	16547 Apr 11 10:36	0°♄40'24	
morning set	16546 May 28 11:50	12°♄20'32			16547 Apr 12 06:11	30°♄	
	16546 Jun 08 03:59	0°♄		morning rise	16547 Apr 16 04:10	27°♄42'37	
				direct	16547 Apr 18 10:31	27°♄19'17	
superior conj	16546 Jun 10 22:27	4°♄28'01	-1°42'03		16547 Apr 24 08:43	0°♄	
minimum elong	16546 Jun 10 13:57	3°♄53'55	1°41'49	morning max el	16547 Apr 25 02:30	0°♄41'11	17°47'10
max. Earth dist.	16546 Jun 15 19:15	12°♄12'02	1.45369 AU	morning set	16547 May 11 00:38	25°♄08'35	
evening rise	16546 Jun 26 16:53	29°♄05'56			16547 May 13 18:55	0°♄	
	16546 Jun 27 07:02	0°♄		desc. node	16547 May 14 00:17	0°♄23'32	
greatest brilliancy	16546 Jul 11 10:44	21°♄08'57	-0.6m				
	16546 Jul 17 19:48	0°♄		superior conj	16547 May 22 16:48	15°♄18'37	-1°06'59
asc. node	16546 Jul 21 12:33	4°♄34'50		minimum elong	16547 May 22 10:42	14°♄53'02	1°06'42
evening max el	16546 Jul 23 20:52	7°♄06'22	20°02'40	max. Earth dist.	16547 May 29 11:46	26°♄27'25	1.44063 AU
retrograde	16546 Jul 31 12:15	11°♄25'29			16547 May 31 16:56	0°♄	
evening set	16546 Aug 04 10:52	9°♄56'13		evening rise	16547 Jun 06 05:33	8°♄39'42	
inferior conj	16546 Aug 09 17:45	3°♄55'33	3°00'24		16547 Jun 20 11:54	0°♄	
minimum elong	16546 Aug 09 18:52	3°♄51'43	2°59'58	evening max el	16547 Jul 06 19:27	21°♄01'31	21°11'03
min. Earth dist.	16546 Aug 10 16:19	2°♄38'59	0.68183 AU	asc. node	16547 Jul 08 09:23	22°♄30'43	
	16546 Aug 12 17:36	30°♄		retrograde	16547 Jul 15 11:10	22°♄01'22	
morning rise	16546 Aug 15 02:27	27°♄29'58		evening set	16547 Jul 19 20:48	24°♄14'22	
direct	16546 Aug 20 16:53	25°♄03'33		inferior conj	16547 Jul 25 02:13	18°♄03'03	3°07'50
desc. node	16546 Aug 23 01:46	25°♄26'02		minimum elong	16547 Jul 25 02:24	18°♄02'23	3°07'23
	16546 Aug 30 04:50	0°♄		min. Earth dist.	16547 Jul 25 11:22	17°♄31'12	0.68931 AU
morning max el	16546 Sep 01 06:21	1°♄58'48	24°33'54	morning rise	16547 Jul 30 07:44	11°♄42'37	
	16546 Sep 22 14:18	0°♄		direct	16547 Aug 04 10:22	9°♄30'09	
morning set	16546 Oct 06 20:07	23°♄09'56		desc. node	16547 Aug 09 23:03	11°♄32'03	
max. Earth dist.	16546 Oct 10 09:35	29°♄29'23	1.37617 AU	morning max el	16547 Aug 14 17:49	15°♄37'38	23°04'53
	16546 Oct 10 16:21	0°♄			16547 Aug 26 12:49	0°♄	
					16547 Sep 15 13:28	0°♄	
superior conj	16546 Oct 17 11:49	12°♄47'00	-0°00'38	morning set	16547 Sep 18 01:05	4°♄04'03	
minimum elong	16546 Oct 17 11:50	12°♄47'06	0°00'16	max. Earth dist.	16547 Sep 22 08:37	11°♄19'52	1.40043 AU
behind sun begin	16546 Oct 17 05:08	12°♄14'39					
behind sun end	16546 Oct 17 18:33	13°♄19'36		superior conj	16547 Sep 30 05:10	25°♄16'00	-0°36'24
asc. node	16546 Oct 17 13:31	12°♄55'15		minimum elong	16547 Sep 30 07:58	25°♄28'48	0°35'43
evening rise	16546 Oct 25 23:06	29°♄36'10			16547 Oct 02 18:32	0°♄	
	16546 Oct 26 03:52	0°♄		asc. node	16547 Oct 04 10:15	3°♄06'39	
evening max el	16546 Nov 11 17:49	27°♄12'08	19°19'57	evening rise	16547 Oct 09 18:58	13°♄21'01	
	16546 Nov 15 03:12	0°♄			16547 Oct 18 21:57	0°♄	
desc. node	16546 Nov 18 23:24	1°♄40'15		evening max el	16547 Oct 25 18:38	9°♄15'11	18°33'08
retrograde	16546 Nov 21 03:19	1°♄54'48		retrograde	16547 Nov 02 18:39	13°♄18'37	
evening set	16546 Nov 23 01:28	1°♄43'50		evening set	16547 Nov 04 17:30	13°♄04'54	
	16546 Nov 27 15:59	30°♄		desc. node	16547 Nov 05 20:34	12°♄45'08	
inferior conj	16546 Dec 01 14:24	27°♄35'20	-3°54'11	inferior conj	16547 Nov 12 15:37	8°♄35'30	-2°11'21
minimum elong	16546 Dec 01 05:11	27°♄50'31	3°50'29	minimum elong	16547 Nov 12 10:23	8°♄45'32	2°08'43
min. Earth dist.	16546 Dec 04 04:39	25°♄53'01	0.55736 AU	min. Earth dist.	16547 Nov 15 19:46	6°♄10'10	0.57549 AU
morning rise	16546 Dec 09 06:39	23°♄07'28		morning rise	16547 Nov 19 23:58	3°♄31'19	
direct	16546 Dec 14 19:27	21°♄57'40		direct	16547 Nov 26 05:00	1°♄54'40	
morning max el	16546 Dec 28 19:51	29°♄03'45	25°29'29	morning max el	16547 Dec 10 10:29	9°♄22'44	26°55'28
	16546 Dec 29 18:46	0°♄			16547 Dec 26 02:54	0°♄	
asc. node	16547 Jan 13 13:02	20°♄16'28		asc. node	16547 Dec 31 10:10	9°♄12'08	
	16547 Jan 18 20:06	0°♄		morning set	16548 Jan 09 07:11	26°♄58'04	
morning set	16547 Jan 24 21:30	12°♄29'44			16548 Jan 10 16:47	0°♄	
superior conj	16547 Jan 31 14:54	27°♄19'22	1°35'52	superior conj	16548 Jan 16 01:57	11°♄57'38	1°38'13
minimum elong	16547 Jan 31 15:50	27°♄24'31	1°36'12	minimum elong	16548 Jan 16 01:50	11°♄56'56	1°38'42
	16547 Feb 01 19:58	0°♄		max. Earth dist.	16548 Jan 16 11:05	12°♄48'45	1.31068 AU

evening rise	16548 Jan 22 22:41	27° \approx 03'09		evening rise	16549 Jan 06 06:10	11° \approx 24'35	
	16548 Jan 24 08:17	0° \mathbb{H}			16549 Jan 15 13:20	0° \mathbb{H}	
desc. node	16548 Feb 01 20:08	16° \mathbb{H} 27'41		desc. node	16549 Jan 18 16:56	5° \mathbb{H} 30'57	
	16548 Feb 10 03:11	0° \mathbb{Y}		evening max el	16549 Feb 03 17:00	26° \mathbb{H} 49'00	26°10'09
evening max el	16548 Feb 22 18:57	15° \mathbb{Y} 33'39	27°10'34		16549 Feb 07 11:33	0° \mathbb{Y}	
retrograde	16548 Mar 07 20:07	22° \mathbb{Y} 52'40		retrograde	16549 Feb 17 16:20	3° \mathbb{Y} 55'03	
evening set	16548 Mar 14 11:12	20° \mathbb{Y} 57'50		evening set	16549 Feb 23 20:10	2° \mathbb{Y} 25'13	
min. Earth dist.	16548 Mar 18 09:14	18° \mathbb{Y} 14'43	0.59924 AU		16549 Feb 27 22:43	30° \mathbb{R} \mathbb{H}	
inferior conj	16548 Mar 21 14:42	15° \mathbb{Y} 34'16	-2°08'56	min. Earth dist.	16549 Feb 28 06:08	29° \mathbb{H} 47'15	0.57735 AU
minimum elong	16548 Mar 21 19:35	15° \mathbb{Y} 24'07	2°07'07	inferior conj	16549 Mar 03 07:28	27° \mathbb{H} 36'03	-3°40'52
asc. node	16548 Mar 28 07:52	11° \mathbb{Y} 07'38		minimum elong	16549 Mar 03 15:52	27° \mathbb{H} 20'59	3°37'56
morning rise	16548 Mar 29 07:33	10° \mathbb{Y} 48'44		morning rise	16549 Mar 11 14:50	23° \mathbb{H} 12'08	
direct	16548 Mar 31 08:12	10° \mathbb{Y} 32'39		direct	16549 Mar 13 13:44	22° \mathbb{H} 59'39	
morning max el	16548 Apr 07 17:08	14° \mathbb{Y} 13'15	18°02'43	asc. node	16549 Mar 15 05:11	23° \mathbb{H} 08'52	
	16548 Apr 18 11:55	0° \mathbb{B}		morning max el	16549 Mar 22 01:02	27° \mathbb{H} 09'57	18°38'28
morning set	16548 Apr 23 07:01	8° \mathbb{B} 44'51			16549 Mar 24 14:03	0° \mathbb{Y}	
desc. node	16548 Apr 29 21:09	20° \mathbb{B} 50'56		morning set	16549 Apr 07 01:41	22° \mathbb{Y} 53'05	
					16549 Apr 10 17:56	0° \mathbb{B}	
superior conj	16548 May 03 10:24	27° \mathbb{B} 12'08	-0°29'12	superior conj	16549 Apr 16 00:04	9° \mathbb{B} 59'07	0°06'18
minimum elong	16548 May 03 07:57	27° \mathbb{B} 01'18	0°29'17	minimum elong	16549 Apr 16 00:29	10° \mathbb{B} 01'02	0°05'54
	16548 May 05 00:40	0° \mathbb{II}		behind sun begin	16549 Apr 15 17:57	9° \mathbb{B} 30'31	
max. Earth dist.	16548 May 11 00:16	10° \mathbb{II} 11'39	1.42215 AU	behind sun end	16549 Apr 16 07:01	10° \mathbb{B} 31'28	
evening rise	16548 May 16 09:14	18° \mathbb{II} 57'22		desc. node	16549 Apr 16 17:56	11° \mathbb{B} 22'04	
	16548 May 23 11:11	0° \mathbb{D}		max. Earth dist.	16549 Apr 23 08:32	23° \mathbb{B} 14'31	1.40018 AU
	16548 Jun 14 01:02	0° \mathbb{Q}		evening rise	16549 Apr 27 09:46	0° \mathbb{II} 09'40	
evening max el	16548 Jun 18 13:02	4° \mathbb{Q} 57'09	22°28'46		16549 Apr 27 07:28	0° \mathbb{II}	
asc. node	16548 Jun 24 06:18	9° \mathbb{Q} 30'10			16549 May 16 20:29	0° \mathbb{D}	
retrograde	16548 Jun 28 08:35	10° \mathbb{Q} 41'30		evening max el	16549 Jun 01 03:26	18° \mathbb{D} 52'30	23°50'26
evening set	16548 Jul 03 05:48	8° \mathbb{Q} 38'03		asc. node	16549 Jun 11 03:18	25° \mathbb{D} 14'57	
inferior conj	16548 Jul 08 12:12	2° \mathbb{Q} 17'40	3°04'27	retrograde	16549 Jun 12 03:15	25° \mathbb{D} 19'11	
minimum elong	16548 Jul 08 11:27	2° \mathbb{Q} 20'15	3°03'52	evening set	16549 Jun 17 12:10	23° \mathbb{D} 01'42	
min. Earth dist.	16548 Jul 08 08:10	2° \mathbb{Q} 31'41	0.69189 AU	min. Earth dist.	16549 Jun 22 04:37	17° \mathbb{D} 32'59	0.68949 AU
	16548 Jul 10 04:22	30° \mathbb{R} \mathbb{D}		inferior conj	16549 Jun 22 21:45	16° \mathbb{D} 34'28	2°50'39
morning rise	16548 Jul 13 16:58	26° \mathbb{D} 04'35		minimum elong	16549 Jun 22 20:12	16° \mathbb{D} 39'45	2°49'49
direct	16548 Jul 18 07:28	24° \mathbb{D} 09'48		morning rise	16549 Jun 28 04:16	10° \mathbb{D} 30'11	
desc. node	16548 Jul 26 20:18	28° \mathbb{D} 55'34		direct	16549 Jul 02 06:50	8° \mathbb{D} 54'51	
morning max el	16548 Jul 27 08:24	29° \mathbb{D} 25'19	21°38'38	morning max el	16549 Jul 10 04:51	13° \mathbb{D} 23'16	20°21'38
	16548 Jul 27 22:03	0° \mathbb{Q}		desc. node	16549 Jul 13 17:30	17° \mathbb{D} 16'11	
	16548 Aug 19 04:47	0° \mathbb{P}			16549 Jul 23 05:25	0° \mathbb{Q}	
morning set	16548 Aug 28 06:29	13° \mathbb{P} 59'02		morning set	16549 Aug 07 16:30	23° \mathbb{Q} 06'37	
max. Earth dist.	16548 Sep 03 13:05	24° \mathbb{P} 06'04	1.42327 AU		16549 Aug 12 03:03	0° \mathbb{P}	
	16548 Sep 07 02:09	0° \mathbb{L}		max. Earth dist.	16549 Aug 17 00:13	7° \mathbb{P} 42'57	1.44195 AU
superior conj	16548 Sep 11 03:21	6° \mathbb{L} 55'04	-1°13'31	superior conj	16549 Aug 23 02:37	17° \mathbb{P} 35'51	-1°46'54
minimum elong	16548 Sep 11 09:27	7° \mathbb{L} 21'28	1°12'39	minimum elong	16549 Aug 23 10:36	18° \mathbb{P} 08'42	1°46'19
asc. node	16548 Sep 20 07:01	23° \mathbb{L} 13'18			16549 Aug 30 12:18	0° \mathbb{L}	
evening rise	16548 Sep 22 03:35	26° \mathbb{L} 36'28		evening rise	16549 Sep 04 20:08	9° \mathbb{L} 10'01	
	16548 Sep 24 00:15	0° \mathbb{M}		asc. node	16549 Sep 07 03:45	13° \mathbb{L} 10'54	
evening max el	16548 Oct 08 04:10	21° \mathbb{M} 58'36	18°07'24		16549 Sep 17 11:38	0° \mathbb{M}	
retrograde	16548 Oct 15 04:56	25° \mathbb{M} 35'05		evening max el	16549 Sep 21 18:12	5° \mathbb{M} 12'07	18°01'15
evening set	16548 Oct 17 09:36	25° \mathbb{M} 14'25		retrograde	16549 Sep 28 06:15	8° \mathbb{M} 34'58	
desc. node	16548 Oct 22 17:46	22° \mathbb{M} 00'17		evening set	16549 Sep 30 18:39	8° \mathbb{M} 03'44	
inferior conj	16548 Oct 24 14:21	20° \mathbb{M} 23'30	-0°35'42	inferior conj	16549 Oct 07 07:35	2° \mathbb{M} 53'41	0°42'40
minimum elong	16548 Oct 24 13:06	20° \mathbb{M} 26'16	0°34'45	minimum elong	16549 Oct 07 08:49	2° \mathbb{M} 50'33	0°42'30
min. Earth dist.	16548 Oct 27 19:29	17° \mathbb{M} 32'12	0.59747 AU	desc. node	16549 Oct 09 15:01	0° \mathbb{M} 31'51	
morning rise	16548 Oct 31 13:20	14° \mathbb{M} 45'26		min. Earth dist.	16549 Oct 10 05:22	29° \mathbb{L} 56'18	0.62036 AU
direct	16548 Nov 07 03:24	12° \mathbb{M} 43'46			16549 Oct 10 03:51	30° \mathbb{R} \mathbb{L}	
morning max el	16548 Nov 21 09:37	20° \mathbb{M} 28'53	27°46'46	morning rise	16549 Oct 13 20:21	26° \mathbb{L} 50'13	
	16548 Nov 29 15:07	0° \mathbb{J}		direct	16549 Oct 20 12:55	24° \mathbb{L} 28'37	
asc. node	16548 Dec 17 07:15	28° \mathbb{J} 36'17			16549 Nov 01 01:21	0° \mathbb{M}	
	16548 Dec 18 00:37	0° \mathbb{Z}		morning max el	16549 Nov 03 15:47	2° \mathbb{M} 25'01	27°58'33
morning set	16548 Dec 23 13:04	11° \mathbb{Z} 12'03			16549 Nov 24 00:57	0° \mathbb{J}	
max. Earth dist.	16548 Dec 29 18:36	24° \mathbb{Z} 49'02	1.31002 AU	asc. node	16549 Dec 04 04:18	18° \mathbb{J} 20'57	
superior conj	16548 Dec 30 13:14	26° \mathbb{Z} 33'13	1°34'31	morning set	16549 Dec 07 13:04	25° \mathbb{J} 06'56	
minimum elong	16548 Dec 30 12:06	26° \mathbb{Z} 26'51	1°35'01		16549 Dec 09 21:09	0° \mathbb{Z}	
	16549 Jan 01 02:10	0° \mathbb{A}		max. Earth dist.	16549 Dec 12 22:56	6° \mathbb{Z} 37'30	1.31493 AU

superior conj	16549 Dec 14 22:53	11° ☿ 01'12	1°24'43	superior conj	16550 Nov 29 04:48	25° ♊ 15'22	1°08'43
minimum elong	16549 Dec 14 20:57	10° ☿ 50'25	1°25'07	minimum elong	16550 Nov 29 02:26	25° ♊ 02'35	1°08'58
evening rise	16549 Dec 21 16:12	25° ☿ 51'06			16550 Dec 01 09:15	0° ☿	
	16549 Dec 23 14:43	0° \approx		evening rise	16550 Dec 06 02:56	10° ☿ 17'28	
desc. node	16550 Jan 05 13:47	23° \approx 51'46			16550 Dec 16 02:20	0° \approx	
	16550 Jan 09 21:28	0° ♋		desc. node	16550 Dec 23 10:42	11° \approx 14'04	
evening max el	16550 Jan 16 06:35	7° ♋ 14'17	24°41'04	evening max el	16550 Dec 28 15:58	17° \approx 10'29	22°57'58
retrograde	16550 Jan 30 00:00	14° ♋ 05'32		retrograde	16551 Jan 10 18:34	23° \approx 39'13	
evening set	16550 Feb 04 07:37	13° ♋ 03'03		evening set	16551 Jan 14 21:26	23° \approx 02'24	
min. Earth dist.	16550 Feb 09 18:38	10° ♋ 14'06	0.55892 AU	min. Earth dist.	16551 Jan 22 01:52	19° \approx 43'11	0.54692 AU
inferior conj	16550 Feb 12 02:59	8° ♋ 46'05	-5°05'17	inferior conj	16551 Jan 23 03:23	19° \approx 06'50	-5°57'01
minimum elong	16550 Feb 12 12:13	8° ♋ 31'39	5°02'52	minimum elong	16551 Jan 23 07:09	19° \approx 01'28	5°56'18
morning rise	16550 Feb 20 19:09	4° ♋ 42'52		morning rise	16551 Jan 31 18:05	15° \approx 17'01	
direct	16550 Feb 22 23:33	4° ♋ 29'57		direct	16551 Feb 03 15:13	14° \approx 57'39	
asc. node	16550 Mar 02 02:29	6° ♋ 58'18		morning max el	16551 Feb 15 04:28	20° \approx 33'04	20°57'35
morning max el	16550 Mar 04 22:02	9° ♋ 19'59	19°36'22	asc. node	16551 Feb 16 23:47	22° \approx 25'23	
	16550 Mar 18 11:22	0° ♌			16551 Feb 22 16:56	0° ♋	
morning set	16550 Mar 22 04:40	7° ♌ 21'42		morning set	16551 Mar 06 12:54	22° ♋ 01'02	
					16551 Mar 10 08:33	0° ♌	
superior conj	16550 Mar 30 05:27	23° ♌ 27'46	0°36'52	superior conj	16551 Mar 13 22:26	7° ♌ 26'00	1°01'28
minimum elong	16550 Mar 30 07:28	23° ♌ 37'38	0°36'21	minimum elong	16551 Mar 14 00:57	7° ♌ 38'54	1°01'04
	16550 Apr 02 14:40	0° ♍		max. Earth dist.	16551 Mar 18 22:57	17° ♌ 30'24	1.35542 AU
desc. node	16550 Apr 03 14:42	1° ♍ 53'35		desc. node	16551 Mar 21 11:25	22° ♌ 21'05	
max. Earth dist.	16550 Apr 05 14:30	5° ♍ 35'51	1.37715 AU	evening rise	16551 Mar 22 21:40	25° ♌ 01'44	
evening rise	16550 Apr 09 06:56	12° ♍ 14'13			16551 Mar 25 14:58	0° ♍	
	16550 Apr 19 23:12	0° ♎			16551 Apr 13 11:55	0° ♎	
	16550 May 12 00:35	0° ☿		evening max el	16551 Apr 27 06:20	16° ♎ 37'22	26°18'06
evening max el	16550 May 14 16:44	2° ☿ 47'06	25°09'18	retrograde	16551 May 10 04:03	23° ♎ 59'56	
retrograde	16550 May 26 18:05	9° ☿ 47'50		asc. node	16551 May 15 21:28	21° ♎ 52'47	
asc. node	16550 May 29 00:21	9° ☿ 26'43		evening set	16551 May 16 10:16	21° ♎ 27'30	
evening set	16550 Jun 01 14:16	7° ☿ 20'16		min. Earth dist.	16551 May 20 12:20	17° ♎ 11'33	0.67027 AU
min. Earth dist.	16550 Jun 05 22:41	2° ☿ 28'40	0.68221 AU	inferior conj	16551 May 22 07:41	14° ♎ 58'19	1°50'05
inferior conj	16550 Jun 07 04:57	0° ☿ 49'34	2°26'09	minimum elong	16551 May 22 05:32	15° ♎ 04'59	1°48'51
minimum elong	16550 Jun 07 02:52	0° ☿ 56'23	2°25'03	morning rise	16551 May 28 01:42	9° ♎ 15'00	
	16550 Jun 07 20:09	30° ♏ 11		direct	16551 May 31 06:27	8° ♎ 17'12	
morning rise	16550 Jun 12 15:50	24° ♎ 55'09		morning max el	16551 Jun 06 18:42	11° ♎ 44'42	18°30'38
direct	16550 Jun 16 07:04	23° ♎ 39'18		desc. node	16551 Jun 17 11:43	25° ♎ 52'50	
morning max el	16550 Jun 23 08:26	27° ♎ 30'58	19°18'10		16551 Jun 20 04:12	0° ☿	
	16550 Jun 25 16:06	0° ☿		morning set	16551 Jun 27 17:23	11° ☿ 49'00	
desc. node	16550 Jun 30 14:39	6° ☿ 18'59			16551 Jul 09 08:00	0° ♏	
greatest brilliancy	16550 Jul 06 01:25	14° ☿ 08'01	-0.7m	superior conj	16551 Jul 13 13:51	6° ♏ 36'55	-2°13'36
	16550 Jul 16 12:53	0° ♏		minimum elong	16551 Jul 13 11:39	6° ♏ 28'20	2°14'06
morning set	16550 Jul 17 21:34	2° ♏ 05'31		max. Earth dist.	16551 Jul 13 11:56	6° ♏ 29'27	1.46012 AU
max. Earth dist.	16550 Jul 30 16:28	21° ♏ 55'38	1.45459 AU		16551 Jul 28 12:21	0° ♐	
superior conj	16550 Aug 03 03:16	27° ♏ 21'39	-2°09'14	evening rise	16551 Jul 29 09:12	1° ♐ 22'11	
minimum elong	16550 Aug 03 08:31	27° ♏ 42'27	2°09'24	greatest brilliancy	16551 Aug 06 14:45	14° ♐ 18'47	-0.8m
	16550 Aug 04 19:12	0° ♐		asc. node	16551 Aug 11 21:14	22° ♐ 19'19	
evening rise	16550 Aug 17 15:14	20° ♐ 47'54			16551 Aug 17 13:32	0° ♑	
	16550 Aug 23 05:29	0° ♑		evening max el	16551 Aug 19 21:47	2° ♑ 34'04	18°43'09
asc. node	16550 Aug 25 00:29	2° ♑ 54'43		retrograde	16551 Aug 26 12:04	6° ♑ 08'21	
evening max el	16550 Sep 05 09:04	18° ♑ 46'28	18°13'28	evening set	16551 Aug 29 18:39	5° ♑ 07'05	
retrograde	16550 Sep 11 17:53	22° ♑ 08'38			16551 Sep 03 22:44	30° ♒ 11	
evening set	16550 Sep 14 15:02	21° ♑ 23'36		inferior conj	16551 Sep 04 09:37	29° ♒ 26'19	2°23'51
inferior conj	16550 Sep 20 15:16	15° ♑ 57'12	1°41'59	minimum elong	16551 Sep 04 11:49	29° ♒ 19'28	2°23'16
minimum elong	16550 Sep 20 17:29	15° ♑ 50'52	1°41'23	min. Earth dist.	16551 Sep 06 06:05	27° ♒ 08'25	0.66068 AU
min. Earth dist.	16550 Sep 23 01:19	13° ♑ 12'10	0.64198 AU	morning rise	16551 Sep 10 03:55	23° ♒ 00'20	
morning rise	16550 Sep 26 18:08	9° ♑ 38'11		desc. node	16551 Sep 13 09:36	20° ♒ 59'02	
desc. node	16550 Sep 26 12:18	9° ♑ 49'50		direct	16551 Sep 16 10:45	20° ♒ 23'16	
direct	16550 Oct 03 07:53	7° ♑ 04'27		morning max el	16551 Sep 29 13:20	28° ♒ 08'03	26°38'34
morning max el	16550 Oct 17 01:55	15° ♑ 02'01	27°33'26		16551 Oct 01 08:10	0° ♒	
	16550 Oct 29 08:20	0° ♓			16551 Oct 23 02:06	0° ♓	
	16550 Nov 16 17:22	0° ♊		morning set	16551 Nov 04 08:43	21° ♓ 32'59	
morning set	16550 Nov 21 04:36	8° ♊ 36'00		asc. node	16551 Nov 07 22:07	28° ♓ 26'37	
asc. node	16550 Nov 21 01:14	8° ♊ 19'16		max. Earth dist.	16551 Nov 08 07:47	29° ♓ 14'34	1.34184 AU
max. Earth dist.	16550 Nov 25 20:09	18° ♊ 05'41	1.32559 AU		16551 Nov 08 16:54	0° ♊	

superior conj	16551 Nov 13 04:39	9°♊10'24	0°46'28	asc. node	16552 Oct 24 18:56	18°♍38'20	
minimum elong	16551 Nov 13 02:29	8°♊59'06	0°46'38				
evening rise	16551 Nov 20 12:33	24°♊39'56		superior conj	16552 Oct 26 19:33	22°♍38'38	0°18'10
	16551 Nov 23 02:05	0°♊		minimum elong	16552 Oct 26 18:28	22°♍33'11	0°18'24
desc. node	16551 Dec 10 07:39	27°♊18'08			16552 Oct 30 10:55	0°♊	
evening max el	16551 Dec 10 06:31	27°♊15'19	21°18'51	evening rise	16552 Nov 03 18:56	8°♊53'00	
	16551 Dec 13 11:31	0°♊			16552 Nov 15 03:52	0°♊	
retrograde	16551 Dec 22 04:13	3°♊08'16		evening max el	16552 Nov 21 09:56	7°♊59'38	19°56'58
evening set	16551 Dec 25 01:36	2°♊48'58		desc. node	16552 Nov 26 04:41	11°♊40'21	
	16551 Dec 31 22:23	30°♊		retrograde	16552 Dec 01 17:19	13°♊08'06	
inferior conj	16552 Jan 02 18:07	28°♊59'13	-5°51'43	evening set	16552 Dec 03 20:03	12°♊56'09	
minimum elong	16552 Jan 02 12:32	29°♊07'03	5°50'33	inferior conj	16552 Dec 12 13:48	8°♊57'07	-4°48'05
min. Earth dist.	16552 Jan 03 07:04	28°♊40'59	0.54375 AU	minimum elong	16552 Dec 12 03:50	9°♊12'19	4°44'47
morning rise	16552 Jan 10 23:46	25°♊09'03		min. Earth dist.	16552 Dec 14 13:21	7°♊44'44	0.54997 AU
direct	16552 Jan 14 22:56	24°♊35'00		morning rise	16552 Dec 20 10:31	4°♊48'02	
	16552 Jan 26 21:51	0°♊		direct	16552 Dec 25 11:11	3°♊52'46	
morning max el	16552 Jan 27 20:24	0°♊52'02	22°39'02	morning max el	16553 Jan 08 04:46	10°♊42'17	24°29'24
asc. node	16552 Feb 03 21:01	9°♊12'13		asc. node	16553 Jan 20 18:13	27°♊00'48	
	16552 Feb 15 18:25	0°♊			16553 Jan 22 13:07	0°♊	
morning set	16552 Feb 19 00:01	6°♊44'25		morning set	16553 Feb 02 12:02	21°♊26'22	
					16553 Feb 06 10:08	0°♊	
superior conj	16552 Feb 25 23:41	21°♊44'30	1°19'45	superior conj	16553 Feb 09 06:29	6°♊15'58	1°31'45
minimum elong	16552 Feb 26 01:55	21°♊56'26	1°19'37	minimum elong	16553 Feb 09 07:58	6°♊24'07	1°31'56
max. Earth dist.	16552 Feb 29 14:12	29°♊18'59	1.33691 AU	max. Earth dist.	16553 Feb 11 13:12	11°♊13'49	1.32273 AU
	16552 Feb 29 22:09	0°♊		evening rise	16553 Feb 16 17:57	22°♊08'55	
evening rise	16552 Mar 05 02:26	8°♊22'45			16553 Feb 20 17:23	0°♊	
desc. node	16552 Mar 07 08:08	12°♊40'41		desc. node	16553 Feb 22 04:51	2°♊47'48	
	16552 Mar 17 04:17	0°♊			16553 Mar 10 23:31	0°♊	
	16552 Apr 08 14:01	0°♊		evening max el	16553 Mar 22 08:35	13°♊27'51	27°34'55
evening max el	16552 Apr 08 20:07	0°♊14'53	27°09'05	retrograde	16553 Apr 05 04:48	20°♊59'35	
retrograde	16552 Apr 22 07:56	7°♊46'47		evening set	16553 Apr 11 23:39	18°♊36'43	
evening set	16552 Apr 28 22:09	5°♊15'44		min. Earth dist.	16553 Apr 15 18:08	15°♊23'06	0.63449 AU
asc. node	16552 May 01 18:37	2°♊39'23		inferior conj	16553 Apr 18 13:45	12°♊31'34	-0°01'37
min. Earth dist.	16552 May 02 19:27	1°♊32'58	0.65414 AU	minimum elong	16553 Apr 18 13:49	12°♊31'25	0°01'57
	16552 May 04 04:35	30°♊		transit middle	16553 Apr 18 13:49	12°♊31'25	0°01'57
inferior conj	16552 May 05 03:34	28°♊54'38	1°01'13	transit begin	16553 Apr 18 10:40	12°♊39'26	
minimum elong	16552 May 05 02:02	28°♊59'00	1°00'11	transit end	16553 Apr 18 16:57	12°♊23'24	
morning rise	16552 May 11 07:34	23°♊24'13		asc. node	16553 Apr 18 15:48	12°♊26'19	
direct	16552 May 14 02:48	22°♊42'08		morning rise	16553 Apr 25 06:32	7°♊16'33	
morning max el	16552 May 20 09:52	25°♊57'50	17°59'59	direct	16553 Apr 27 17:19	6°♊47'13	
	16552 May 23 22:27	0°♊		morning max el	16553 May 04 03:25	10°♊03'13	17°46'45
desc. node	16552 Jun 03 08:43	15°♊49'07			16553 May 17 17:04	0°♊	
morning set	16552 Jun 07 15:20	22°♊47'46		morning set	16553 May 20 15:29	5°♊00'59	
	16552 Jun 12 01:29	0°♊		desc. node	16553 May 21 05:40	6°♊01'41	
superior conj	16552 Jun 22 02:15	16°♊02'20	-1°58'08	superior conj	16553 Jun 02 07:35	26°♊17'01	-1°27'55
minimum elong	16552 Jun 21 18:20	15°♊31'07	1°58'10	minimum elong	16553 Jun 01 23:44	25°♊44'59	1°27'36
max. Earth dist.	16552 Jun 25 08:26	21°♊09'18	1.45817 AU		16553 Jun 04 14:35	0°♊	
	16552 Jul 01 00:52	0°♊		max. Earth dist.	16553 Jun 08 03:39	5°♊40'20	1.44895 AU
evening rise	16552 Jul 08 04:54	11°♊03'00		evening rise	16553 Jun 17 15:17	20°♊27'05	
	16552 Jul 20 16:49	0°♊			16553 Jun 23 22:30	0°♊	
greatest brilliancy	16552 Jul 21 10:21	1°♊04'37	-0.7m	asc. node	16553 Jul 15 14:50	29°♊38'41	
asc. node	16552 Jul 28 18:01	11°♊16'59			16553 Jul 15 23:05	0°♊	
evening max el	16552 Aug 02 05:52	16°♊27'27	19°29'20	evening max el	16553 Jul 16 07:58	0°♊22'22	20°30'17
retrograde	16552 Aug 09 09:48	20°♊26'32		retrograde	16553 Jul 24 08:51	4°♊57'36	
evening set	16552 Aug 13 02:28	19°♊07'29		evening set	16553 Jul 28 12:12	3°♊20'28	
inferior conj	16552 Aug 18 11:25	13°♊13'47	2°50'48		16553 Jul 31 16:41	30°♊	
minimum elong	16552 Aug 18 13:01	13°♊08'27	2°50'19	inferior conj	16553 Aug 02 18:07	27°♊15'00	3°04'55
min. Earth dist.	16552 Aug 19 17:53	11°♊33'08	0.67543 AU	minimum elong	16553 Aug 02 18:51	27°♊12'28	3°04'30
morning rise	16552 Aug 23 23:01	6°♊47'00		min. Earth dist.	16553 Aug 03 10:52	26°♊17'27	0.68564 AU
direct	16552 Aug 29 20:00	4°♊14'50		morning rise	16553 Aug 08 01:12	20°♊51'31	
desc. node	16552 Aug 30 06:54	4°♊15'39		direct	16553 Aug 13 10:40	18°♊30'42	
morning max el	16552 Sep 11 00:30	11°♊31'32	25°23'02	desc. node	16553 Aug 17 04:13	19°♊26'21	
	16552 Sep 25 20:12	0°♊		morning max el	16553 Aug 24 11:37	25°♊06'04	23°56'16
	16552 Oct 14 18:11	0°♊			16553 Aug 28 22:11	0°♊	
morning set	16552 Oct 16 21:42	3°♊49'04			16553 Sep 19 07:19	0°♊	
max. Earth dist.	16552 Oct 20 10:43	10°♊19'12	1.36277 AU				

morning set	16553 Sep 28 15:29	15° Ω 15'18		16554 Aug 23 14:30	0° Π	
max. Earth dist.	16553 Oct 02 09:46	21° Ω 46'56	1.38651 AU	16554 Sep 09 10:30	25° Π 44'13	
	16553 Oct 06 23:01	0° Π		16554 Sep 12 01:03	0° Ω	
				max. Earth dist.	16554 Sep 14 10:39	3° Ω 59'57 1.41042 AU
superior conj	16553 Oct 09 21:57	5° Π 31'31	-0°15'24	superior conj	16554 Sep 22 07:39	17° Ω 39'50 -0°52'15
minimum elong	16553 Oct 09 23:01	5° Π 36'36	0°14'55	minimum elong	16554 Sep 22 11:51	17° Ω 58'39 0°51'26
behind sun begin	16553 Oct 09 20:17	5° Π 23'40		asc. node	16554 Sep 28 12:30	29° Ω 00'24
behind sun end	16553 Oct 10 01:45	5° Π 49'33			16554 Sep 29 01:17	0° Π
asc. node	16553 Oct 11 15:44	8° Π 50'43		evening rise	16554 Oct 02 11:10	6° Π 23'54
evening rise	16553 Oct 18 19:32	22° Π 50'19			16554 Oct 16 14:47	0° Ω
	16553 Oct 22 11:56	0° Ω		evening max el	16554 Oct 18 08:43	1° Ω 55'28 18°19'46
evening max el	16553 Nov 04 03:41	19° Ω 34'18	18°57'18	retrograde	16554 Oct 25 21:49	5° Ω 46'12
retrograde	16553 Nov 12 21:55	23° Ω 59'28		evening set	16554 Oct 27 22:33	5° Ω 30'09
desc. node	16553 Nov 13 01:48	23° Ω 59'23		desc. node	16554 Oct 30 22:59	4° Ω 12'43
evening set	16553 Nov 14 19:24	23° Ω 47'52		inferior conj	16554 Nov 04 13:18	0° Ω 51'35 -1°29'05
inferior conj	16553 Nov 23 02:40	19° Ω 30'27	-3°10'52	minimum elong	16554 Nov 04 09:54	0° Ω 58'33 1°27'11
minimum elong	16553 Nov 22 18:55	19° Ω 44'02	3°07'24		16554 Nov 05 14:16	30° Ω
min. Earth dist.	16553 Nov 26 00:23	17° Ω 28'24	0.56436 AU	min. Earth dist.	16554 Nov 07 19:12	28° Π 12'36 0.58442 AU
morning rise	16553 Nov 30 15:40	14° Ω 47'22		morning rise	16554 Nov 11 17:46	25° Π 31'50
direct	16553 Dec 06 12:00	13° Ω 26'37		direct	16554 Nov 18 03:20	23° Π 44'03
morning max el	16553 Dec 20 15:31	20° Ω 42'19	26°09'46		16554 Nov 30 23:23	0° Ω
	16553 Dec 28 16:02	0° Ω		morning max el	16554 Dec 02 10:01	1° Ω 20'58 27°22'08
asc. node	16554 Jan 07 15:24	15° Ω 35'30			16554 Dec 22 22:20	0° Ω
	16554 Jan 15 02:47	0° Ω		asc. node	16554 Dec 25 12:31	4° Ω 44'19
morning set	16554 Jan 17 23:06	6° Ω 01'11		morning set	16555 Jan 02 07:27	20° Ω 24'22
					16555 Jan 06 16:43	0° Ω
superior conj	16554 Jan 24 16:33	20° Ω 53'18	1°37'36	superior conj	16555 Jan 09 03:58	5° Ω 31'22 1°37'23
minimum elong	16554 Jan 24 17:03	20° Ω 56'01	1°38'01	minimum elong	16555 Jan 09 03:24	5° Ω 28'11 1°37'54
max. Earth dist.	16554 Jan 25 18:01	23° Ω 14'59	1.31353 AU	max. Earth dist.	16555 Jan 09 01:28	5° Ω 17'19 1.30966 AU
	16554 Jan 28 19:39	0° Ω		evening rise	16555 Jan 15 22:34	20° Ω 29'14
evening rise	16554 Jan 31 17:25	6° Ω 12'46			16555 Jan 20 12:48	0° Ω
desc. node	16554 Feb 09 01:35	22° Ω 36'05		desc. node	16555 Jan 26 22:23	11° Ω 58'34
	16554 Feb 13 06:54	0° Ω			16555 Feb 07 20:16	0° Ω
evening max el	16554 Mar 04 17:14	26° Ω 01'57	27°29'23	evening max el	16555 Feb 14 19:42	7° Ω 47'29 26°48'53
	16554 Mar 09 11:38	0° Ω		retrograde	16555 Feb 28 20:44	15° Ω 02'07
retrograde	16554 Mar 18 17:30	3° Ω 27'21		evening set	16555 Mar 07 07:59	13° Ω 17'10
evening set	16554 Mar 25 11:58	1° Ω 19'57		min. Earth dist.	16555 Mar 11 09:39	10° Ω 37'56 0.58972 AU
	16554 Mar 27 10:07	30° Ω		inferior conj	16555 Mar 14 14:50	8° Ω 07'33 -2°47'38
min. Earth dist.	16554 Mar 29 06:57	28° Ω 28'42	0.61240 AU	minimum elong	16555 Mar 14 21:19	7° Ω 54'54 2°45'13
inferior conj	16554 Apr 01 10:45	25° Ω 39'00	-1°18'48	morning rise	16555 Mar 22 14:17	3° Ω 31'23
minimum elong	16554 Apr 01 13:35	25° Ω 32'38	1°17'51	asc. node	16555 Mar 23 10:21	3° Ω 22'04
asc. node	16554 Apr 05 13:04	22° Ω 19'00		direct	16555 Mar 24 13:25	3° Ω 17'23
morning rise	16554 Apr 08 18:34	20° Ω 42'16		morning max el	16555 Apr 01 08:32	7° Ω 09'18 18°15'17
direct	16554 Apr 10 22:16	20° Ω 22'25			16555 Apr 15 22:34	0° Ω
morning max el	16554 Apr 17 20:11	23° Ω 50'28	17°51'28	morning set	16555 Apr 17 00:35	2° Ω 02'22
	16554 Apr 22 19:19	0° Ω		desc. node	16555 Apr 24 23:22	16° Ω 53'49
morning set	16554 May 03 12:27	18° Ω 11'21				
desc. node	16554 May 08 02:32	26° Ω 24'37		superior conj	16555 Apr 26 14:44	19° Ω 52'46 -0°13'42
	16554 May 10 03:13	0° Π		minimum elong	16555 Apr 26 13:38	19° Ω 47'50 0°13'55
superior conj	16554 May 14 12:05	7° Π 35'11	-0°50'57	behind sun begin	16555 Apr 26 09:58	19° Ω 31'12
minimum elong	16554 May 14 07:32	7° Π 15'44	0°50'47	behind sun end	16555 Apr 26 17:19	20° Ω 04'26
max. Earth dist.	16554 May 21 18:46	19° Π 44'26	1.43335 AU		16555 May 02 08:25	0° Π
evening rise	16554 May 28 09:01	0° Ω 16'01		max. Earth dist.	16555 May 04 04:44	3° Π 09'08 1.41311 AU
	16554 May 28 04:55	0° Ω		evening rise	16555 May 08 21:15	10° Π 56'11
	16554 Jun 17 12:26	0° Ω			16555 May 21 03:58	0° Ω
evening max el	16554 Jun 29 04:05	14° Ω 16'43	21°43'11	evening max el	16555 Jun 11 19:55	28° Ω 11'30 23°03'25
asc. node	16554 Jul 02 11:43	17° Ω 12'08			16555 Jun 13 18:01	0° Ω
retrograde	16554 Jul 08 07:26	19° Ω 35'46		asc. node	16555 Jun 19 08:41	3° Ω 41'45
evening set	16554 Jul 12 21:57	17° Ω 41'23		retrograde	16555 Jun 22 03:57	4° Ω 15'12
inferior conj	16554 Jul 18 03:29	11° Ω 25'41	3°07'42	evening set	16555 Jun 27 06:03	2° Ω 05'31
minimum elong	16554 Jul 18 03:16	11° Ω 26'26	3°07'12		16555 Jun 29 07:00	30° Ω
min. Earth dist.	16554 Jul 18 06:56	11° Ω 13'38	0.69099 AU	min. Earth dist.	16555 Jul 02 03:57	26° Ω 14'52 0.69144 AU
morning rise	16554 Jul 23 08:23	5° Ω 08'09		inferior conj	16555 Jul 02 13:32	25° Ω 41'40 2°59'54
direct	16554 Jul 28 05:43	3° Ω 03'09		minimum elong	16555 Jul 02 12:26	25° Ω 45'30 2°59'12
desc. node	16554 Aug 04 01:29	6° Ω 07'36		morning rise	16555 Jul 07 18:43	19° Ω 31'56
morning max el	16554 Aug 07 00:15	8° Ω 48'49	22°27'26			

direct	16555 Jul 12 04:00	17°☿45'20		morning rise	16556 Jun 21 06:22	3°☿58'21	
morning max el	16555 Jul 20 17:01	22°☿40'22	21°04'19	direct	16556 Jun 25 04:05	2°☿31'11	
desc. node	16555 Jul 21 22:43	23°☿57'09		morning max el	16556 Jul 02 16:21	6°☿42'31	19°52'42
	16555 Jul 27 00:55	0°♊		desc. node	16556 Jul 07 19:52	12°☿37'20	
	16555 Aug 16 20:54	0°♊			16556 Jul 20 02:40	0°♊	
morning set	16555 Aug 20 06:30	5°♊15'36		morning set	16556 Jul 29 12:04	14°♊13'08	
max. Earth dist.	16555 Aug 27 17:20	17°♊06'16	1.43179 AU		16556 Aug 08 15:36	0°♊	
				max. Earth dist.	16556 Aug 09 06:55	1°♊00'34	1.44820 AU
superior conj	16555 Sep 03 20:21	28°♊54'11	-1°28'33	superior conj	16556 Aug 14 09:40	9°♊10'51	-1°58'11
minimum elong	16555 Sep 04 03:36	29°♊24'52	1°27'43	minimum elong	16556 Aug 14 17:12	9°♊41'19	1°57'54
	16555 Sep 04 11:53	0°♋			16556 Aug 26 23:27	0°♋	
asc. node	16555 Sep 15 09:15	19°♋03'19		evening rise	16556 Aug 27 21:38	1°♋33'52	
evening rise	16555 Sep 15 13:34	19°♋22'33		asc. node	16556 Sep 01 06:01	8°♋55'41	
	16555 Sep 21 13:47	0°♌		evening max el	16556 Sep 14 11:33	28°♋16'21	18°04'15
evening max el	16555 Oct 01 20:40	14°♌52'38	18°02'33		16556 Sep 16 11:58	0°♌	
retrograde	16555 Oct 08 14:49	18°♌21'33		retrograde	16556 Sep 20 20:54	1°♌36'53	
evening set	16555 Oct 10 22:36	17°♌56'51		evening set	16556 Sep 23 13:04	1°♌00'00	
inferior conj	16555 Oct 17 20:20	12°♌57'49	-0°00'05		16556 Sep 25 06:09	30°♌♋	
minimum elong	16555 Oct 17 20:20	12°♌57'49	0°00'16	inferior conj	16556 Sep 29 20:10	25°♋42'43	1°10'06
transit middle	16555 Oct 17 20:20	12°♌57'49	0°00'16	minimum elong	16556 Sep 29 21:58	25°♋37'53	1°09'40
transit begin	16555 Oct 17 17:03	13°♌05'35		min. Earth dist.	16556 Oct 02 13:20	22°♋48'40	0.62993 AU
transit end	16555 Oct 17 23:37	12°♌50'01		desc. node	16556 Oct 03 17:28	21°♋38'30	
desc. node	16555 Oct 17 20:13	12°♌58'04		morning rise	16556 Oct 06 04:39	19°♋31'47	
min. Earth dist.	16555 Oct 20 23:17	10°♌01'12	0.60721 AU	direct	16556 Oct 12 20:48	17°♋03'57	
morning rise	16555 Oct 24 14:59	7°♌07'49		morning max el	16556 Oct 26 20:14	25°♋01'28	27°51'57
direct	16555 Oct 31 07:01	4°♌56'24			16556 Oct 31 09:46	0°♌	
morning max el	16555 Nov 14 12:16	12°♌47'49	27°56'34		16556 Nov 20 16:37	0°♌	
	16555 Nov 28 05:18	0°♍		asc. node	16556 Nov 28 06:36	14°♍08'02	
asc. node	16555 Dec 12 09:35	24°♍17'24		morning set	16556 Nov 30 07:43	18°♍13'48	
	16555 Dec 15 06:39	0°♎		max. Earth dist.	16556 Dec 05 09:26	28°♍51'05	1.31878 AU
morning set	16555 Dec 17 11:04	4°♎30'11			16556 Dec 05 22:13	0°♎	
max. Earth dist.	16555 Dec 23 07:50	17°♎11'49	1.31134 AU				
superior conj	16555 Dec 24 14:47	20°♎03'55	1°31'07	superior conj	16556 Dec 07 23:05	4°♎26'06	1°18'42
minimum elong	16555 Dec 24 13:16	19°♎55'28	1°31'36	minimum elong	16556 Dec 07 20:53	4°♎14'07	1°19'02
	16555 Dec 29 01:49	0°♏		evening rise	16556 Dec 14 17:51	19°♎19'12	
evening rise	16555 Dec 31 07:19	4°♏52'45			16556 Dec 19 20:45	0°♏	
	16556 Jan 13 08:15	0°♐		desc. node	16556 Dec 30 16:05	18°♏42'22	
desc. node	16556 Jan 13 19:13	0°♐44'57		evening max el	16557 Jan 08 01:12	28°♏49'26	23°57'55
evening max el	16556 Jan 27 14:07	18°♐40'23	25°35'12		16557 Jan 09 07:57	0°♐	
retrograde	16556 Feb 10 12:05	25°♐40'43		retrograde	16557 Jan 21 13:29	5°♐31'33	
evening set	16556 Feb 16 08:08	24°♐22'45		evening set	16557 Jan 26 09:46	4°♐40'40	
min. Earth dist.	16556 Feb 21 03:00	21°♐42'00	0.56887 AU	min. Earth dist.	16557 Feb 01 12:46	1°♐41'25	0.55284 AU
inferior conj	16556 Feb 23 22:41	19°♐47'50	-4°18'54	inferior conj	16557 Feb 03 09:21	0°♐35'05	-5°32'57
minimum elong	16556 Feb 24 08:00	19°♐32'05	4°15'55	minimum elong	16557 Feb 03 17:07	0°♐23'30	5°31'17
morning rise	16556 Mar 03 10:47	15°♐32'50			16557 Feb 04 09:01	30°♐♑	
direct	16556 Mar 05 10:42	15°♐20'48		morning rise	16557 Feb 12 02:09	26°♑38'37	
asc. node	16556 Mar 09 07:37	16°♐08'48		direct	16557 Feb 14 12:27	26°♑23'41	
morning max el	16556 Mar 14 12:19	19°♐47'30	19°00'11		16557 Feb 23 09:43	0°♐	
	16556 Mar 22 03:30	0°♑		asc. node	16557 Feb 24 04:55	0°♐40'54	
morning set	16556 Mar 30 23:14	16°♑20'34		morning max el	16557 Feb 25 03:15	1°♐32'53	20°08'09
	16556 Apr 06 22:19	0°♒			16557 Mar 14 18:02	0°♑	
				morning set	16557 Mar 15 04:48	0°♑54'48	
superior conj	16556 Apr 08 11:36	2°♒58'50	0°19'56	superior conj	16557 Mar 22 22:21	16°♑41'01	0°48'04
minimum elong	16556 Apr 08 12:51	3°♒04'45	0°19'27	minimum elong	16557 Mar 23 00:41	16°♑52'43	0°47'34
desc. node	16556 Apr 10 20:09	7°♒25'35		desc. node	16557 Mar 28 16:53	27°♑55'43	
max. Earth dist.	16556 Apr 15 11:25	15°♒52'52	1.39041 AU	max. Earth dist.	16557 Mar 28 18:17	28°♑02'17	1.36763 AU
evening rise	16556 Apr 19 06:54	22°♒32'13			16557 Mar 29 19:23	0°♒	
	16556 Apr 23 17:56	0°♓		evening rise	16557 Apr 01 11:58	4°♒56'13	
	16556 May 14 01:11	0°☊			16557 Apr 16 16:26	0°♓	
evening max el	16556 May 24 09:49	12°☊07'42	24°24'48	evening max el	16557 May 06 23:20	26°♓01'57	25°40'15
retrograde	16556 Jun 04 21:06	18°☊49'56			16557 May 11 13:04	0°☊	
asc. node	16556 Jun 05 05:41	18°☊49'24		retrograde	16557 May 19 09:47	3°☊12'38	
evening set	16556 Jun 10 10:48	16°☊27'56		asc. node	16557 May 23 02:44	2°☊17'13	
min. Earth dist.	16556 Jun 14 23:44	11°☊14'53	0.68699 AU	evening set	16557 May 25 10:31	0°☊42'24	
inferior conj	16556 Jun 15 22:21	9°☊58'49	2°41'37		16557 May 26 05:24	30°♒♓	
minimum elong	16556 Jun 15 20:32	10°☊04'55	2°40'40				

min. Earth dist.	16557 May 29 16:06	26° Π 06'17	0.67776 AU	asc. node	16558 May 09 23:49	13° Π 58'53	
inferior conj	16557 May 31 03:55	24° Π 11'58	2°12'19	min. Earth dist.	16558 May 13 03:04	10° Π 41'32	0.66397 AU
minimum elong	16557 May 31 01:44	24° Π 18'57	2°11'09	inferior conj	16558 May 15 04:02	8° Π 16'09	1°31'01
morning rise	16557 Jun 05 17:29	18° Π 22'05		minimum elong	16558 May 15 02:03	8° Π 22'06	1°29'49
direct	16557 Jun 09 04:16	17° Π 13'58		morning rise	16558 May 21 01:58	2° Π 38'21	
morning max el	16557 Jun 15 22:53	20° Π 53'22	18°55'54	direct	16558 May 24 02:36	1° Π 47'35	
	16557 Jun 23 08:47	0° \mathfrak{E}		morning max el	16558 May 30 11:35	5° Π 08'14	18°15'31
desc. node	16557 Jun 24 16:58	1° \mathfrak{E} 54'23		desc. node	16558 Jun 11 14:01	21° Π 38'40	
greatest brilliancy	16557 Jun 29 05:54	8° \mathfrak{E} 37'19	-0.7m		16558 Jun 16 20:32	0° \mathfrak{E}	
morning set	16557 Jul 08 21:18	23° \mathfrak{E} 25'34		morning set	16558 Jun 19 03:35	3° \mathfrak{E} 39'37	
	16557 Jul 13 03:09	0° Ω					
max. Earth dist.	16557 Jul 23 01:21	15° Ω 26'07	1.45796 AU	superior conj	16558 Jul 04 11:52	27° \mathfrak{E} 53'00	-2°09'18
				minimum elong	16558 Jul 04 06:36	27° \mathfrak{E} 32'28	2°09'39
superior conj	16557 Jul 25 02:40	18° Ω 39'03	-2°13'34		16558 Jul 05 20:26	0° Ω	
minimum elong	16557 Jul 25 05:05	18° Ω 48'27	2°13'58	max. Earth dist.	16558 Jul 05 21:48	0° Ω 05'20	1.46027 AU
	16557 Aug 01 07:19	0° \mathfrak{M}		evening rise	16558 Jul 20 13:49	22° Ω 54'00	
evening rise	16557 Aug 09 06:13	12° \mathfrak{M} 45'00			16558 Jul 25 03:30	0° \mathfrak{M}	
asc. node	16557 Aug 19 02:45	28° \mathfrak{M} 31'59		greatest brilliancy	16558 Jul 31 02:29	9° \mathfrak{M} 09'28	-0.8m
	16557 Aug 20 01:32	0° \mathfrak{L}		asc. node	16558 Aug 05 23:29	17° \mathfrak{M} 46'01	
evening max el	16557 Aug 29 01:50	11° \mathfrak{L} 57'05	18°23'57	evening max el	16558 Aug 12 12:43	25° \mathfrak{M} 47'21	19°00'47
retrograde	16557 Sep 04 11:49	15° \mathfrak{L} 22'45		retrograde	16558 Aug 19 07:57	29° \mathfrak{M} 31'00	
evening set	16557 Sep 07 12:58	14° \mathfrak{L} 30'54		evening set	16558 Aug 22 18:41	28° \mathfrak{M} 22'19	
inferior conj	16557 Sep 13 08:49	8° \mathfrak{L} 57'52	2°01'42	inferior conj	16558 Aug 28 06:42	22° \mathfrak{M} 35'38	2°36'58
minimum elong	16557 Sep 13 11:07	8° \mathfrak{L} 51'01	2°01'06	minimum elong	16558 Aug 28 08:42	22° \mathfrak{M} 29'13	2°36'26
min. Earth dist.	16557 Sep 15 13:05	6° \mathfrak{L} 23'14	0.65042 AU	min. Earth dist.	16558 Aug 29 21:09	20° \mathfrak{M} 32'40	0.66747 AU
morning rise	16557 Sep 19 07:52	2° \mathfrak{L} 35'06		morning rise	16558 Sep 02 21:54	16° \mathfrak{M} 08'26	
desc. node	16557 Sep 20 14:44	1° \mathfrak{L} 38'33		desc. node	16558 Sep 07 12:01	13° \mathfrak{M} 41'53	
	16557 Sep 25 07:44	30° \mathfrak{R} \mathfrak{M}		direct	16558 Sep 09 00:38	13° \mathfrak{M} 32'45	
direct	16557 Sep 25 19:01	29° \mathfrak{M} 59'14		morning max el	16558 Sep 21 18:55	21° \mathfrak{M} 07'55	26°08'23
	16557 Sep 26 06:24	0° \mathfrak{L}			16558 Sep 29 11:56	0° \mathfrak{L}	
morning max el	16557 Oct 09 07:15	7° \mathfrak{L} 52'26	27°13'15		16558 Oct 19 16:30	0° \mathfrak{M}	
	16557 Oct 26 12:15	0° \mathfrak{M}		morning set	16558 Oct 27 16:57	14° \mathfrak{M} 10'43	
	16557 Nov 13 00:13	0° \mathfrak{X}		max. Earth dist.	16558 Oct 31 10:50	21° \mathfrak{M} 16'54	1.35024 AU
morning set	16557 Nov 13 18:48	1° \mathfrak{X} 30'02		asc. node	16558 Nov 02 00:23	24° \mathfrak{M} 20'30	
asc. node	16557 Nov 15 03:32	4° \mathfrak{X} 10'52			16558 Nov 04 20:14	0° \mathfrak{X}	
max. Earth dist.	16557 Nov 18 03:02	10° \mathfrak{X} 11'44	1.33188 AU	superior conj	16558 Nov 05 23:07	2° \mathfrak{X} 17'01	0°35'09
				minimum elong	16558 Nov 05 21:17	2° \mathfrak{X} 07'37	0°35'19
superior conj	16557 Nov 22 02:43	18° \mathfrak{X} 32'51	1°00'02	evening rise	16558 Nov 13 12:53	18° \mathfrak{X} 03'48	
minimum elong	16557 Nov 22 00:21	18° \mathfrak{X} 20'12	1°00'14		16558 Nov 19 11:23	0° \mathfrak{Z}	
	16557 Nov 27 10:27	0° \mathfrak{Z}		evening max el	16558 Dec 02 06:42	19° \mathfrak{Z} 02'22	20°41'26
evening rise	16557 Nov 29 04:23	3° \mathfrak{Z} 44'48		desc. node	16558 Dec 04 10:01	20° \mathfrak{Z} 57'47	
	16557 Dec 13 08:06	0° \mathfrak{A}		retrograde	16558 Dec 13 13:03	24° \mathfrak{Z} 37'38	
desc. node	16557 Dec 17 13:01	5° \mathfrak{A} 34'08		evening set	16558 Dec 16 00:29	24° \mathfrak{Z} 22'39	
evening max el	16557 Dec 20 11:26	8° \mathfrak{A} 44'06	22°14'18	inferior conj	16558 Dec 24 19:01	20° \mathfrak{Z} 30'14	-5°30'50
retrograde	16558 Jan 02 03:09	14° \mathfrak{A} 59'28		minimum elong	16558 Dec 24 10:37	20° \mathfrak{Z} 42'22	5°28'43
evening set	16558 Jan 05 17:07	14° \mathfrak{A} 31'07		min. Earth dist.	16558 Dec 25 23:42	19° \mathfrak{Z} 48'50	0.54520 AU
inferior conj	16558 Jan 14 04:00	10° \mathfrak{A} 39'54	-6°02'32	morning rise	16559 Jan 01 20:35	16° \mathfrak{Z} 34'08	
minimum elong	16558 Jan 14 03:46	10° \mathfrak{A} 40'13	6°02'03	direct	16559 Jan 06 06:46	15° \mathfrak{Z} 51'58	
min. Earth dist.	16558 Jan 13 18:21	10° \mathfrak{A} 53'24	0.54438 AU	morning max el	16559 Jan 19 14:50	22° \mathfrak{Z} 24'19	23°26'01
morning rise	16558 Jan 22 15:22	6° \mathfrak{A} 52'32			16559 Jan 26 04:38	0° \mathfrak{A}	
direct	16558 Jan 25 23:02	6° \mathfrak{A} 27'58		asc. node	16559 Jan 28 23:24	3° \mathfrak{A} 59'06	
morning max el	16558 Feb 07 03:07	12° \mathfrak{A} 21'21	21°38'53		16559 Feb 11 22:29	0° \mathfrak{H}	
asc. node	16558 Feb 11 02:10	16° \mathfrak{A} 44'11		morning set	16559 Feb 12 02:15	0° \mathfrak{H} 20'05	
	16558 Feb 19 17:02	0° \mathfrak{H}					
morning set	16558 Feb 27 14:33	15° \mathfrak{H} 37'03		superior conj	16559 Feb 18 23:09	15° \mathfrak{H} 13'57	1°25'36
	16558 Mar 06 09:49	0° \mathfrak{Y}		minimum elong	16559 Feb 19 01:06	15° \mathfrak{H} 24'33	1°25'36
superior conj	16558 Mar 06 19:14	0° \mathfrak{Y} 49'14	1°10'00	max. Earth dist.	16559 Feb 21 23:49	21° \mathfrak{H} 42'02	1.33022 AU
minimum elong	16558 Mar 06 21:43	1° \mathfrak{Y} 02'08	1°09'41		16559 Feb 26 00:31	0° \mathfrak{Y}	
max. Earth dist.	16558 Mar 11 05:29	9° \mathfrak{Y} 53'13	1.34702 AU	evening rise	16559 Feb 26 18:45	1° \mathfrak{Y} 31'07	
evening rise	16558 Mar 15 09:05	17° \mathfrak{Y} 59'01		desc. node	16559 Mar 02 10:22	8° \mathfrak{Y} 35'15	
desc. node	16558 Mar 15 13:38	18° \mathfrak{Y} 20'34			16559 Mar 14 22:36	0° \mathfrak{B}	
	16558 Mar 21 23:47	0° \mathfrak{B}		evening max el	16559 Apr 02 02:12	23° \mathfrak{B} 15'19	27°23'31
	16558 Apr 10 21:39	0° Π			16559 Apr 11 15:45	0° Π	
evening max el	16558 Apr 19 13:01	9° Π 47'49	26°42'17	retrograde	16559 Apr 15 18:26	0° Π 49'06	
retrograde	16558 May 02 17:12	17° Π 15'34			16559 Apr 19 15:26	30° \mathfrak{R} \mathfrak{B}	
evening set	16558 May 09 03:20	14° Π 42'38		evening set	16559 Apr 22 11:07	28° \mathfrak{B} 20'20	

min. Earth dist.	16559 Apr 26 06:47	24°♄50'45	0.64611 AU		16560 Feb 18 01:35	0°♄	
asc. node	16559 Apr 26 20:59	24°♄13'04			16560 Mar 08 19:28	0°♄	
inferior conj	16559 Apr 28 20:09	22°♄04'48	0°36'21	evening max el	16560 Mar 14 13:23	6°♄13'09	27°36'48
minimum elong	16559 Apr 28 19:09	22°♄07'31	0°35'32	retrograde	16560 Mar 28 12:13	13°♄43'18	
morning rise	16559 May 05 05:17	16°♄40'51		evening set	16560 Apr 04 07:21	11°♄26'21	
direct	16559 May 07 20:40	16°♄04'45		min. Earth dist.	16560 Apr 08 01:34	8°♄22'57	0.62520 AU
morning max el	16559 May 14 04:10	19°♄19'19	17°52'15	inferior conj	16560 Apr 11 01:09	5°♄30'10	-0°32'40
	16559 May 22 06:22	0°♄		minimum elong	16560 Apr 11 02:15	5°♄27'30	0°32'32
desc. node	16559 May 29 11:01	11°♄42'35		asc. node	16560 Apr 12 18:13	3°♄53'07	
morning set	16559 May 31 13:08	15°♄11'21		morning rise	16560 Apr 18 00:06	0°♄22'26	
	16559 Jun 09 12:43	0°♄			16560 Apr 19 14:38	30°♄	
				direct	16560 Apr 20 07:33	29°♄57'39	
superior conj	16559 Jun 14 06:13	7°♄36'47	-1°46'40		16560 Apr 21 00:26	0°♄	
minimum elong	16559 Jun 13 21:41	7°♄02'45	1°46'30	morning max el	16560 Apr 26 21:45	3°♄17'46	17°46'30
max. Earth dist.	16559 Jun 18 17:37	14°♄41'57	1.45504 AU	morning set	16560 May 12 22:53	27°♄50'56	
	16559 Jun 28 14:20	0°♄			16560 May 14 04:25	0°♄	
evening rise	16559 Jun 30 03:32	2°♄22'23		desc. node	16560 May 15 07:57	2°♄00'03	
greatest brilliancy	16559 Jul 14 19:40	24°♄21'37	-0.6m				
	16559 Jul 18 19:27	0°♄		superior conj	16560 May 24 21:06	18°♄17'41	-1°12'38
asc. node	16559 Jul 23 20:16	6°♄30'11		minimum elong	16560 May 24 14:28	17°♄50'07	1°12'19
evening max el	16559 Jul 26 18:19	9°♄42'09	19°53'34	max. Earth dist.	16560 May 31 10:54	29°♄01'47	1.44295 AU
retrograde	16559 Aug 03 06:34	13°♄55'46			16560 Jun 01 01:27	0°♄	
evening set	16559 Aug 07 03:35	12°♄29'13		evening rise	16560 Jun 08 15:07	11°♄52'24	
inferior conj	16559 Aug 12 10:55	6°♄30'23	2°58'15		16560 Jun 20 16:45	0°♄	
minimum elong	16559 Aug 12 12:11	6°♄26'08	2°57'48	evening max el	16560 Jul 08 17:53	23°♄37'38	21°00'08
min. Earth dist.	16559 Aug 13 11:34	5°♄07'17	0.68033 AU	asc. node	16560 Jul 09 17:07	24°♄33'29	
morning rise	16559 Aug 17 20:19	0°♄04'19		retrograde	16560 Jul 17 05:33	28°♄30'42	
	16559 Aug 17 22:16	30°♄		evening set	16560 Jul 21 13:34	26°♄46'15	
direct	16559 Aug 23 12:31	27°♄36'06		inferior conj	16560 Jul 26 19:02	20°♄36'31	3°07'25
desc. node	16559 Aug 25 09:20	27°♄50'04		minimum elong	16560 Jul 26 19:22	20°♄35'21	3°06'58
	16559 Aug 29 21:27	0°♄		min. Earth dist.	16560 Jul 27 06:10	19°♄57'53	0.68853 AU
morning max el	16559 Sep 04 06:01	4°♄37'27	24°46'51	morning rise	16560 Aug 01 00:54	14°♄15'15	
	16559 Sep 23 19:39	0°♄		direct	16560 Aug 06 05:21	12°♄00'27	
morning set	16559 Oct 09 22:20	26°♄07'34		desc. node	16560 Aug 11 06:38	13°♄42'25	
	16559 Oct 12 02:37	0°♄		morning max el	16560 Aug 16 17:17	18°♄15'07	23°18'10
max. Earth dist.	16559 Oct 13 10:58	2°♄26'32	1.37265 AU		16560 Aug 26 13:46	0°♄	
asc. node	16559 Oct 19 21:13	14°♄33'23			16560 Sep 15 21:34	0°♄	
				morning set	16560 Sep 20 06:45	7°♄10'17	
superior conj	16559 Oct 20 09:12	15°♄31'45	0°04'29	max. Earth dist.	16560 Sep 24 09:54	14°♄10'51	1.39690 AU
minimum elong	16559 Oct 20 08:53	15°♄30'14	0°04'49				
behind sun begin	16559 Oct 20 02:32	14°♄59'16		superior conj	16560 Oct 02 05:05	28°♄07'30	-0°30'48
behind sun end	16559 Oct 20 15:14	16°♄01'17		minimum elong	16560 Oct 02 07:23	28°♄18'11	0°30'09
	16559 Oct 27 15:08	0°♄			16560 Oct 03 05:19	0°♄	
evening rise	16559 Oct 28 17:11	2°♄11'15		asc. node	16560 Oct 05 18:00	4°♄45'21	
evening max el	16559 Nov 14 16:31	0°♄08'40	19°28'51	evening rise	16560 Oct 11 14:24	15°♄59'38	
	16559 Nov 14 13:05	0°♄			16560 Oct 19 02:43	0°♄	
desc. node	16559 Nov 21 07:04	4°♄29'55		evening max el	16560 Oct 27 15:38	12°♄04'36	18°38'41
retrograde	16559 Nov 24 07:30	4°♄57'41		retrograde	16560 Nov 04 19:59	16°♄13'12	
evening set	16559 Nov 26 06:28	4°♄46'39		evening set	16560 Nov 06 18:21	16°♄00'08	
inferior conj	16559 Dec 04 21:00	0°♄40'56	-4°09'03	desc. node	16560 Nov 07 04:12	15°♄54'06	
minimum elong	16559 Dec 04 11:24	0°♄56'24	4°05'22	inferior conj	16560 Nov 14 18:57	11°♄33'49	-2°26'49
	16559 Dec 05 22:17	30°♄		minimum elong	16560 Nov 14 13:02	11°♄44'53	2°23'56
min. Earth dist.	16559 Dec 07 07:59	29°♄06'04	0.55524 AU	min. Earth dist.	16560 Nov 17 21:52	9°♄14'05	0.57248 AU
morning rise	16559 Dec 12 14:22	26°♄18'16		morning rise	16560 Nov 22 04:33	6°♄35'12	
direct	16559 Dec 18 00:19	25°♄12'14		direct	16560 Nov 28 07:38	5°♄02'41	
	16559 Dec 29 10:11	0°♄		morning max el	16560 Dec 12 12:39	12°♄27'25	26°44'43
morning max el	16559 Dec 31 23:09	2°♄14'16	25°14'24		16560 Dec 26 06:04	0°♄	
asc. node	16560 Jan 15 20:38	22°♄08'59		asc. node	16561 Jan 01 17:48	10°♄59'43	
	16560 Jan 20 05:31	0°♄		morning set	16561 Jan 11 00:11	29°♄29'37	
morning set	16560 Jan 27 14:03	14°♄59'10			16561 Jan 11 05:50	0°♄	
superior conj	16560 Feb 03 07:36	29°♄48'31	1°34'58	superior conj	16561 Jan 17 18:29	14°♄26'56	1°38'14
minimum elong	16560 Feb 03 08:41	29°♄54'29	1°35'16	minimum elong	16561 Jan 17 18:31	14°♄27'09	1°38'43
	16560 Feb 03 09:41	0°♄		max. Earth dist.	16561 Jan 18 07:50	15°♄41'37	1.31124 AU
max. Earth dist.	16560 Feb 05 01:22	3°♄38'25	1.31817 AU	evening rise	16561 Jan 24 16:10	29°♄35'49	
evening rise	16560 Feb 10 13:58	15°♄25'30			16561 Jan 24 20:44	0°♄	
desc. node	16560 Feb 17 07:06	28°♄34'57		desc. node	16561 Feb 03 03:52	18°♄13'34	

	16561 Feb 10 05:08	0°♿			16562 Feb 06 22:35	0°♿		
evening max el	16561 Feb 24 20:02	18°♿29'02	27°16'38	evening max el	16562 Feb 06 19:12	29°♿51'59	26°21'13	
retrograde	16561 Mar 10 20:58	25°♿49'30		retrograde	16562 Feb 20 18:59	7°♿00'27		
evening set	16561 Mar 17 13:11	23°♿51'17		evening set	16562 Feb 27 01:07	5°♿26'29		
min. Earth dist.	16561 Mar 21 10:14	21°♿06'26	0.60266 AU	min. Earth dist.	16562 Mar 03 08:29	2°♿48'48	0.58047 AU	
inferior conj	16561 Mar 24 15:31	18°♿23'07	-1°55'23	inferior conj	16562 Mar 06 11:17	0°♿32'03	-3°26'58	
minimum elong	16561 Mar 24 19:50	18°♿13'56	1°53'48	minimum elong	16562 Mar 06 19:14	0°♿17'28	3°24'06	
asc. node	16561 Mar 30 15:30	14°♿09'52			16562 Mar 07 04:50	30°♿♿		
morning rise	16561 Apr 01 06:00	13°♿34'30		morning rise	16562 Mar 14 16:46	26°♿05'06		
direct	16561 Apr 03 07:24	13°♿17'31		direct	16562 Mar 16 15:33	25°♿52'21		
morning max el	16561 Apr 10 13:05	16°♿54'25	17°59'10	asc. node	16562 Mar 17 12:48	25°♿55'04		
	16561 Apr 19 19:21	0°♿			16562 Mar 24 23:22	0°♿		
morning set	16561 Apr 26 03:00	11°♿21'16		morning max el	16562 Mar 24 22:17	29°♿57'21	18°31'45	
desc. node	16561 May 02 04:49	22°♿26'33		morning set	16562 Apr 09 20:05	25°♿25'23		
					16562 Apr 12 05:11	0°♿		
superior conj	16561 May 06 11:23	0°♿02'24	-0°34'54	superior conj	16562 Apr 18 22:19	12°♿42'10	0°01'10	
minimum elong	16561 May 06 08:24	29°♿49'20	0°34'54	minimum elong	16562 Apr 18 22:23	12°♿42'28	0°00'48	
	16561 May 06 10:50	0°♿		behind sun begin	16562 Apr 18 15:17	12°♿09'38		
max. Earth dist.	16561 May 14 00:19	12°♿52'26	1.42520 AU	behind sun end	16562 Apr 19 05:28	13°♿15'13		
evening rise	16561 May 19 15:58	22°♿02'11		desc. node	16562 Apr 19 01:37	12°♿57'26		
	16561 May 24 18:18	0°♿		max. Earth dist.	16562 Apr 26 08:57	26°♿01'03	1.40360 AU	
	16561 Jun 14 21:26	0°♿			16562 Apr 28 16:53	0°♿		
evening max el	16561 Jun 21 12:06	7°♿32'53	22°16'45	evening rise	16562 Apr 30 13:15	3°♿05'59		
asc. node	16561 Jun 26 14:02	11°♿42'23			16562 May 18 00:11	0°♿		
retrograde	16561 Jul 01 03:18	13°♿10'32		evening max el	16562 Jun 04 02:42	21°♿27'45	23°38'14	
evening set	16561 Jul 05 22:49	11°♿09'15		asc. node	16562 Jun 13 11:01	27°♿39'34		
inferior conj	16561 Jul 11 04:55	4°♿50'02	3°05'39	retrograde	16562 Jun 14 22:31	27°♿48'51		
minimum elong	16561 Jul 11 04:19	4°♿52'09	3°05'04	evening set	16562 Jun 20 05:41	25°♿33'12		
min. Earth dist.	16561 Jul 11 02:49	4°♿57'25	0.69185 AU	min. Earth dist.	16562 Jun 24 23:27	19°♿58'49	0.69015 AU	
	16561 Jul 14 22:59	30°♿♿		inferior conj	16562 Jun 25 14:39	19°♿06'40	2°53'25	
morning rise	16561 Jul 16 09:40	28°♿35'52		minimum elong	16562 Jun 25 13:13	19°♿11'35	2°52'38	
direct	16561 Jul 21 01:56	26°♿38'23		morning rise	16562 Jun 30 20:44	13°♿00'58		
	16561 Jul 28 02:58	0°♿		direct	16562 Jul 05 01:00	11°♿22'48		
desc. node	16561 Jul 29 03:53	0°♿55'22		morning max el	16562 Jul 13 02:46	15°♿57'53	20°32'17	
morning max el	16561 Jul 30 07:18	2°♿01'28	21°51'01	desc. node	16562 Jul 16 01:04	19°♿08'15		
	16561 Aug 20 10:48	0°♿			16562 Jul 24 08:41	0°♿		
morning set	16561 Aug 31 15:37	17°♿13'45		morning set	16562 Aug 11 03:52	26°♿26'51		
max. Earth dist.	16561 Sep 06 13:33	26°♿49'07	1.42009 AU		16562 Aug 13 10:51	0°♿		
	16561 Sep 08 11:25	0°♿		max. Earth dist.	16562 Aug 19 23:31	10°♿18'30	1.43946 AU	
superior conj	16561 Sep 14 06:22	9°♿54'18	-1°08'00	superior conj	16562 Aug 26 09:09	20°♿44'02	-1°42'22	
minimum elong	16561 Sep 14 11:59	10°♿18'52	1°07'07	minimum elong	16562 Aug 26 17:04	21°♿16'51	1°41'42	
asc. node	16561 Sep 22 14:45	24°♿52'55			16562 Aug 31 21:29	0°♿		
evening rise	16561 Sep 25 00:58	29°♿20'12		evening rise	16562 Sep 07 20:17	12°♿01'10		
	16561 Sep 25 09:38	0°♿		asc. node	16562 Sep 09 11:30	14°♿52'23		
evening max el	16561 Oct 11 00:07	24°♿42'22	18°09'55		16562 Sep 18 11:54	0°♿		
retrograde	16561 Oct 18 03:46	28°♿22'14		evening max el	16562 Sep 24 13:43	7°♿52'18	18°00'59	
evening set	16561 Oct 20 07:19	28°♿02'54		retrograde	16562 Oct 01 03:07	11°♿16'26		
desc. node	16561 Oct 25 01:23	25°♿22'50		evening set	16562 Oct 03 14:14	10°♿47'04		
inferior conj	16561 Oct 27 14:36	23°♿14'58	-0°49'10	inferior conj	16562 Oct 10 05:22	5°♿39'48	0°31'59	
minimum elong	16561 Oct 27 12:51	23°♿18'49	0°48'00	minimum elong	16562 Oct 10 06:19	5°♿37'25	0°31'56	
min. Earth dist.	16561 Oct 30 20:11	20°♿26'17	0.59403 AU	desc. node	16562 Oct 11 22:36	3°♿55'47		
morning rise	16561 Nov 03 15:03	17°♿41'22		min. Earth dist.	16562 Oct 13 04:39	2°♿41'55	0.61697 AU	
direct	16561 Nov 10 04:05	15°♿43'14			16562 Oct 16 08:04	30°♿♿		
morning max el	16561 Nov 24 10:39	23°♿26'22	27°41'43	morning rise	16562 Oct 16 19:37	29°♿39'23		
	16561 Nov 30 08:34	0°♿		direct	16562 Oct 23 12:12	27°♿20'09		
	16561 Dec 19 10:40	0°♿			16562 Oct 31 06:55	0°♿		
asc. node	16561 Dec 19 14:54	0°♿20'10		morning max el	16562 Nov 06 15:58	5°♿15'48	27°59'15	
morning set	16561 Dec 26 06:45	13°♿46'08			16562 Nov 25 06:40	0°♿		
max. Earth dist.	16562 Jan 01 15:29	27°♿42'49	1.30972 AU	asc. node	16562 Dec 06 11:56	20°♿02'12		
superior conj	16562 Jan 02 05:50	29°♿03'11	1°35'28	morning set	16562 Dec 10 07:45	27°♿44'12		
minimum elong	16562 Jan 02 04:51	28°♿57'38	1°35'59		16562 Dec 11 09:49	0°♿		
	16562 Jan 02 15:58	0°♿		max. Earth dist.	16562 Dec 15 20:25	9°♿33'08	1.31381 AU	
evening rise	16562 Jan 08 23:04	13°♿55'59						
	16562 Jan 16 21:42	0°♿		superior conj	16562 Dec 17 15:50	13°♿32'37	1°26'38	
desc. node	16562 Jan 21 00:40	7°♿22'17		minimum elong	16562 Dec 17 13:59	13°♿22'24	1°27'02	

evening rise	16562 Dec 24 08:48	28° ☿ 21'50		16563 Dec 02 22:29	0° ☿	
	16562 Dec 25 03:01	0° ☿		evening rise	16563 Dec 08 19:32	12° ☿ 48'27
desc. node	16563 Jan 07 21:29	25° ☿ 50'15			16563 Dec 17 08:41	0° ☿
	16563 Jan 10 16:34	0° ☿		desc. node	16563 Dec 25 18:22	13° ☿ 22'22
evening max el	16563 Jan 19 09:50	10° ☿ 23'26	24°55'40	evening max el	16563 Dec 31 19:24	20° ☿ 22'05 23°13'28
retrograde	16563 Feb 02 04:48	17° ☿ 17'28		retrograde	16564 Jan 14 01:02	26° ☿ 54'31
evening set	16563 Feb 07 15:51	16° ☿ 11'00		evening set	16564 Jan 18 08:26	26° ☿ 14'21
min. Earth dist.	16563 Feb 12 22:06	13° ☿ 24'43	0.56130 AU	min. Earth dist.	16564 Jan 25 06:01	23° ☿ 00'50 0.54818 AU
inferior conj	16563 Feb 15 09:53	11° ☿ 49'32	-4°53'59	inferior conj	16564 Jan 26 12:40	22° ☿ 16'45 -5°52'25
minimum elong	16563 Feb 15 19:20	11° ☿ 34'29	4°51'21	minimum elong	16564 Jan 26 17:41	22° ☿ 09'32 5°51'31
morning rise	16563 Feb 24 01:20	7° ☿ 43'30		morning rise	16564 Feb 04 04:13	18° ☿ 25'26
direct	16563 Feb 26 04:09	7° ☿ 31'01		direct	16564 Feb 06 22:09	18° ☿ 07'28
asc. node	16563 Mar 04 10:04	9° ☿ 27'48		morning max el	16564 Feb 18 05:48	23° ☿ 36'23 20°44'06
morning max el	16563 Mar 07 21:09	12° ☿ 14'53	19°26'15	asc. node	16564 Feb 19 07:19	24° ☿ 40'55
	16563 Mar 19 20:45	0° ☿			16564 Feb 23 15:22	0° ☿
morning set	16563 Mar 24 22:00	9° ☿ 51'15		morning set	16564 Mar 08 05:38	24° ☿ 29'42
					16564 Mar 10 21:10	0° ☿
superior conj	16563 Apr 02 01:36	26° ☿ 05'12	0°32'36	superior conj	16564 Mar 15 17:05	9° ☿ 59'45 0°58'08
minimum elong	16563 Apr 02 03:27	26° ☿ 14'11	0°32'04	minimum elong	16564 Mar 15 19:34	10° ☿ 12'29 0°57'41
	16563 Apr 04 02:15	0° ☿		max. Earth dist.	16564 Mar 20 22:37	20° ☿ 24'41 1.35848 AU
desc. node	16563 Apr 05 22:23	3° ☿ 29'03		desc. node	16564 Mar 22 19:08	23° ☿ 57'45
max. Earth dist.	16563 Apr 08 14:45	8° ☿ 26'49	1.38055 AU	evening rise	16564 Mar 24 19:51	27° ☿ 45'25
evening rise	16563 Apr 12 07:29	15° ☿ 03'12			16564 Mar 26 01:15	0° ☿
	16563 Apr 21 06:34	0° ☿			16564 Apr 13 14:27	0° ☿
	16563 May 12 17:03	0° ☿		evening max el	16564 Apr 29 05:40	19° ☿ 14'49 26°08'50
evening max el	16563 May 17 16:02	5° ☿ 22'38	24°58'04	retrograde	16564 May 12 00:43	26° ☿ 34'40
retrograde	16563 May 29 14:01	12° ☿ 19'12		asc. node	16564 May 17 05:04	24° ☿ 49'21
asc. node	16563 May 31 08:01	12° ☿ 06'29		evening set	16564 May 18 05:32	24° ☿ 02'45
evening set	16563 Jun 04 08:30	9° ☿ 52'56		min. Earth dist.	16564 May 22 08:30	19° ☿ 41'32 0.67234 AU
min. Earth dist.	16563 Jun 08 18:01	4° ☿ 55'45	0.68357 AU	inferior conj	16564 May 24 01:52	17° ☿ 33'02 1°56'22
inferior conj	16563 Jun 09 22:18	3° ☿ 22'25	2°30'34	minimum elong	16564 May 23 23:41	17° ☿ 39'50 1°55'10
minimum elong	16563 Jun 09 20:17	3° ☿ 29'06	2°29'32	morning rise	16564 May 29 18:37	11° ☿ 47'52
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morning rise	16563 Jun 15 08:21	27° ☿ 26'19		morning max el	16564 Jun 08 14:33	14° ☿ 17'37 18°36'38
direct	16563 Jun 19 01:12	26° ☿ 07'36		desc. node	16564 Jun 18 19:19	27° ☿ 35'35
morning max el	16563 Jun 26 05:13	0° ☿ 04'10	19°26'36		16564 Jun 20 09:36	0° ☿
	16563 Jun 26 03:31	0° ☿		morning set	16564 Jun 30 00:59	14° ☿ 58'00
desc. node	16563 Jul 02 22:13	8° ☿ 05'28			16564 Jul 09 15:58	0° ☿
greatest brilliancy	16563 Jul 08 21:39	16° ☿ 34'40	-0.7m	max. Earth dist.	16564 Jul 15 10:12	8° ☿ 58'33 1.45983 AU
	16563 Jul 17 19:50	0° ☿		superior conj	16564 Jul 16 00:39	9° ☿ 54'55 -2°14'16
morning set	16563 Jul 21 08:21	5° ☿ 23'24		minimum elong	16564 Jul 15 23:40	9° ☿ 51'04 2°14'45
max. Earth dist.	16563 Aug 02 14:55	24° ☿ 26'09	1.45312 AU		16564 Jul 28 19:58	0° ☿
	16563 Aug 06 03:29	0° ☿		evening rise	16564 Jul 31 16:36	4° ☿ 31'43
superior conj	16563 Aug 06 12:51	0° ☿ 37'12	-2°06'54	greatest brilliancy	16564 Aug 07 22:25	15° ☿ 59'41 -0.9m
minimum elong	16563 Aug 06 18:54	1° ☿ 01'16	2°06'56	asc. node	16564 Aug 13 04:58	24° ☿ 06'37
evening rise	16563 Aug 20 18:51	23° ☿ 47'55			16564 Aug 17 08:25	0° ☿
	16563 Aug 24 12:33	0° ☿		evening max el	16564 Aug 21 17:56	5° ☿ 10'31 18°37'39
asc. node	16563 Aug 27 08:14	4° ☿ 38'39		retrograde	16564 Aug 28 06:47	8° ☿ 42'00
evening max el	16563 Sep 08 04:42	21° ☿ 24'17	18°10'32	evening set	16564 Aug 31 11:58	7° ☿ 43'11
retrograde	16563 Sep 14 13:23	24° ☿ 45'36		inferior conj	16564 Sep 06 04:06	2° ☿ 04'25 2°18'29
evening set	16563 Sep 17 09:12	24° ☿ 02'48		minimum elong	16564 Sep 06 06:20	1° ☿ 57'30 2°17'53
inferior conj	16563 Sep 23 11:07	18° ☿ 38'49	1°34'06		16564 Sep 07 20:35	30° ☿
minimum elong	16563 Sep 23 13:16	18° ☿ 32'48	1°33'33	min. Earth dist.	16564 Sep 08 02:36	29° ☿ 41'52 0.65817 AU
min. Earth dist.	16563 Sep 25 23:08	15° ☿ 50'53	0.63893 AU	morning rise	16564 Sep 11 23:35	25° ☿ 39'10
desc. node	16563 Sep 28 19:52	13° ☿ 01'36		desc. node	16564 Sep 14 17:09	23° ☿ 51'46
morning rise	16563 Sep 29 15:24	12° ☿ 21'38		direct	16564 Sep 18 07:42	23° ☿ 02'09
direct	16563 Oct 06 05:58	9° ☿ 49'01			16564 Sep 30 16:55	0° ☿
morning max el	16563 Oct 20 01:34	17° ☿ 47'09	27°39'12	morning max el	16564 Oct 01 12:51	0° ☿ 49'17 26°48'15
	16563 Oct 30 07:57	0° ☿			16564 Oct 23 08:39	0° ☿
	16563 Nov 18 03:19	0° ☿		morning set	16564 Nov 06 06:42	24° ☿ 19'27
asc. node	16563 Nov 23 08:53	9° ☿ 58'53		asc. node	16564 Nov 09 05:48	0° ☿ 05'17
morning set	16563 Nov 24 00:42	11° ☿ 17'25			16564 Nov 09 04:44	0° ☿
max. Earth dist.	16563 Nov 28 18:45	21° ☿ 03'57	1.32365 AU	max. Earth dist.	16564 Nov 10 07:55	2° ☿ 15'22 1.33912 AU
superior conj	16563 Dec 01 22:25	27° ☿ 49'17	1°11'35	superior conj	16564 Nov 14 23:21	11° ☿ 47'36 0°50'15
minimum elong	16563 Dec 01 20:05	27° ☿ 36'37	1°11'50			

minimum elong	16564 Nov 14 21:06	11° ♄ 35'48	0°50'25	superior conj	16565 Oct 29 15:49	25° ♄ 20'33	0°22'49
evening rise	16564 Nov 22 05:27	27° ♄ 11'55		minimum elong	16565 Oct 29 14:29	25° ♄ 13'54	0°23'02
	16564 Nov 23 13:26	0° ♄			16565 Oct 31 22:58	0° ♄	
desc. node	16564 Dec 11 15:19	29° ♄ 39'48		evening rise	16565 Nov 06 12:29	11° ♄ 27'10	
	16564 Dec 11 23:12	0° ♄			16565 Nov 16 05:45	0° ♄	
evening max el	16564 Dec 12 08:35	0° ♄ 23'24	21°32'44	evening max el	16565 Nov 24 09:51	11° ♄ 00'57	20°07'50
retrograde	16564 Dec 24 11:10	6° ♄ 22'19		desc. node	16565 Nov 28 12:20	14° ♄ 19'29	
evening set	16564 Dec 27 12:42	6° ♄ 00'57		retrograde	16565 Dec 04 23:13	16° ♄ 16'35	
inferior conj	16565 Jan 05 03:59	2° ♄ 11'26	-5°56'35	evening set	16565 Dec 07 03:47	16° ♄ 04'04	
minimum elong	16565 Jan 04 23:41	2° ♄ 17'26	5°55'41	inferior conj	16565 Dec 15 22:07	12° ♄ 06'58	-5°00'40
min. Earth dist.	16565 Jan 05 11:10	2° ♄ 01'23	0.54362 AU	minimum elong	16565 Dec 15 12:18	12° ♄ 21'41	4°57'37
	16565 Jan 09 06:13	30° ♄		min. Earth dist.	16565 Dec 17 17:02	11° ♄ 02'39	0.54844 AU
morning rise	16565 Jan 13 11:09	28° ♄ 22'38		morning rise	16565 Dec 23 20:01	8° ♄ 01'53	
direct	16565 Jan 17 06:20	27° ♄ 51'14		direct	16565 Dec 28 17:06	7° ♄ 10'16	
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morning max el	16565 Jan 29 23:33	4° ♄ 02'18	22°23'04	asc. node	16566 Jan 23 01:51	28° ♄ 57'51	
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morning set	16565 Feb 20 16:28	9° ♄ 13'09			16566 Feb 07 23:29	0° ♄	
superior conj	16565 Feb 27 17:16	24° ♄ 15'54	1°17'22	superior conj	16566 Feb 11 23:26	8° ♄ 46'15	1°30'19
minimum elong	16565 Feb 27 19:35	24° ♄ 28'12	1°17'12	minimum elong	16566 Feb 12 01:03	8° ♄ 55'06	1°30'28
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max. Earth dist.	16565 Mar 03 12:51	2° ♄ 14'01	1.33939 AU	evening rise	16566 Feb 19 12:52	24° ♄ 45'11	
evening rise	16565 Mar 07 22:44	11° ♄ 02'06			16566 Feb 22 04:21	0° ♄	
desc. node	16565 Mar 09 15:51	14° ♄ 19'00		desc. node	16566 Feb 24 12:36	4° ♄ 28'32	
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evening max el	16565 Apr 11 19:33	2° ♄ 55'19	27°02'54	retrograde	16566 Apr 08 03:28	23° ♄ 44'46	
retrograde	16565 Apr 25 05:29	10° ♄ 26'13		evening set	16566 Apr 14 21:58	21° ♄ 20'03	
evening set	16565 May 01 18:46	7° ♄ 54'31		min. Earth dist.	16566 Apr 18 16:38	18° ♄ 02'35	0.63762 AU
asc. node	16565 May 04 02:12	5° ♄ 49'44		asc. node	16566 Apr 20 23:24	15° ♄ 41'34	
min. Earth dist.	16565 May 05 16:40	4° ♄ 07'09	0.65681 AU	inferior conj	16566 Apr 21 10:45	15° ♄ 12'00	0°08'54
inferior conj	16565 May 07 22:57	1° ♄ 31'54	1°09'34	minimum elong	16566 Apr 21 10:30	15° ♄ 12'40	0°08'24
minimum elong	16565 May 07 21:15	1° ♄ 36'46	1°08'28	transit middle	16566 Apr 21 10:30	15° ♄ 12'40	0°08'24
	16565 May 09 07:35	30° ♄		transit begin	16566 Apr 21 07:50	15° ♄ 19'36	
morning rise	16565 May 14 01:16	25° ♄ 59'28		transit end	16566 Apr 21 13:10	15° ♄ 05'45	
direct	16565 May 16 21:55	25° ♄ 15'10		morning rise	16566 Apr 28 01:29	9° ♄ 54'41	
morning max el	16565 May 23 05:10	28° ♄ 31'40	18°03'30	direct	16566 Apr 30 13:27	9° ♄ 23'41	
	16565 May 24 15:02	0° ♄		morning max el	16566 May 06 22:34	12° ♄ 38'48	17°47'38
desc. node	16565 Jun 05 16:21	17° ♄ 29'11			16566 May 19 00:46	0° ♄	
morning set	16565 Jun 10 18:53	25° ♄ 45'32		morning set	16566 May 23 15:21	7° ♄ 48'15	
	16565 Jun 13 09:41	0° ♄		desc. node	16566 May 23 13:21	7° ♄ 39'42	
superior conj	16565 Jun 25 11:43	19° ♄ 16'14	-2°01'36	superior conj	16566 Jun 05 13:55	29° ♄ 22'11	-1°33'08
minimum elong	16565 Jun 25 04:18	18° ♄ 47'04	2°01'44	minimum elong	16566 Jun 05 05:45	28° ♄ 49'06	1°32'49
max. Earth dist.	16565 Jun 28 07:02	23° ♄ 39'54	1.45899 AU		16566 Jun 05 23:15	0° ♄	
	16565 Jul 02 08:39	0° ♄		max. Earth dist.	16566 Jun 11 02:30	8° ♄ 12'59	1.45075 AU
evening rise	16565 Jul 11 15:05	14° ♄ 19'18		evening rise	16566 Jun 21 01:45	23° ♄ 42'57	
	16565 Jul 21 21:29	0° ♄			16566 Jun 25 04:58	0° ♄	
greatest brilliancy	16565 Jul 24 04:33	3° ♄ 25'34	-0.7m		16566 Jul 16 12:04	0° ♄	
asc. node	16565 Jul 31 01:44	13° ♄ 08'59		asc. node	16566 Jul 17 22:33	1° ♄ 37'01	
evening max el	16565 Aug 05 02:49	19° ♄ 03'27	19°21'25	evening max el	16566 Jul 19 05:48	2° ♄ 58'18	20°20'19
retrograde	16565 Aug 12 04:11	22° ♄ 58'04		retrograde	16566 Jul 27 03:16	7° ♄ 27'47	
evening set	16565 Aug 15 19:20	21° ♄ 41'39		evening set	16566 Jul 31 04:56	5° ♄ 53'22	
inferior conj	16565 Aug 21 04:59	15° ♄ 49'40	2°47'34	inferior conj	16566 Aug 05 11:07	29° ♄ 49'29	3°03'32
minimum elong	16565 Aug 21 06:43	15° ♄ 44'00	2°47'04	minimum elong	16566 Aug 05 12:00	29° ♄ 46'27	3°03'06
min. Earth dist.	16565 Aug 22 13:29	14° ♄ 03'07	0.67353 AU		16566 Aug 05 08:03	30° ♄	
morning rise	16565 Aug 26 17:28	9° ♄ 22'40		min. Earth dist.	16566 Aug 06 05:53	28° ♄ 45'16	0.68442 AU
direct	16565 Sep 01 15:58	6° ♄ 49'30		morning rise	16566 Aug 10 18:44	23° ♄ 25'10	
desc. node	16565 Sep 01 14:28	6° ♄ 49'31		direct	16566 Aug 16 05:56	21° ♄ 02'23	
morning max el	16565 Sep 14 00:13	14° ♄ 11'14	25°35'13	desc. node	16566 Aug 19 11:47	21° ♄ 44'30	
	16565 Sep 26 22:22	0° ♄		morning max el	16566 Aug 27 11:22	27° ♄ 44'58	24°09'29
	16565 Oct 16 03:33	0° ♄			16566 Aug 29 14:27	0° ♄	
morning set	16565 Oct 19 22:13	6° ♄ 42'27			16566 Sep 20 13:59	0° ♄	
max. Earth dist.	16565 Oct 23 12:10	13° ♄ 20'19	1.35940 AU	morning set	16566 Oct 01 19:08	18° ♄ 16'58	
asc. node	16565 Oct 27 02:41	20° ♄ 16'55		max. Earth dist.	16566 Oct 05 11:18	24° ♄ 42'29	1.38287 AU




































































































































	16566 Oct 08 09:36	0°♌				16567 Sep 13 09:32	0°♏	
				max. Earth dist.		16567 Sep 17 11:24	6°♏47'32	1.40700 AU
superior conj	16566 Oct 12 20:19	8°♌19'16 -0°10'04			superior conj	16567 Sep 25 08:50	20°♏35'23 -0°46'34	
minimum elong	16566 Oct 12 21:00	8°♌22'29 0°09'36			minimum elong	16567 Sep 25 12:31	20°♏52'04 0°45'48	
behind sun begin	16566 Oct 12 15:22	7°♌55'39				16567 Sep 30 11:41	0°♌	
behind sun end	16566 Oct 13 02:37	8°♌49'22			asc. node	16567 Sep 30 20:16	0°♌40'11	
asc. node	16566 Oct 13 23:29	10°♌29'34			evening rise	16567 Oct 05 07:23	9°♌05'22	
evening rise	16566 Oct 21 14:09	25°♌27'23				16567 Oct 17 07:54	0°♏	
	16566 Oct 23 21:35	0°♏			evening max el	16567 Oct 21 05:12	4°♏43'06 18°23'57	
evening max el	16566 Nov 07 01:34	22°♏28'07 19°04'47			retrograde	16567 Oct 28 21:54	8°♏37'58	
desc. node	16566 Nov 15 09:26	26°♏58'00			evening set	16567 Oct 30 21:53	8°♏22'50	
retrograde	16566 Nov 16 01:05	26°♏59'23			desc. node	16567 Nov 02 06:35	7°♏29'03	
evening set	16566 Nov 17 22:33	26°♏48'08			inferior conj	16567 Nov 07 15:15	3°♏47'33 -1°43'53	
inferior conj	16566 Nov 26 07:56	22°♏33'54 -3°26'26			minimum elong	16567 Nov 07 11:13	3°♏55'38 1°41'44	
minimum elong	16566 Nov 25 23:37	22°♏48'11 3°22'51			min. Earth dist.	16567 Nov 10 20:51	1°♏12'50 0.58126 AU	
min. Earth dist.	16566 Nov 29 03:20	20°♏38'31 0.56175 AU				16567 Nov 12 12:44	30°♌	
morning rise	16566 Dec 03 22:03	17°♏56'13			morning rise	16567 Nov 14 21:05	28°♌33'07	
direct	16566 Dec 09 15:50	16°♏39'21			direct	16567 Nov 21 05:15	26°♌49'03	
morning max el	16566 Dec 23 18:31	23°♏51'57 25°56'14				16567 Nov 30 04:21	0°♏	
	16566 Dec 29 08:15	0°♏			morning max el	16567 Dec 05 11:37	4°♏23'09 27°13'35	
asc. node	16567 Jan 09 23:04	17°♏26'31				16567 Dec 24 05:11	0°♏	
	16567 Jan 16 14:03	0°♏			asc. node	16567 Dec 27 20:13	6°♏30'46	
morning set	16567 Jan 20 15:49	8°♏32'22			morning set	16568 Jan 05 00:39	22°♏57'11	
						16568 Jan 08 06:14	0°♏	
superior conj	16567 Jan 27 09:10	23°♏23'17 1°37'06			superior conj	16568 Jan 11 20:28	8°♏01'19 1°37'49	
minimum elong	16567 Jan 27 09:49	23°♏26'53 1°37'29			minimum elong	16568 Jan 11 20:04	7°♏59'01 1°38'19	
max. Earth dist.	16567 Jan 28 14:50	26°♏07'57 1.31455 AU			max. Earth dist.	16568 Jan 11 22:00	8°♏09'51 1.30987 AU	
	16567 Jan 30 08:58	0°♏			evening rise	16568 Jan 18 15:43	23°♏01'31	
evening rise	16567 Feb 03 11:19	8°♏46'49				16568 Jan 21 23:56	0°♏	
desc. node	16567 Feb 11 09:20	24°♏20'04			desc. node	16568 Jan 29 06:05	13°♏46'43	
	16567 Feb 14 13:43	0°♏				16568 Feb 08 15:07	0°♏	
evening max el	16567 Mar 07 17:33	28°♏52'47 27°32'21			evening max el	16568 Feb 17 21:10	10°♏46'24 26°57'15	
	16567 Mar 08 22:32	0°♏			retrograde	16568 Mar 02 22:27	18°♏02'46	
retrograde	16567 Mar 21 17:37	6°♏19'52			evening set	16568 Mar 09 11:07	16°♏14'20	
evening set	16567 Mar 28 12:27	4°♏09'40			min. Earth dist.	16568 Mar 13 11:19	13°♏33'57 0.59299 AU	
min. Earth dist.	16567 Apr 01 07:01	1°♏15'35 0.61576 AU			inferior conj	16568 Mar 16 16:49	10°♏59'38 -2°33'45	
	16567 Apr 02 16:34	30°♏			minimum elong	16568 Mar 16 22:43	10°♏47'49 2°31'31	
inferior conj	16567 Apr 04 09:57	28°♏24'24 -1°06'14			morning rise	16568 Mar 24 13:59	6°♏20'09	
minimum elong	16567 Apr 04 12:18	28°♏19'02 1°05'31			asc. node	16568 Mar 24 17:57	6°♏17'51	
asc. node	16567 Apr 07 20:40	25°♏28'33			direct	16568 Mar 26 13:31	6°♏05'32	
morning rise	16567 Apr 11 15:27	23°♏24'51			morning max el	16568 Apr 03 04:55	9°♏53'22 18°10'26	
direct	16567 Apr 13 20:01	23°♏03'52				16568 Apr 16 08:14	0°♏	
morning max el	16567 Apr 20 15:41	26°♏29'31 17°49'35			morning set	16568 Apr 18 19:47	4°♏37'19	
	16567 Apr 23 17:05	0°♏			desc. node	16568 Apr 26 07:04	18°♏30'05	
morning set	16567 May 06 09:35	20°♏51'10						
desc. node	16567 May 10 10:15	28°♏01'29			superior conj	16568 Apr 28 14:24	22°♏40'13 -0°19'10	
	16567 May 11 13:06	0°♏			minimum elong	16568 Apr 28 12:50	22°♏33'15 0°19'21	
superior conj	16567 May 17 14:53	10°♏30'56 -0°56'42				16568 May 02 18:12	0°♏	
minimum elong	16567 May 17 09:46	10°♏09'15 0°56'29			max. Earth dist.	16568 May 06 04:46	5°♏52'22 1.41632 AU	
max. Earth dist.	16567 May 24 18:00	22°♏20'56 1.43597 AU			evening rise	16568 May 11 02:32	13°♏58'04	
	16567 May 29 12:51	0°♏				16568 May 21 09:48	0°♏	
evening rise	16567 May 31 17:26	3°♏26'02				16568 Jun 13 00:08	0°♏	
	16567 Jun 18 14:51	0°♏			evening max el	16568 Jun 13 19:09	0°♏48'15 22°51'17	
evening max el	16567 Jul 02 02:46	16°♏53'16 21°31'45			asc. node	16568 Jun 20 16:19	5°♏59'42	
asc. node	16567 Jul 04 19:24	19°♏19'10			retrograde	16568 Jun 23 22:52	6°♏45'16	
retrograde	16567 Jul 11 02:01	22°♏05'41			evening set	16568 Jun 28 23:13	4°♏37'46	
evening set	16567 Jul 15 14:49	20°♏13'53				16568 Jul 02 23:53	30°♏	
inferior conj	16567 Jul 20 20:14	13°♏59'41 3°07'58			inferior conj	16568 Jul 04 06:17	28°♏15'06 3°01'44	
minimum elong	16567 Jul 20 20:10	13°♏59'55 3°07'29			minimum elong	16568 Jul 04 05:18	28°♏18'30 3°01'05	
min. Earth dist.	16567 Jul 21 01:42	13°♏40'38 0.69049 AU			min. Earth dist.	16568 Jul 03 22:40	28°♏41'34 0.69169 AU	
morning rise	16567 Jul 26 01:18	7°♏41'00			morning rise	16568 Jul 09 11:15	22°♏04'08	
direct	16567 Jul 31 00:28	5°♏33'20			direct	16568 Jul 13 22:23	20°♏14'35	
desc. node	16567 Aug 06 09:04	8°♏14'00			morning max el	16568 Jul 22 15:28	25°♏16'43 21°16'05	
morning max el	16567 Aug 09 23:34	11°♏26'51 22°40'27			desc. node	16568 Jul 23 06:18	25°♏54'26	
	16567 Aug 24 18:03	0°♏				16568 Jul 26 21:20	0°♏	
morning set	16567 Sep 12 17:43	28°♏55'20						

	16568 Aug 17 03:38	0°♍		morning max el	16569 Jul 05 13:42	9°♊17'11	20°02'28
morning set	16568 Aug 22 16:50	8°♍34'30		desc. node	16569 Jul 10 03:28	14°♊27'47	
max. Earth dist.	16568 Aug 29 17:14	19°♍46'50	1.42893 AU		16569 Jul 21 07:44	0°♊	
	16568 Sep 04 20:58	0°♊		morning set	16569 Aug 01 23:30	17°♊34'08	
					16569 Aug 09 23:32	0°♍	
superior conj	16568 Sep 06 00:53	1°♊58'36	-1°23'17	max. Earth dist.	16569 Aug 12 05:59	3°♍35'13	1.44618 AU
minimum elong	16568 Sep 06 07:46	2°♊27'57	1°22'27				
asc. node	16568 Sep 16 16:59	20°♊44'30		superior conj	16569 Aug 17 17:33	12°♍23'09	-1°54'27
evening rise	16568 Sep 17 12:02	22°♊10'09		minimum elong	16569 Aug 18 01:22	12°♍54'55	1°54'03
	16568 Sep 21 21:02	0°♌			16569 Aug 28 07:52	0°♊	
evening max el	16568 Oct 03 16:24	17°♌35'53	18°03'49	evening rise	16569 Aug 30 23:06	4°♊29'11	
retrograde	16568 Oct 10 12:36	21°♌07'02		asc. node	16569 Sep 03 13:41	10°♊38'36	
evening set	16568 Oct 12 19:17	20°♌43'48			16569 Sep 16 09:29	0°♌	
desc. node	16568 Oct 19 03:47	16°♌23'40		evening max el	16569 Sep 17 07:02	0°♌56'06	18°02'50
inferior conj	16568 Oct 19 19:26	15°♌47'33	-0°12'26	retrograde	16569 Sep 23 17:07	4°♌17'12	
minimum elong	16568 Oct 19 19:02	15°♌48'30	0°11'52	evening set	16569 Sep 26 07:58	3°♌42'18	
transit middle	16568 Oct 19 19:02	15°♌48'30	0°11'52		16569 Oct 01 05:11	30°♌♊	
transit begin	16568 Oct 19 16:47	15°♌53'43		inferior conj	16569 Oct 02 17:02	28°♊27'25	1°00'40
transit end	16568 Oct 19 21:17	15°♌43'15		minimum elong	16569 Oct 02 18:39	28°♊23'08	1°00'19
min. Earth dist.	16568 Oct 22 23:18	12°♌52'24	0.60385 AU	min. Earth dist.	16569 Oct 05 11:50	25°♊31'57	0.62663 AU
morning rise	16568 Oct 26 15:37	10°♌01'37		desc. node	16569 Oct 06 01:01	24°♊59'03	
direct	16568 Nov 02 07:11	7°♌53'25		morning rise	16569 Oct 09 03:00	22°♊18'56	
morning max el	16568 Nov 16 12:45	15°♌42'38	27°53'57	direct	16569 Oct 15 19:23	19°♊53'12	
	16568 Nov 28 05:39	0°♌		morning max el	16569 Oct 29 20:05	27°♊50'16	27°55'00
asc. node	16568 Dec 13 17:17	26°♌00'53			16569 Oct 31 22:01	0°♌	
	16568 Dec 15 18:00	0°♊			16569 Nov 22 00:18	0°♌	
morning set	16568 Dec 19 05:05	7°♊05'54		asc. node	16569 Nov 30 14:16	15°♌49'31	
max. Earth dist.	16568 Dec 25 04:49	20°♊06'27	1.31074 AU	morning set	16569 Dec 03 02:56	20°♌53'29	
					16569 Dec 07 11:12	0°♊	
superior conj	16568 Dec 26 07:29	22°♊35'05	1°32'29	max. Earth dist.	16569 Dec 08 07:29	1°♊49'22	1.31733 AU
minimum elong	16568 Dec 26 06:05	22°♊27'21	1°32'57				
	16568 Dec 29 15:09	0°♌		superior conj	16569 Dec 10 16:15	6°♊59'19	1°21'00
evening rise	16569 Jan 02 00:03	7°♌24'30		minimum elong	16569 Dec 10 14:09	6°♊47'42	1°21'21
	16569 Jan 13 13:01	0°♌		evening rise	16569 Dec 17 10:26	21°♊51'04	
desc. node	16569 Jan 15 02:53	2°♌39'23			16569 Dec 21 07:11	0°♌	
evening max el	16569 Jan 29 16:56	21°♌47'28	25°48'04	desc. node	16570 Jan 01 23:44	20°♌45'20	
retrograde	16569 Feb 12 15:29	28°♌49'45			16570 Jan 09 05:01	0°♌	
evening set	16569 Feb 18 14:25	27°♌27'41		evening max el	16570 Jan 11 04:44	2°♌01'17	24°13'12
min. Earth dist.	16569 Feb 23 05:55	24°♌48'16	0.57171 AU	retrograde	16570 Jan 24 18:55	8°♌46'42	
inferior conj	16569 Feb 26 03:50	22°♌47'57	-4°05'38	evening set	16570 Jan 29 19:23	7°♌51'49	
minimum elong	16569 Feb 26 12:53	22°♌32'18	4°02'37	min. Earth dist.	16570 Feb 04 16:27	4°♌56'38	0.55481 AU
morning rise	16569 Mar 06 14:25	18°♌29'47		inferior conj	16570 Feb 06 17:26	3°♌42'35	-5°23'57
direct	16569 Mar 08 13:48	18°♌17'41		minimum elong	16570 Feb 07 01:53	3°♌29'49	5°22'01
asc. node	16569 Mar 11 15:15	18°♌48'22			16570 Feb 14 07:44	30°♌♌	
morning max el	16569 Mar 17 10:13	22°♌38'30	18°52'06	morning rise	16570 Feb 15 10:17	29°♌44'01	
	16569 Mar 23 05:50	0°♍		direct	16570 Feb 17 18:18	29°♌29'54	
morning set	16569 Apr 02 17:08	18°♍52'41			16570 Feb 21 01:43	0°♌	
	16569 Apr 08 09:45	0°♌		asc. node	16570 Feb 26 12:32	3°♌05'08	
				morning max el	16570 Feb 28 03:18	4°♌32'16	19°56'35
superior conj	16569 Apr 11 08:51	5°♌40'10	0°15'10		16570 Mar 16 05:13	0°♍	
minimum elong	16569 Apr 11 09:49	5°♌44'46	0°14'41	morning set	16570 Mar 17 21:51	3°♍24'59	
behind sun begin	16569 Apr 11 07:11	5°♌32'14					
behind sun end	16569 Apr 11 12:28	5°♌57'16		superior conj	16570 Mar 25 17:48	19°♍17'42	0°44'11
desc. node	16569 Apr 13 03:51	9°♌01'55		minimum elong	16570 Mar 25 20:02	19°♍28'51	0°43'40
max. Earth dist.	16569 Apr 18 12:02	18°♌43'22	1.39386 AU	desc. node	16570 Mar 31 00:36	29°♍32'28	
evening rise	16569 Apr 22 09:05	25°♌26'24			16570 Mar 31 06:27	0°♌	
	16569 Apr 25 02:23	0°♌		max. Earth dist.	16570 Mar 31 18:33	0°♌56'44	1.37092 AU
	16569 May 15 01:44	0°♌		evening rise	16570 Apr 04 11:27	7°♌43'34	
evening max el	16569 May 27 09:12	14°♌44'22	24°12'50		16570 Apr 17 22:00	0°♌	
retrograde	16569 Jun 07 16:28	21°♌21'08		evening max el	16570 May 09 22:37	28°♌38'48	25°29'37
asc. node	16569 Jun 07 13:18	21°♌21'03			16570 May 11 08:45	0°♌	
evening set	16569 Jun 13 04:33	19°♌00'38		retrograde	16570 May 22 05:55	5°♌46'09	
min. Earth dist.	16569 Jun 17 18:42	13°♌42'07	0.68802 AU	asc. node	16570 May 25 10:20	5°♌04'54	
inferior conj	16569 Jun 18 15:23	12°♌32'10	2°45'04	evening set	16570 May 28 05:07	3°♌16'40	
minimum elong	16569 Jun 18 13:39	12°♌38'00	2°44'10		16570 May 31 08:24	30°♌♌	
morning rise	16569 Jun 23 22:49	6°♌30'20		min. Earth dist.	16570 Jun 01 11:39	28°♌35'15	0.67944 AU
direct	16569 Jun 27 22:14	5°♌00'17		inferior conj	16570 Jun 02 21:33	26°♌46'04	2°17'32

minimum elong	16570 Jun 02 19:23	26° Π 53'01	2°16'23	morning rise	16571 May 23 19:09	5° Π 12'06	
morning rise	16570 Jun 08 10:08	20° Π 54'39		direct	16571 May 26 21:10	4° Π 18'59	
direct	16570 Jun 11 22:28	19° Π 43'51		morning max el	16571 Jun 02 07:11	7° Π 41'49	18°20'29
morning max el	16570 Jun 18 19:15	23° Π 27'11	19°03'21	desc. node	16571 Jun 13 21:42	23° Π 20'42	
	16570 Jun 24 08:42	0° \mathfrak{C}			16571 Jun 18 03:32	0° \mathfrak{C}	
desc. node	16570 Jun 27 00:36	3° \mathfrak{C} 40'00		morning set	16571 Jun 22 09:25	6° \mathfrak{C} 43'59	
greatest brilliancy	16570 Jul 01 19:24	10° \mathfrak{C} 40'02	-0.7m		16571 Jul 07 04:18	0° Ω	
morning set	16570 Jul 12 06:56	26° \mathfrak{C} 41'03					
	16570 Jul 14 10:28	0° Ω		superior conj	16571 Jul 07 22:24	1° Ω 10'34	-2°11'14
max. Earth dist.	16570 Jul 25 23:51	17° Ω 57'10	1.45693 AU	minimum elong	16571 Jul 07 18:08	0° Ω 53'59	2°11'39
				max. Earth dist.	16571 Jul 08 19:57	2° Ω 34'33	1.46036 AU
superior conj	16570 Jul 28 13:02	21° Ω 56'57	-2°12'26	evening rise	16571 Jul 23 22:37	26° Ω 07'34	
minimum elong	16570 Jul 28 16:32	22° Ω 10'45	2°12'46		16571 Jul 26 10:08	0° \mathfrak{M}	
	16570 Aug 02 15:16	0° \mathfrak{M}		greatest brilliancy	16571 Aug 02 17:00	11° \mathfrak{M} 18'00	-0.8m
evening rise	16570 Aug 12 11:27	15° \mathfrak{M} 50'02		asc. node	16571 Aug 08 07:10	19° \mathfrak{M} 35'49	
asc. node	16570 Aug 21 10:25	0° \mathfrak{A} 17'50		evening max el	16571 Aug 15 09:09	28° \mathfrak{M} 24'07	18°54'17
	16570 Aug 21 05:53	0° \mathfrak{A}			16571 Aug 17 04:12	0° \mathfrak{A}	
evening max el	16570 Aug 31 21:35	14° \mathfrak{A} 34'50	18°19'56	retrograde	16571 Aug 22 02:32	2° \mathfrak{A} 04'20	
retrograde	16570 Sep 07 07:00	17° \mathfrak{A} 59'06		evening set	16571 Aug 25 11:47	0° \mathfrak{A} 58'19	
evening set	16570 Sep 10 06:44	17° \mathfrak{A} 09'42			16571 Aug 26 18:30	30° \mathfrak{R} \mathfrak{M}	
inferior conj	16570 Sep 16 04:02	11° \mathfrak{A} 38'53	1°54'59	inferior conj	16571 Aug 31 00:46	25° \mathfrak{M} 13'42	2°32'35
minimum elong	16570 Sep 16 06:19	11° \mathfrak{A} 32'10	1°54'22	minimum elong	16571 Aug 31 02:51	25° \mathfrak{M} 07'05	2°32'00
min. Earth dist.	16570 Sep 18 10:19	9° \mathfrak{A} 00'21	0.64750 AU	min. Earth dist.	16571 Sep 01 17:20	23° \mathfrak{M} 05'15	0.66517 AU
morning rise	16570 Sep 22 04:23	5° \mathfrak{A} 17'13		morning rise	16571 Sep 05 17:00	18° \mathfrak{M} 46'43	
desc. node	16570 Sep 22 22:18	4° \mathfrak{A} 43'14		desc. node	16571 Sep 09 19:38	16° \mathfrak{M} 27'00	
direct	16570 Sep 28 16:28	2° \mathfrak{A} 41'59		direct	16571 Sep 11 21:13	16° \mathfrak{M} 10'21	
morning max el	16570 Oct 12 06:57	10° \mathfrak{A} 37'06	27°20'54	morning max el	16571 Sep 24 18:36	23° \mathfrak{M} 49'26	26°19'19
	16570 Oct 27 15:25	0° \mathfrak{M}			16571 Sep 30 07:32	0° \mathfrak{A}	
	16570 Nov 14 10:56	0° \mathfrak{A}			16571 Oct 21 00:18	0° \mathfrak{M}	
morning set	16570 Nov 16 15:39	4° \mathfrak{A} 14'35		morning set	16571 Oct 30 15:58	17° \mathfrak{M} 01'03	
asc. node	16570 Nov 17 11:12	5° \mathfrak{A} 50'58		max. Earth dist.	16571 Nov 03 11:29	24° \mathfrak{M} 18'38	1.34719 AU
max. Earth dist.	16570 Nov 21 02:28	13° \mathfrak{A} 13'10	1.32958 AU	asc. node	16571 Nov 04 08:05	25° \mathfrak{M} 59'47	
					16571 Nov 06 08:13	0° \mathfrak{A}	
superior conj	16570 Nov 24 20:45	21° \mathfrak{A} 08'55	1°03'17	superior conj	16571 Nov 08 18:25	4° \mathfrak{A} 56'53	0°39'20
minimum elong	16570 Nov 24 18:22	20° \mathfrak{A} 56'08	1°03'30	minimum elong	16571 Nov 08 16:27	4° \mathfrak{A} 46'42	0°39'30
	16570 Nov 28 23:07	0° \mathfrak{B}		evening rise	16571 Nov 16 06:01	20° \mathfrak{A} 37'17	
evening rise	16570 Dec 01 21:05	6° \mathfrak{B} 17'12			16571 Nov 20 20:21	0° \mathfrak{B}	
	16570 Dec 14 07:36	0° \mathfrak{A}		evening max el	16571 Dec 05 07:54	22° \mathfrak{B} 08'36	20°54'09
desc. node	16570 Dec 19 20:39	7° \mathfrak{A} 48'28		desc. node	16571 Dec 06 17:39	23° \mathfrak{B} 27'05	
evening max el	16570 Dec 23 14:24	11° \mathfrak{A} 55'31	22°29'20	retrograde	16571 Dec 16 19:51	27° \mathfrak{B} 50'13	
retrograde	16571 Jan 05 10:14	18° \mathfrak{A} 15'55		evening set	16571 Dec 19 10:26	27° \mathfrak{B} 33'57	
evening set	16571 Jan 09 04:41	17° \mathfrak{A} 44'46		inferior conj	16571 Dec 28 04:30	23° \mathfrak{B} 42'46	-5°39'25
min. Earth dist.	16571 Jan 16 22:30	14° \mathfrak{A} 13'49	0.54510 AU	minimum elong	16571 Dec 27 20:57	23° \mathfrak{B} 53'33	5°37'39
inferior conj	16571 Jan 17 13:50	13° \mathfrak{A} 52'15	-6°01'53	min. Earth dist.	16571 Dec 29 03:52	23° \mathfrak{B} 09'22	0.54449 AU
minimum elong	16571 Jan 17 15:04	13° \mathfrak{A} 50'31	6°01'22	morning rise	16572 Jan 05 07:26	19° \mathfrak{B} 49'02	
morning rise	16571 Jan 26 02:31	10° \mathfrak{A} 04'22		direct	16572 Jan 09 13:47	19° \mathfrak{B} 09'49	
direct	16571 Jan 29 06:18	9° \mathfrak{A} 41'50		morning max el	16572 Jan 22 18:30	25° \mathfrak{B} 37'12	23°09'30
morning max el	16571 Feb 10 05:26	15° \mathfrak{A} 29'02	21°24'06		16572 Jan 26 19:38	0° \mathfrak{A}	
asc. node	16571 Feb 13 09:49	18° \mathfrak{A} 55'42		asc. node	16572 Jan 31 07:05	6° \mathfrak{A} 01'05	
	16571 Feb 20 23:00	0° \mathfrak{H}			16572 Feb 13 10:41	0° \mathfrak{H}	
morning set	16571 Mar 02 07:06	18° \mathfrak{H} 06'03		morning set	16572 Feb 14 18:40	2° \mathfrak{H} 49'26	
	16571 Mar 07 22:37	0° \mathfrak{Y}					
superior conj	16571 Mar 09 13:23	3° \mathfrak{Y} 22'23	1°07'03	superior conj	16572 Feb 21 16:26	17° \mathfrak{H} 45'16	1°23'37
minimum elong	16571 Mar 09 15:53	3° \mathfrak{Y} 35'22	1°06'44	minimum elong	16572 Feb 21 18:31	17° \mathfrak{H} 56'24	1°23'35
max. Earth dist.	16571 Mar 14 04:39	12° \mathfrak{Y} 47'56	1.34988 AU	max. Earth dist.	16572 Feb 24 21:50	24° \mathfrak{H} 36'15	1.33244 AU
desc. node	16571 Mar 17 21:21	19° \mathfrak{Y} 58'07			16572 Feb 27 12:37	0° \mathfrak{Y}	
evening rise	16571 Mar 18 06:24	20° \mathfrak{Y} 40'54		evening rise	16572 Feb 29 14:26	4° \mathfrak{Y} 09'30	
	16571 Mar 23 09:04	0° \mathfrak{B}		desc. node	16572 Mar 03 18:05	10° \mathfrak{Y} 14'46	
	16571 Apr 11 20:01	0° Π			16572 Mar 15 03:46	0° \mathfrak{B}	
evening max el	16571 Apr 22 12:12	12° Π 25'59	26°34'13	evening max el	16572 Apr 04 01:41	25° \mathfrak{B} 57'36	27°19'05
retrograde	16571 May 05 14:17	19° Π 52'24			16572 Apr 08 19:27	0° Π	
evening set	16571 May 11 23:07	17° Π 19'26		retrograde	16572 Apr 17 16:37	3° Π 31'08	
asc. node	16571 May 12 07:28	17° Π 02'03		evening set	16572 Apr 24 08:27	1° Π 01'29	
min. Earth dist.	16571 May 15 23:36	13° Π 13'15	0.66624 AU		16572 Apr 25 14:30	30° \mathfrak{R} \mathfrak{B}	
inferior conj	16571 May 17 22:38	10° Π 51'50	1°38'08	min. Earth dist.	16572 Apr 28 04:37	27° \mathfrak{B} 27'20	0.64895 AU
minimum elong	16571 May 17 20:34	10° Π 58'05	1°36'55	asc. node	16572 Apr 28 04:39	27° \mathfrak{B} 27'17	

inferior conj	16572 Apr 30 16:11	24° ♄ 43'44	0°45'36	evening set	16573 Apr 07 06:35	14° ♄ 12'49	
minimum elong	16572 Apr 30 14:58	24° ♄ 47'05	0°44'41	min. Earth dist.	16573 Apr 11 00:51	11° ♄ 05'57	0.62848 AU
morning rise	16572 May 06 23:27	19° ♄ 17'27		inferior conj	16573 Apr 13 23:06	8° ♄ 13'19	-0°21'15
direct	16572 May 09 16:10	18° ♄ 39'20		minimum elong	16573 Apr 13 23:48	8° ♄ 11'35	0°21'17
morning max el	16572 May 15 23:22	21° ♄ 54'10	17°54'37	asc. node	16573 Apr 15 01:54	7° ♄ 08'04	
	16572 May 22 09:20	0° ♄		morning rise	16573 Apr 20 19:50	3° ♄ 02'53	
desc. node	16572 May 30 18:42	13° ♄ 22'14		direct	16573 Apr 23 04:25	2° ♄ 36'34	
morning set	16572 Jun 02 15:03	18° ♄ 04'48		morning max el	16573 Apr 29 17:00	5° ♄ 55'01	17°46'12
	16572 Jun 09 21:12	0° ♄		morning set	16573 May 15 21:31	0° ♄ 35'20	
					16573 May 15 13:23	0° ♄	
superior conj	16572 Jun 16 14:29	10° ♄ 47'50	-1°51'03	desc. node	16573 May 17 15:38	3° ♄ 37'53	
minimum elong	16572 Jun 16 06:03	10° ♄ 14'19	1°50'55				
max. Earth dist.	16572 Jun 20 16:00	17° ♄ 12'38	1.45629 AU	superior conj	16573 May 28 01:54	21° ♄ 19'04	-1°18'12
	16572 Jun 28 21:37	0° ♄		minimum elong	16573 May 27 18:48	20° ♄ 49'43	1°17'51
evening rise	16572 Jul 02 14:11	5° ♄ 39'53			16573 Jun 02 09:53	0° ♄	
greatest brilliancy	16572 Jul 16 20:41	27° ♄ 06'54	-0.6m	max. Earth dist.	16573 Jun 03 10:05	1° ♄ 36'54	1.44519 AU
	16572 Jul 18 20:50	0° ♄		evening rise	16573 Jun 12 00:59	15° ♄ 06'52	
asc. node	16572 Jul 25 03:58	8° ♄ 25'21			16573 Jun 21 21:59	0° ♄	
evening max el	16572 Jul 28 15:43	12° ♄ 18'56	19°44'45	evening max el	16573 Jul 11 16:12	26° ♄ 14'21	20°49'25
retrograde	16572 Aug 05 00:54	16° ♄ 27'08		asc. node	16573 Jul 12 00:50	26° ♄ 35'33	
evening set	16572 Aug 08 20:23	15° ♄ 03'16			16573 Jul 16 10:26	0° ♄	
inferior conj	16572 Aug 14 04:14	9° ♄ 06'16	2°55'48	retrograde	16573 Jul 19 23:55	1° ♄ 00'51	
minimum elong	16572 Aug 14 05:37	9° ♄ 01'36	2°55'20		16573 Jul 23 07:18	30° ♄	
min. Earth dist.	16572 Aug 15 06:56	7° ♄ 36'50	0.67875 AU	evening set	16573 Jul 24 06:19	29° ♄ 18'55	
morning rise	16572 Aug 19 14:22	2° ♄ 39'51		inferior conj	16573 Jul 29 11:53	23° ♄ 10'43	3°06'41
direct	16572 Aug 25 08:18	0° ♄ 10'04		minimum elong	16573 Jul 29 12:22	23° ♄ 09'02	3°06'16
desc. node	16572 Aug 26 16:57	0° ♄ 17'28		min. Earth dist.	16573 Jul 30 00:59	22° ♄ 25'25	0.68767 AU
morning max el	16572 Sep 06 05:41	7° ♄ 16'59	24°59'37	morning rise	16573 Aug 03 18:09	16° ♄ 48'39	
	16572 Sep 24 00:06	0° ♄		direct	16573 Aug 09 00:23	14° ♄ 31'40	
morning set	16572 Oct 12 00:06	29° ♄ 04'41		desc. node	16573 Aug 13 14:14	15° ♄ 55'24	
	16572 Oct 12 12:33	0° ♄		morning max el	16573 Aug 19 16:51	20° ♄ 53'32	23°31'28
max. Earth dist.	16572 Oct 15 12:25	5° ♄ 25'25	1.36916 AU		16573 Aug 27 12:58	0° ♄	
asc. node	16572 Oct 21 04:55	16° ♄ 12'17			16573 Sep 17 05:10	0° ♄	
				morning set	16573 Sep 23 11:53	10° ♄ 15'53	
superior conj	16572 Oct 22 06:17	18° ♄ 16'28	0°09'29	max. Earth dist.	16573 Sep 27 11:21	17° ♄ 03'56	1.39330 AU
minimum elong	16572 Oct 22 05:40	18° ♄ 13'26	0°09'46		16573 Oct 04 15:57	0° ♄	
behind sun begin	16572 Oct 22 00:27	17° ♄ 47'45					
behind sun end	16572 Oct 22 10:54	18° ♄ 39'10		superior conj	16573 Oct 05 04:34	0° ♄ 58'41	-0°25'14
	16572 Oct 28 02:36	0° ♄		minimum elong	16573 Oct 05 06:25	1° ♄ 07'19	0°24'39
evening rise	16572 Oct 30 11:06	4° ♄ 46'38		asc. node	16573 Oct 08 01:43	6° ♄ 24'39	
	16572 Nov 13 21:30	0° ♄		evening rise	16573 Oct 14 09:36	18° ♄ 38'35	
evening max el	16572 Nov 16 15:32	3° ♄ 07'04	19°38'14		16573 Oct 20 09:14	0° ♄	
desc. node	16572 Nov 22 14:42	7° ♄ 17'25		evening max el	16573 Oct 30 12:51	14° ♄ 55'50	18°44'43
retrograde	16572 Nov 26 12:06	8° ♄ 02'41		retrograde	16573 Nov 07 21:49	19° ♄ 09'58	
evening set	16572 Nov 28 12:10	7° ♄ 51'25		desc. node	16573 Nov 09 11:47	19° ♄ 01'24	
inferior conj	16572 Dec 07 04:04	3° ♄ 48'18	-4°23'24	evening set	16573 Nov 09 19:46	18° ♄ 57'29	
minimum elong	16572 Dec 06 18:12	4° ♄ 03'51	4°19'49	inferior conj	16573 Nov 17 22:46	14° ♄ 34'14	-2°42'27
min. Earth dist.	16572 Dec 09 11:23	2° ♄ 21'07	0.55323 AU	minimum elong	16573 Nov 17 16:11	14° ♄ 46'17	2°39'20
	16572 Dec 13 18:23	30° ♄		min. Earth dist.	16573 Nov 21 00:07	12° ♄ 20'27	0.56953 AU
morning rise	16572 Dec 14 22:33	29° ♄ 30'41		morning rise	16573 Nov 25 09:35	9° ♄ 41'10	
direct	16572 Dec 20 05:29	28° ♄ 28'25		direct	16573 Dec 01 10:29	8° ♄ 12'48	
	16572 Dec 26 13:52	0° ♄		morning max el	16573 Dec 15 15:01	15° ♄ 34'16	26°33'13
morning max el	16573 Jan 03 02:35	5° ♄ 26'13	24°58'59		16573 Dec 27 06:56	0° ♄	
asc. node	16573 Jan 17 04:18	24° ♄ 03'43		asc. node	16574 Jan 04 01:28	12° ♄ 49'04	
	16573 Jan 20 13:37	0° ♄			16574 Jan 12 18:19	0° ♄	
morning set	16573 Jan 29 06:34	17° ♄ 29'33		morning set	16574 Jan 13 17:05	2° ♄ 01'45	
	16573 Feb 03 23:13	0° ♄					
superior conj	16573 Feb 05 00:21	2° ♄ 18'47	1°33'56	superior conj	16574 Jan 20 10:59	16° ♄ 56'59	1°38'09
minimum elong	16573 Feb 05 01:35	2° ♄ 25'34	1°34'12	minimum elong	16574 Jan 20 11:11	16° ♄ 58'06	1°38'35
max. Earth dist.	16573 Feb 06 22:35	6° ♄ 32'20	1.31965 AU	max. Earth dist.	16574 Jan 21 04:36	18° ♄ 35'22	1.31193 AU
evening rise	16573 Feb 12 08:25	18° ♄ 01'11			16574 Jan 26 09:22	0° ♄	
	16573 Feb 18 11:07	0° ♄		evening rise	16574 Jan 27 09:42	2° ♄ 09'26	
desc. node	16573 Feb 18 14:48	0° ♄ 17'10		desc. node	16574 Feb 05 11:32	19° ♄ 59'23	
	16573 Mar 09 13:07	0° ♄			16574 Feb 11 08:34	0° ♄	
evening max el	16573 Mar 17 13:27	9° ♄ 01'11	27°36'53	evening max el	16574 Feb 27 20:50	21° ♄ 23'34	27°21'50
retrograde	16573 Mar 31 11:28	16° ♄ 31'54		retrograde	16574 Mar 13 21:30	28° ♄ 45'39	
				evening set	16574 Mar 20 14:42	26° ♄ 44'06	

min. Earth dist.	16574 Mar 24 10:54	23° Υ 57'14	0.60610 AU	retrograde	16575 Feb 23 21:23	10° Υ 04'46	
inferior conj	16574 Mar 27 15:50	21° Υ 11'21	-1°42'06	evening set	16575 Mar 02 05:30	8° Υ 26'48	
minimum elong	16574 Mar 27 19:36	21° Υ 03'09	1°40'44	min. Earth dist.	16575 Mar 06 10:35	5° Υ 48'57	0.58364 AU
asc. node	16574 Apr 01 23:08	17° Υ 14'39		inferior conj	16575 Mar 09 14:32	3° Υ 27'00	-3°12'57
morning rise	16574 Apr 04 03:58	16° Υ 19'50		minimum elong	16575 Mar 09 21:59	3° Υ 13'02	3°10'14
direct	16574 Apr 06 06:10	16° Υ 01'52			16575 Mar 14 20:50	30° \Re H	
morning max el	16574 Apr 13 08:51	19° Υ 35'18	17°56'02	morning rise	16575 Mar 17 17:59	28° H 56'55	
	16574 Apr 21 01:08	0° B		direct	16575 Mar 19 16:46	28° H 43'49	
morning set	16574 Apr 28 23:12	13° B 58'41		asc. node	16575 Mar 19 20:24	28° H 43'54	
desc. node	16574 May 04 12:30	24° B 03'02			16575 Mar 24 06:24	0° Υ	
	16574 May 07 20:53	0° II		morning max el	16575 Mar 27 19:15	2° Υ 43'56	18°25'34
				morning set	16575 Apr 12 14:38	27° Υ 58'20	
superior conj	16574 May 09 12:46	2° II 54'13	-0°40'36		16575 Apr 13 16:06	0° B	
minimum elong	16574 May 09 09:14	2° II 38'53	0°40'33	desc. node	16575 Apr 21 09:18	14° B 33'17	
max. Earth dist.	16574 May 17 00:08	15° II 32'17	1.42816 AU				
evening rise	16574 May 22 23:05	25° II 08'25		superior conj	16575 Apr 21 20:53	15° B 26'30	-0°04'05
	16574 May 26 01:38	0° E		minimum elong	16575 Apr 21 20:33	15° B 25'00	0°04'25
	16574 Jun 15 20:05	0° Ω		behind sun begin	16575 Apr 21 13:34	14° B 52'55	
evening max el	16574 Jun 24 10:59	10° Ω 08'51	22°04'51	behind sun end	16575 Apr 22 03:33	15° B 57'01	
asc. node	16574 Jun 28 21:42	13° Ω 53'19		max. Earth dist.	16575 Apr 29 09:09	28° B 46'25	1.40694 AU
retrograde	16574 Jul 03 21:58	15° Ω 39'58			16575 Apr 30 02:22	0° II	
evening set	16574 Jul 08 15:46	13° Ω 40'58		evening rise	16575 May 03 17:09	6° II 03'48	
inferior conj	16574 Jul 13 21:36	7° Ω 22'57	3°06'33		16575 May 19 04:32	0° E	
minimum elong	16574 Jul 13 21:08	7° Ω 24'34	3°06'02	evening max el	16575 Jun 07 01:55	24° E 03'32	23°26'05
min. Earth dist.	16574 Jul 13 21:25	7° Ω 23'35	0.69166 AU	asc. node	16575 Jun 15 18:38	0° Ω 02'32	
morning rise	16574 Jul 19 02:21	1° Ω 07'36			16575 Jun 15 15:01	0° Ω	
	16574 Jul 20 16:24	30° \Re E		retrograde	16575 Jun 17 17:41	0° Ω 18'52	
direct	16574 Jul 23 20:23	29° E 07'31			16575 Jun 19 17:52	30° \Re E	
	16574 Jul 27 06:28	0° Ω		evening set	16575 Jun 22 23:05	28° E 05'11	
desc. node	16574 Jul 31 11:30	2° Ω 57'13		inferior conj	16575 Jun 28 07:29	21° E 39'27	2°55'58
morning max el	16574 Aug 02 06:19	4° Ω 38'24	22°03'37	minimum elong	16575 Jun 28 06:09	21° E 44'01	2°55'13
	16574 Aug 21 16:09	0° M		min. Earth dist.	16575 Jun 27 18:14	22° E 25'06	0.69067 AU
morning set	16574 Sep 04 00:17	20° M 28'10		morning rise	16575 Jul 03 13:12	15° E 32'19	
max. Earth dist.	16574 Sep 09 14:05	29° M 33'45	1.41678 AU	direct	16575 Jul 07 19:10	13° E 51'14	
	16574 Sep 09 20:23	0° E		morning max el	16575 Jul 16 00:50	18° E 33'16	20°43'16
				desc. node	16575 Jul 18 08:43	21° E 02'10	
superior conj	16574 Sep 17 08:53	12° E 53'05	-1°02'24		16575 Jul 25 10:33	0° Ω	
minimum elong	16574 Sep 17 14:00	13° E 15'40	1°01'33	morning set	16575 Aug 14 15:02	29° Ω 47'14	
asc. node	16574 Sep 24 22:28	26° E 32'57			16575 Aug 14 18:20	0° M	
	16574 Sep 26 19:17	0° M		max. Earth dist.	16575 Aug 22 22:54	12° M 55'19	1.43688 AU
evening rise	16574 Sep 27 22:03	2° M 03'59					
evening max el	16574 Oct 13 20:10	27° M 27'43	18°12'53	superior conj	16575 Aug 29 15:10	23° M 51'29	-1°37'37
	16574 Oct 17 00:49	0° J		minimum elong	16575 Aug 29 22:55	24° M 23'51	1°36'52
retrograde	16574 Oct 21 02:57	1° J 11'14			16575 Sep 02 06:37	0° E	
evening set	16574 Oct 23 05:25	0° J 53'10		evening rise	16575 Sep 10 19:57	14° E 51'30	
	16574 Oct 25 09:06	30° \Re M		asc. node	16575 Sep 11 19:11	16° E 33'41	
desc. node	16574 Oct 27 08:58	28° M 45'04			16575 Sep 19 15:02	0° M	
inferior conj	16574 Oct 30 15:18	26° M 08'24	-1°03'06	evening max el	16575 Sep 27 09:17	10° M 33'30	18°01'08
minimum elong	16574 Oct 30 12:59	26° M 13'21	1°01'41	retrograde	16575 Oct 04 00:10	13° M 59'05	
min. Earth dist.	16574 Nov 02 21:10	23° M 22'42	0.59063 AU	evening set	16575 Oct 06 10:05	13° M 31'27	
morning rise	16574 Nov 06 17:09	20° M 39'26		inferior conj	16575 Oct 13 03:29	8° M 27'05	0°20'52
direct	16574 Nov 13 05:04	18° M 44'51		minimum elong	16575 Oct 13 04:07	8° M 25'29	0°20'57
morning max el	16574 Nov 27 11:51	26° M 25'58	27°35'44	desc. node	16575 Oct 14 06:11	7° M 20'55	
	16574 Nov 30 21:05	0° J		min. Earth dist.	16575 Oct 16 04:11	5° M 29'10	0.61359 AU
	16574 Dec 20 19:50	0° Z		morning rise	16575 Oct 19 19:16	2° M 30'02	
asc. node	16574 Dec 21 22:34	2° Z 05'21		direct	16575 Oct 26 11:47	0° M 13'19	
morning set	16574 Dec 29 00:18	16° Z 20'29		morning max el	16575 Nov 09 16:12	8° M 07'51	27°59'03
	16575 Jan 04 05:40	0° \approx			16575 Nov 26 11:10	0° J	
				asc. node	16575 Dec 08 19:36	21° J 44'15	
superior conj	16575 Jan 04 22:23	1° \approx 33'39	1°36'18		16575 Dec 12 22:09	0° Z	
minimum elong	16575 Jan 04 21:32	1° \approx 28'56	1°36'48	morning set	16575 Dec 13 02:14	0° Z 21'11	
max. Earth dist.	16575 Jan 04 12:14	0° \approx 36'50	1.30957 AU	max. Earth dist.	16575 Dec 18 17:42	12° Z 28'17	1.31283 AU
evening rise	16575 Jan 11 16:00	16° \approx 28'02					
	16575 Jan 18 06:55	0° H		superior conj	16575 Dec 20 08:42	16° Z 04'07	1°28'22
desc. node	16575 Jan 23 08:17	9° H 12'51		minimum elong	16575 Dec 20 06:58	15° Z 54'29	1°28'48
	16575 Feb 07 01:01	0° Υ			16575 Dec 26 15:41	0° \approx	
evening max el	16575 Feb 09 21:06	2° Υ 53'58	26°31'33	evening rise	16575 Dec 27 01:26	0° \approx 52'50	

desc. node	16576 Jan 10 05:06	27°  47'20		16576 Dec 17 16:32	0° 	
	16576 Jan 11 15:19	0° 		desc. node	16576 Dec 27 02:00	15°  29'06
evening max el	16576 Jan 22 12:59	13°  32'13	25°09'54	evening max el	16577 Jan 02 23:03	23°  34'26 23°29'07
retrograde	16576 Feb 05 09:15	20°  28'42			16577 Jan 14 03:59	0° 
evening set	16576 Feb 10 23:33	19°  18'15		retrograde	16577 Jan 16 07:16	0°  10'21
min. Earth dist.	16576 Feb 16 01:31	16°  34'13	0.56380 AU		16577 Jan 18 11:09	30°  R 
inferior conj	16576 Feb 18 16:20	14°  52'11	-4°42'00	evening set	16577 Jan 20 19:17	29°  26'36
minimum elong	16576 Feb 19 01:51	14°  36'42	4°39'13	min. Earth dist.	16577 Jan 27 10:09	26°  18'28 0.54964 AU
morning rise	16576 Feb 27 06:49	10°  43'06		inferior conj	16577 Jan 28 21:50	25°  26'36 -5°46'36
direct	16576 Feb 29 08:19	10°  30'56		minimum elong	16577 Jan 29 03:58	25°  17'41 5°45'27
asc. node	16576 Mar 05 17:42	11°  59'57		morning rise	16577 Feb 06 14:02	21°  33'38
morning max el	16576 Mar 09 19:55	15°  08'46	19°16'41	direct	16577 Feb 09 05:04	21°  16'51
	16576 Mar 20 04:51	0°  Y		morning max el	16577 Feb 20 06:51	26°  39'01 20°31'03
morning set	16576 Mar 26 15:28	12°  Y21'30		asc. node	16577 Feb 20 14:59	26°  59'03
					16577 Feb 23 08:09	0°  H
superior conj	16576 Apr 03 22:00	28°  Y43'40	0°28'11	morning set	16577 Mar 10 22:29	26°  H58'55
minimum elong	16576 Apr 03 23:39	28°  Y51'40	0°27'39		16577 Mar 12 09:32	0°  Y
	16576 Apr 04 13:50	0°  8				
desc. node	16576 Apr 07 06:03	5°  804'49		superior conj	16577 Mar 18 11:57	12°  Y34'21 0°54'38
max. Earth dist.	16576 Apr 10 15:04	11°  817'43	1.38396 AU	minimum elong	16577 Mar 18 14:24	12°  Y46'48 0°54'10
evening rise	16576 Apr 14 08:26	17°  853'42		max. Earth dist.	16577 Mar 23 22:33	23°  Y19'32 1.36164 AU
	16576 Apr 21 14:15	0°  II		desc. node	16577 Mar 25 02:48	25°  Y34'06
	16576 May 12 12:35	0°  6			16577 Mar 27 11:50	0°  8
evening max el	16576 May 19 15:23	7°  658'45	24°46'37	evening rise	16577 Mar 27 18:25	0°  830'12
retrograde	16576 May 31 09:48	14°  650'41			16577 Apr 14 18:05	0°  II
asc. node	16576 Jun 01 15:38	14°  644'14		evening max el	16577 May 02 05:05	21°  II52'09 25°59'06
evening set	16576 Jun 06 02:36	12°  625'50		retrograde	16577 May 14 21:12	29°  II08'51
min. Earth dist.	16576 Jun 10 13:18	7°  623'02	0.68485 AU	asc. node	16577 May 19 12:43	27°  II43'19
inferior conj	16576 Jun 11 15:34	5°  655'40	2°34'49	evening set	16577 May 21 00:37	26°  II37'30
minimum elong	16576 Jun 11 13:37	6°  602'11	2°33'47	min. Earth dist.	16577 May 25 04:30	22°  II11'03 0.67436 AU
	16576 Jun 16 23:44	30°  R  II		inferior conj	16577 May 26 19:54	20°  II07'25 2°02'24
morning rise	16576 Jun 17 00:51	29°  II57'57		minimum elong	16577 May 26 17:43	20°  II14'20 2°01'11
direct	16576 Jun 20 19:23	28°  II36'17		morning rise	16577 Jun 01 11:29	14°  II20'30
	16576 Jun 24 21:30	0°  6		direct	16577 Jun 04 19:22	13°  II17'21
morning max el	16576 Jun 28 02:10	2°  637'52	19°35'24	morning max el	16577 Jun 11 10:32	16°  II50'26 18°43'00
desc. node	16576 Jul 04 05:53	9°  653'22		desc. node	16577 Jun 21 03:00	29°  II18'59
greatest brilliancy	16576 Jul 10 22:26	19°  618'01	-0.6m		16577 Jun 21 14:05	0°  6
	16576 Jul 18 02:22	0°  Omega		morning set	16577 Jul 03 09:10	18°  608'25
morning set	16576 Jul 23 19:25	8°  Omega42'30			16577 Jul 10 23:55	0°  Omega
max. Earth dist.	16576 Aug 04 13:30	26°  Omega57'37	1.45154 AU	max. Earth dist.	16577 Jul 18 08:35	11°  Omega27'56 1.45938 AU
	16576 Aug 06 11:41	0°  n				
				superior conj	16577 Jul 19 11:24	13°  Omega12'34 -2°14'26
superior conj	16576 Aug 08 22:04	3°  n52'11	-2°04'08	minimum elong	16577 Jul 19 11:38	13°  Omega13'29 2°14'55
minimum elong	16576 Aug 09 04:47	4°  n19'00	2°04'03		16577 Jul 30 03:49	0°  n
evening rise	16576 Aug 22 21:54	26°  n46'36		evening rise	16577 Aug 03 23:26	7°  n39'37
	16576 Aug 24 20:10	0°  Omega		asc. node	16577 Aug 15 12:38	25°  n52'44
asc. node	16576 Aug 28 15:53	6°  Omega21'56			16577 Aug 18 07:40	0°  Omega
evening max el	16576 Sep 10 00:19	24°  Omega02'36	18°08'01	evening max el	16577 Aug 24 13:59	7°  Omega46'45 18°32'32
retrograde	16576 Sep 16 09:03	27°  Omega23'21		retrograde	16577 Aug 31 01:36	11°  Omega15'50
evening set	16576 Sep 19 03:35	26°  Omega42'41		evening set	16577 Sep 03 05:24	10°  Omega19'26
inferior conj	16576 Sep 25 07:15	21°  Omega21'03	1°25'52	inferior conj	16577 Sep 08 22:46	4°  Omega42'39 2°12'48
minimum elong	16576 Sep 25 09:18	21°  Omega15'24	1°25'20	minimum elong	16577 Sep 09 01:03	4°  Omega35'43 2°12'11
min. Earth dist.	16576 Sep 27 21:08	18°  Omega30'39	0.63584 AU	min. Earth dist.	16577 Sep 10 23:17	2°  Omega15'42 0.65555 AU
desc. node	16576 Sep 30 03:29	16°  Omega15'50			16577 Sep 12 23:53	30°  R  n
morning rise	16576 Oct 01 13:00	15°  Omega05'57		morning rise	16577 Sep 14 19:28	28°  n18'11
direct	16576 Oct 08 04:16	12°  Omega34'45		desc. node	16577 Sep 17 00:48	26°  n46'56
morning max el	16576 Oct 22 01:14	20°  Omega32'52	27°44'18	direct	16577 Sep 21 04:43	25°  n41'27
	16576 Oct 30 05:29	0°  m			16577 Sep 30 16:11	0°  Omega
	16576 Nov 18 12:48	0°  x		morning max el	16577 Oct 04 12:25	3°  Omega30'48 26°57'28
asc. node	16576 Nov 24 16:34	11°  x38'49			16577 Oct 24 14:32	0°  m
morning set	16576 Nov 25 20:34	13°  x58'15		morning set	16577 Nov 09 04:24	27°  m05'03
max. Earth dist.	16576 Nov 30 17:12	24°  x02'00	1.32182 AU		16577 Nov 10 16:26	0°  x
	16576 Dec 03 11:44	0°  3		asc. node	16577 Nov 11 13:29	1°  x43'42
				max. Earth dist.	16577 Nov 13 07:59	5°  x16'26 1.33647 AU
superior conj	16576 Dec 03 15:58	0°  323'02	1°14'16			
minimum elong	16576 Dec 03 13:40	0°  310'32	1°14'34	superior conj	16577 Nov 17 17:54	14°  x24'13 0°53'54
evening rise	16576 Dec 10 12:09	15°  319'42		minimum elong	16577 Nov 17 15:35	14°  x12'01 0°54'04

evening rise	16577 Nov 24 22:19	29° ♄ 43'50		16578 Nov 02 11:13	0° ♄	
	16577 Nov 25 01:22	0° ♄		evening rise	16578 Nov 09 05:56	14° ♄ 00'31
	16577 Dec 12 05:42	0° ♄			16578 Nov 17 10:36	0° ♄
desc. node	16577 Dec 13 22:58	1° ♄ 59'11		evening max el	16578 Nov 27 10:03	14° ♄ 02'36 20°19'09
evening max el	16577 Dec 15 11:01	3° ♄ 32'32 21°47'01		desc. node	16578 Nov 30 20:00	16° ♄ 54'57
retrograde	16577 Dec 27 18:20	9° ♄ 37'22		retrograde	16578 Dec 08 05:26	19° ♄ 25'18
evening set	16577 Dec 31 00:10	9° ♄ 13'43		evening set	16578 Dec 10 12:06	19° ♄ 12'04
inferior conj	16578 Jan 08 14:01	5° ♄ 23'59 -6°00'03		inferior conj	16578 Dec 19 06:45	15° ♄ 16'46 -5°12'17
minimum elong	16578 Jan 08 11:07	5° ♄ 28'02 5°59'21		minimum elong	16578 Dec 18 21:16	15° ♄ 30'46 5°09'34
min. Earth dist.	16578 Jan 08 15:16	5° ♄ 22'13 0.54369 AU		min. Earth dist.	16578 Dec 20 20:51	14° ♄ 20'28 0.54711 AU
morning rise	16578 Jan 16 22:43	1° ♄ 36'08		morning rise	16578 Dec 27 05:52	11° ♄ 15'14
direct	16578 Jan 20 13:51	1° ♄ 07'16		direct	16578 Dec 31 23:11	10° ♄ 27'06
morning max el	16578 Feb 02 02:38	7° ♄ 12'13 22°07'17		morning max el	16579 Jan 14 12:23	17° ♄ 07'52 23°56'44
asc. node	16578 Feb 07 12:17	13° ♄ 23'42			16579 Jan 24 19:15	0° ♄
	16578 Feb 17 14:45	0° ♄		asc. node	16579 Jan 25 09:31	0° ♄ 55'26
morning set	16578 Feb 23 08:59	11° ♄ 42'00		morning set	16579 Feb 07 20:56	26° ♄ 25'01
					16579 Feb 09 12:44	0° ♄
superior conj	16578 Mar 02 11:03	26° ♄ 47'41 1°14'50		superior conj	16579 Feb 14 16:28	11° ♄ 16'03 1°28'45
minimum elong	16578 Mar 02 13:26	27° ♄ 00'16 1°14'38		minimum elong	16579 Feb 14 18:13	11° ♄ 25'35 1°28'50
	16578 Mar 03 23:43	0° ♄		max. Earth dist.	16579 Feb 17 08:30	17° ♄ 01'20 1.32642 AU
max. Earth dist.	16578 Mar 06 11:48	5° ♄ 09'24 1.34200 AU		evening rise	16579 Feb 22 07:58	27° ♄ 21'07
evening rise	16578 Mar 10 19:22	13° ♄ 41'59			16579 Feb 23 15:53	0° ♄
desc. node	16578 Mar 11 23:31	15° ♄ 56'25		desc. node	16579 Feb 26 20:15	6° ♄ 07'41
	16578 Mar 19 19:39	0° ♄			16579 Mar 13 02:10	0° ♄
	16578 Apr 09 14:27	0° ♄		evening max el	16579 Mar 28 07:46	18° ♄ 55'10 27°30'10
evening max el	16578 Apr 14 18:56	5° ♄ 34'39 26°56'07		retrograde	16579 Apr 11 02:00	26° ♄ 28'20
retrograde	16578 Apr 28 02:53	13° ♄ 04'27		evening set	16579 Apr 17 20:01	24° ♄ 01'59
evening set	16578 May 04 15:09	10° ♄ 32'10		min. Earth dist.	16579 Apr 21 14:56	20° ♄ 40'28 0.64066 AU
asc. node	16578 May 06 09:54	8° ♄ 57'35		asc. node	16579 Apr 23 07:07	18° ♄ 55'44
min. Earth dist.	16578 May 08 13:41	6° ♄ 40'06 0.65943 AU		inferior conj	16579 Apr 24 07:30	17° ♄ 51'07 0°19'00
inferior conj	16578 May 10 18:07	4° ♄ 08'08 1°17'34		minimum elong	16579 Apr 24 06:57	17° ♄ 52'34 0°18'24
minimum elong	16578 May 10 16:18	4° ♄ 13'26 1°16'25		morning rise	16579 Apr 30 20:13	12° ♄ 31'32
	16578 May 14 17:06	30° ♄		direct	16579 May 03 09:22	11° ♄ 58'50
morning rise	16578 May 16 18:50	28° ♄ 33'47		morning max el	16579 May 09 17:43	15° ♄ 13'26 17°48'52
direct	16578 May 19 16:54	27° ♄ 47'14			16579 May 20 07:48	0° ♄
	16578 May 24 19:34	0° ♄		desc. node	16579 May 25 20:58	9° ♄ 17'07
morning max el	16578 May 26 00:33	1° ♄ 04'50 18°07'21		morning set	16579 May 26 15:41	10° ♄ 36'05
desc. node	16578 Jun 08 00:02	19° ♄ 09'12			16579 Jun 07 08:05	0° ♄
morning set	16578 Jun 13 22:59	28° ♄ 44'15		superior conj	16579 Jun 08 20:43	2° ♄ 28'04 -1°38'09
	16578 Jun 14 17:47	0° ♄		minimum elong	16579 Jun 08 12:20	1° ♄ 54'18 1°37'52
superior conj	16578 Jun 28 21:30	22° ♄ 30'30 -2°04'43		max. Earth dist.	16579 Jun 14 01:07	10° ♄ 43'56 1.45237 AU
minimum elong	16578 Jun 28 14:44	22° ♄ 03'57 2°04'55		evening rise	16579 Jun 24 12:18	26° ♄ 58'34
max. Earth dist.	16578 Jul 01 05:33	26° ♄ 09'35 1.45961 AU			16579 Jun 26 11:53	0° ♄
	16578 Jul 03 16:41	0° ♄			16579 Jul 17 06:51	0° ♄
evening rise	16578 Jul 15 00:59	17° ♄ 34'27		asc. node	16579 Jul 20 06:14	3° ♄ 33'46
	16578 Jul 23 03:00	0° ♄		evening max el	16579 Jul 22 03:28	5° ♄ 33'43 20°10'40
greatest brilliancy	16578 Jul 26 21:48	5° ♄ 42'49 -0.7m		retrograde	16579 Jul 29 21:37	9° ♄ 57'35
asc. node	16578 Aug 02 09:25	14° ♄ 59'40		evening set	16579 Aug 02 21:38	8° ♄ 25'55
evening max el	16578 Aug 07 23:36	21° ♄ 38'58 19°13'51		inferior conj	16579 Aug 08 04:10	2° ♄ 23'44 3°01'50
retrograde	16578 Aug 14 22:39	25° ♄ 29'30		minimum elong	16579 Aug 08 05:11	2° ♄ 20'15 3°01'25
evening set	16578 Aug 18 12:15	24° ♄ 15'46		min. Earth dist.	16579 Aug 09 00:59	1° ♄ 12'49 0.68308 AU
inferior conj	16578 Aug 23 22:40	18° ♄ 25'31 2°44'01			16579 Aug 09 22:45	30° ♄
minimum elong	16578 Aug 24 00:29	18° ♄ 19'33 2°43'31		morning rise	16579 Aug 13 12:21	25° ♄ 58'39
min. Earth dist.	16578 Aug 25 09:13	16° ♄ 33'10 0.67150 AU		direct	16579 Aug 19 01:16	23° ♄ 33'54
morning rise	16578 Aug 29 12:04	11° ♄ 58'22		desc. node	16579 Aug 21 19:25	24° ♄ 04'20
desc. node	16578 Sep 03 22:07	9° ♄ 25'36			16579 Aug 30 01:44	0° ♄
direct	16578 Sep 04 12:04	9° ♄ 24'16		morning max el	16579 Aug 30 11:06	0° ♄ 23'25 24°22'39
morning max el	16578 Sep 16 23:59	16° ♄ 50'57 25°47'08			16579 Sep 21 20:18	0° ♄
	16578 Sep 27 23:25	0° ♄		morning set	16579 Oct 04 22:16	21° ♄ 16'48
	16578 Oct 17 12:41	0° ♄		max. Earth dist.	16579 Oct 08 12:46	27° ♄ 38'06 1.37928 AU
morning set	16578 Oct 22 22:21	9° ♄ 34'24			16579 Oct 09 20:11	0° ♄
max. Earth dist.	16578 Oct 26 13:29	16° ♄ 21'13 1.35611 AU		superior conj	16579 Oct 15 18:19	11° ♄ 05'24 -0°04'47
asc. node	16578 Oct 29 10:21	21° ♄ 54'36		minimum elong	16579 Oct 15 18:37	11° ♄ 06'50 0°04'23
				behind sun begin	16579 Oct 15 12:01	10° ♄ 35'07
superior conj	16578 Nov 01 11:49	28° ♄ 01'10 0°27'22				
minimum elong	16578 Nov 01 10:17	27° ♄ 53'26 0°27'33				

behind sun end	16579 Oct 16 01:13	11°♄38'38			16580 Sep 30 22:21	0°♄	
asc. node	16579 Oct 16 07:08	12°♄07'15		asc. node	16580 Oct 02 03:54	2°♄18'30	
evening rise	16579 Oct 24 08:33	28°♄03'09		evening rise	16580 Oct 07 03:14	11°♄44'54	
	16579 Oct 25 08:05	0°♄			16580 Oct 17 07:22	0°♄	
evening max el	16579 Nov 09 23:41	25°♄22'04	19°12'43	evening max el	16580 Oct 23 01:50	7°♄30'38	18°28'39
desc. node	16579 Nov 17 17:05	29°♄52'31		retrograde	16580 Oct 30 22:20	11°♄29'55	
retrograde	16579 Nov 19 04:32	29°♄59'26		evening set	16580 Nov 01 21:41	11°♄15'35	
evening set	16579 Nov 21 02:15	29°♄48'24		desc. node	16580 Nov 03 14:13	10°♄41'59	
inferior conj	16579 Nov 29 13:37	25°♄37'18	-3°41'49	inferior conj	16580 Nov 09 17:37	6°♄43'30	-1°58'57
minimum elong	16579 Nov 29 04:46	25°♄52'09	3°38'09	minimum elong	16580 Nov 09 12:55	6°♄52'40	1°56'31
min. Earth dist.	16579 Dec 02 06:25	23°♄48'46	0.55932 AU	min. Earth dist.	16580 Nov 12 22:35	4°♄13'35	0.57814 AU
morning rise	16579 Dec 07 04:50	21°♄04'55		morning rise	16580 Nov 17 00:47	1°♄34'31	
direct	16579 Dec 12 20:00	19°♄51'50			16580 Nov 21 19:42	30°♄	
morning max el	16579 Dec 26 21:36	27°♄01'06	25°42'09	direct	16580 Nov 23 07:24	29°♄54'20	
	16579 Dec 29 18:51	0°♄			16580 Nov 24 19:21	0°♄	
asc. node	16580 Jan 12 06:42	19°♄17'17		morning max el	16580 Dec 07 13:19	7°♄25'18	27°04'16
	16580 Jan 18 00:51	0°♄			16580 Dec 24 10:57	0°♄	
morning set	16580 Jan 23 08:27	11°♄02'10		asc. node	16580 Dec 29 03:49	8°♄16'37	
				morning set	16581 Jan 06 17:44	25°♄28'46	
superior conj	16580 Jan 30 01:46	25°♄52'15	1°36'28		16581 Jan 08 19:42	0°♄	
minimum elong	16580 Jan 30 02:34	25°♄56'44	1°36'49	superior conj	16581 Jan 13 12:56	10°♄30'19	1°38'07
max. Earth dist.	16580 Jan 31 11:37	28°♄59'37	1.31565 AU	minimum elong	16581 Jan 13 12:41	10°♄28'56	1°38'35
	16580 Jan 31 22:34	0°♄		max. Earth dist.	16581 Jan 13 18:32	11°♄01'40	1.31020 AU
evening rise	16580 Feb 06 05:17	11°♄20'10		evening rise	16581 Jan 20 08:56	25°♄33'18	
desc. node	16580 Feb 13 16:59	26°♄02'21			16581 Jan 22 11:44	0°♄	
	16580 Feb 15 21:38	0°♄		desc. node	16581 Jan 30 13:45	15°♄33'21	
	16580 Mar 08 00:46	0°♄			16581 Feb 08 13:24	0°♄	
evening max el	16580 Mar 09 17:46	1°♄42'12	27°34'42	evening max el	16581 Feb 19 22:30	13°♄43'41	27°04'52
retrograde	16580 Mar 23 17:37	9°♄10'45		retrograde	16581 Mar 05 23:48	21°♄01'37	
evening set	16580 Mar 30 12:37	6°♄58'01		evening set	16581 Mar 12 13:48	19°♄09'45	
min. Earth dist.	16580 Apr 03 06:55	4°♄00'53	0.61906 AU	min. Earth dist.	16581 Mar 16 12:47	16°♄28'01	0.59631 AU
inferior conj	16580 Apr 06 08:50	1°♄08'39	-0°53'57	inferior conj	16581 Mar 19 18:21	13°♄50'12	-2°19'54
minimum elong	16580 Apr 06 10:42	1°♄04'17	0°53'27	minimum elong	16581 Mar 19 23:42	13°♄39'17	2°17'54
	16580 Apr 07 14:38	30°♄		asc. node	16581 Mar 27 01:36	9°♄15'35	
asc. node	16580 Apr 09 04:20	28°♄39'10		morning rise	16581 Mar 27 13:12	9°♄07'27	
morning rise	16580 Apr 13 12:00	26°♄06'14		direct	16581 Mar 29 13:17	8°♄52'05	
direct	16580 Apr 15 17:30	25°♄44'01		morning max el	16581 Apr 06 01:07	12°♄35'57	18°06'04
morning max el	16580 Apr 22 11:06	29°♄07'34	17°48'05		16581 Apr 17 17:18	0°♄	
	16580 Apr 23 07:34	0°♄		morning set	16581 Apr 21 15:16	7°♄12'32	
morning set	16580 May 08 07:04	23°♄31'31		desc. node	16581 Apr 28 14:42	20°♄05'30	
desc. node	16580 May 11 17:51	29°♄37'35					
	16580 May 11 22:57	0°♄		superior conj	16581 May 01 14:32	25°♄28'24	-0°24'45
superior conj	16580 May 19 18:10	13°♄27'30	-1°02'26	minimum elong	16581 May 01 12:30	25°♄19'18	0°24'52
minimum elong	16580 May 19 12:31	13°♄03'37	1°02'10		16581 May 04 04:16	0°♄	
max. Earth dist.	16580 May 26 17:10	24°♄56'14	1.43852 AU	max. Earth dist.	16581 May 09 04:51	8°♄34'36	1.41951 AU
	16580 May 29 21:06	0°♄		evening rise	16581 May 14 08:24	17°♄00'53	
evening rise	16580 Jun 03 02:16	6°♄36'39			16581 May 22 16:15	0°♄	
	16580 Jun 18 18:28	0°♄			16581 Jun 13 14:05	0°♄	
evening max el	16580 Jul 04 01:20	19°♄29'02	21°20'28	evening max el	16581 Jun 16 18:20	3°♄24'15	22°39'05
asc. node	16580 Jul 06 03:07	21°♄24'00		asc. node	16581 Jun 23 00:01	8°♄15'06	
retrograde	16580 Jul 12 20:31	24°♄34'38		retrograde	16581 Jun 26 17:38	9°♄14'23	
evening set	16580 Jul 17 07:35	22°♄45'27		evening set	16581 Jul 01 16:19	7°♄09'03	
inferior conj	16580 Jul 22 12:58	16°♄32'47	3°07'56	inferior conj	16581 Jul 06 23:00	0°♄47'37	3°03'20
minimum elong	16580 Jul 22 13:03	16°♄32'30	3°07'29	minimum elong	16581 Jul 06 22:09	0°♄50'34	3°02'43
min. Earth dist.	16580 Jul 22 20:26	16°♄06'47	0.68993 AU	min. Earth dist.	16581 Jul 06 17:20	1°♄07'20	0.69190 AU
morning rise	16580 Jul 27 18:16	10°♄13'04			16581 Jul 07 12:43	30°♄	
direct	16580 Aug 01 19:17	8°♄02'47		morning rise	16581 Jul 12 03:51	24°♄35'29	
desc. node	16580 Aug 07 16:39	10°♄21'03		direct	16581 Jul 16 16:47	22°♄43'04	
morning max el	16580 Aug 11 22:53	14°♄03'54	22°53'30	morning max el	16581 Jul 25 14:02	27°♄52'19	21°28'02
	16580 Aug 24 20:54	0°♄		desc. node	16581 Jul 25 13:53	27°♄51'58	
	16580 Sep 13 18:01	0°♄			16581 Jul 27 14:22	0°♄	
morning set	16580 Sep 15 00:18	2°♄03'46			16581 Aug 18 10:16	0°♄	
max. Earth dist.	16580 Sep 19 12:14	9°♄35'16	1.40353 AU	morning set	16581 Aug 26 02:43	11°♄51'10	
				max. Earth dist.	16581 Sep 01 17:15	22°♄27'16	1.42595 AU
superior conj	16580 Sep 27 09:28	23°♄28'36	-0°40'55		16581 Sep 06 06:15	0°♄	
minimum elong	16580 Sep 27 12:39	23°♄43'08	0°40'12				

superior conj	16581 Sep 09 04:50	5° Ω 00'27	-1°17'57	superior conj	16582 Aug 21 01:02	15° Π 33'41	-1°50'24
minimum elong	16581 Sep 09 11:18	5° Ω 28'16	1°17'03	minimum elong	16582 Aug 21 08:59	16° Π 06'15	1°49'53
asc. node	16581 Sep 19 00:39	22° Ω 24'22			16582 Aug 29 16:43	0° Ω	
evening rise	16581 Sep 20 10:03	24° Ω 55'37		evening rise	16582 Sep 03 00:07	7° Ω 22'40	
	16581 Sep 23 05:21	0° Π		asc. node	16582 Sep 05 21:23	12° Ω 20'34	
evening max el	16581 Oct 06 12:11	20° Π 18'49	18°05'34		16582 Sep 17 00:13	0° Π	
retrograde	16581 Oct 13 10:44	23° Π 52'41		evening max el	16582 Sep 20 02:33	3° Π 35'33	18°01'49
evening set	16581 Oct 15 16:19	23° Π 30'52		retrograde	16582 Sep 26 13:36	6° Π 57'32	
desc. node	16581 Oct 21 11:23	19° Π 47'56		evening set	16582 Sep 29 03:07	6° Π 24'38	
inferior conj	16581 Oct 22 18:55	18° Π 37'26	-0°25'10	inferior conj	16582 Oct 05 14:14	1° Π 12'17	0°50'49
minimum elong	16581 Oct 22 18:04	18° Π 39'23	0°24'25	minimum elong	16582 Oct 05 15:39	1° Π 08'36	0°50'33
min. Earth dist.	16581 Oct 25 23:32	15° Π 44'13	0.60040 AU		16582 Oct 06 17:55	30° \mathbb{R} Ω	
morning rise	16581 Oct 29 16:36	12° Π 55'44		desc. node	16582 Oct 08 08:40	28° Ω 20'38	
direct	16581 Nov 05 07:29	10° Π 50'57		min. Earth dist.	16582 Oct 08 10:39	28° Ω 15'40	0.62327 AU
morning max el	16581 Nov 19 13:22	18° Π 37'55	27°50'32	morning rise	16582 Oct 12 01:41	25° Ω 06'25	
	16581 Nov 29 03:59	0° \mathbb{X}		direct	16582 Oct 18 18:11	22° Ω 42'52	
asc. node	16581 Dec 16 00:53	27° \mathbb{X} 43'47			16582 Nov 01 03:55	0° Π	
	16581 Dec 17 04:56	0° \mathbb{Z}		morning max el	16582 Nov 01 20:08	0° Π 39'36	27°57'16
morning set	16581 Dec 21 22:58	9° \mathbb{Z} 40'39			16582 Nov 23 07:23	0° \mathbb{X}	
max. Earth dist.	16581 Dec 28 01:47	23° \mathbb{Z} 00'40	1.31028 AU	asc. node	16582 Dec 02 21:53	17° \mathbb{X} 30'19	
				morning set	16582 Dec 05 21:58	23° \mathbb{X} 32'03	
superior conj	16581 Dec 29 00:07	25° \mathbb{Z} 05'27	1°33'41		16582 Dec 09 00:10	0° \mathbb{Z}	
minimum elong	16581 Dec 28 22:52	24° \mathbb{Z} 58'28	1°34'11	max. Earth dist.	16582 Dec 11 05:24	4° \mathbb{Z} 46'43	1.31599 AU
	16581 Dec 31 04:46	0° \approx					
evening rise	16582 Jan 04 16:51	9° \approx 55'49		superior conj	16582 Dec 13 09:22	9° \mathbb{Z} 31'32	1°23'09
	16582 Jan 14 19:29	0° \mathbb{H}		minimum elong	16582 Dec 13 07:20	9° \mathbb{Z} 20'22	1°23'32
desc. node	16582 Jan 17 10:33	4° \mathbb{H} 32'10		evening rise	16582 Dec 20 03:02	24° \mathbb{Z} 22'14	
evening max el	16582 Feb 01 19:30	24° \mathbb{H} 52'30	26°00'15		16582 Dec 22 18:30	0° \approx	
	16582 Feb 08 15:44	0° Υ		desc. node	16583 Jan 04 07:25	22° \approx 46'23	
retrograde	16582 Feb 15 18:31	1° Υ 56'47			16583 Jan 09 14:05	0° \mathbb{H}	
evening set	16582 Feb 21 20:09	0° Υ 30'35		evening max el	16583 Jan 14 08:11	5° \mathbb{H} 11'53	24°28'17
	16582 Feb 22 20:58	30° \mathbb{R} \mathbb{H}		retrograde	16583 Jan 28 00:10	12° \mathbb{H} 00'28	
min. Earth dist.	16582 Feb 26 08:35	27° \mathbb{H} 52'06	0.57469 AU	evening set	16583 Feb 02 04:33	11° \mathbb{H} 01'30	
inferior conj	16582 Mar 01 08:27	25° \mathbb{H} 45'49	-3°52'01	min. Earth dist.	16583 Feb 07 20:03	8° \mathbb{H} 09'51	0.55694 AU
minimum elong	16582 Mar 01 17:11	25° \mathbb{H} 30'26	3°49'02	inferior conj	16583 Feb 10 01:09	6° \mathbb{H} 48'15	-5°14'03
morning rise	16582 Mar 09 17:22	21° \mathbb{H} 24'34		minimum elong	16583 Feb 10 10:06	6° \mathbb{H} 34'29	5°11'50
direct	16582 Mar 11 16:26	21° \mathbb{H} 12'17		morning rise	16583 Feb 18 17:45	2° \mathbb{H} 47'16	
asc. node	16582 Mar 13 22:51	21° \mathbb{H} 29'30		direct	16583 Feb 20 23:42	2° \mathbb{H} 33'52	
morning max el	16582 Mar 20 07:51	25° \mathbb{H} 27'22	18°44'33	asc. node	16583 Feb 28 20:09	5° \mathbb{H} 30'42	
	16582 Mar 24 04:26	0° Υ		morning max el	16583 Mar 03 03:02	7° \mathbb{H} 29'33	19°45'33
morning set	16582 Apr 05 11:13	21° Υ 24'12			16583 Mar 17 15:59	0° Υ	
	16582 Apr 09 21:19	0° \mathbb{B}		morning set	16583 Mar 20 15:01	5° Υ 54'23	
superior conj	16582 Apr 14 06:28	8° \mathbb{B} 21'28	0°10'15	superior conj	16583 Mar 28 13:31	21° Υ 54'08	0°40'09
minimum elong	16582 Apr 14 07:08	8° \mathbb{B} 24'36	0°09'49	minimum elong	16583 Mar 28 15:38	22° Υ 04'36	0°39'37
behind sun begin	16582 Apr 14 01:39	7° \mathbb{B} 58'53			16583 Apr 01 17:52	0° \mathbb{B}	
behind sun end	16582 Apr 14 12:36	8° \mathbb{B} 50'16		desc. node	16583 Apr 02 08:17	1° \mathbb{B} 08'05	
desc. node	16582 Apr 15 11:31	10° \mathbb{B} 37'04		max. Earth dist.	16583 Apr 03 18:49	3° \mathbb{B} 49'24	1.37423 AU
max. Earth dist.	16582 Apr 21 12:37	21° \mathbb{B} 31'56	1.39730 AU	evening rise	16583 Apr 07 11:18	10° \mathbb{B} 30'55	
evening rise	16582 Apr 25 11:44	28° \mathbb{B} 20'37			16583 Apr 19 04:27	0° Π	
	16582 Apr 26 11:25	0° Π			16583 May 11 16:20	0° \mathbb{E}	
	16582 May 16 03:50	0° \mathbb{E}		evening max el	16583 May 12 21:54	1° \mathbb{E} 14'50	25°18'49
evening max el	16582 May 30 08:33	17° \mathbb{E} 20'02	24°00'47	retrograde	16583 May 25 02:03	8° \mathbb{E} 18'49	
asc. node	16582 Jun 09 20:59	23° \mathbb{E} 49'43		asc. node	16583 May 27 18:02	7° \mathbb{E} 49'40	
retrograde	16582 Jun 10 11:48	23° \mathbb{E} 51'20		evening set	16583 May 30 23:40	5° \mathbb{E} 50'15	
evening set	16582 Jun 15 22:13	21° \mathbb{E} 32'23		min. Earth dist.	16583 Jun 04 07:10	1° \mathbb{E} 03'26	0.68096 AU
min. Earth dist.	16582 Jun 20 13:35	16° \mathbb{E} 08'25	0.68890 AU		16583 Jun 05 02:44	30° \mathbb{R} Π	
inferior conj	16582 Jun 21 08:22	15° \mathbb{E} 04'35	2°48'19	inferior conj	16583 Jun 05 15:07	29° Π 19'34	2°22'30
minimum elong	16582 Jun 21 06:44	15° \mathbb{E} 10'07	2°47'26	minimum elong	16583 Jun 05 13:01	29° Π 26'28	2°21'23
morning rise	16582 Jun 26 15:17	9° \mathbb{E} 01'27		morning rise	16583 Jun 11 02:46	23° Π 26'34	
direct	16582 Jun 30 16:24	7° \mathbb{E} 28'33		direct	16583 Jun 14 16:39	22° Π 13'04	
morning max el	16582 Jul 08 11:18	11° \mathbb{E} 51'26	20°12'36	morning max el	16583 Jun 21 15:51	26° Π 00'48	19°11'12
desc. node	16582 Jul 12 11:06	16° \mathbb{E} 18'21			16583 Jun 25 05:40	0° \mathbb{E}	
	16582 Jul 22 12:23	0° \mathbb{Q}		desc. node	16583 Jun 29 08:15	5° \mathbb{E} 25'46	
morning set	16582 Aug 05 11:03	20° \mathbb{Q} 54'46		greatest brilliancy	16583 Jul 04 11:18	12° \mathbb{E} 51'06	-0.7m
	16582 Aug 11 07:34	0° Π		morning set	16583 Jul 15 17:08	29° \mathbb{E} 57'42	
max. Earth dist.	16582 Aug 15 05:16	6° Π 10'06	1.44397 AU		16583 Jul 15 17:44	0° \mathbb{Q}	

max. Earth dist.	16583 Jul 28 22:26	20° Ω 28'09	1.45576 AU	minimum elong	16584 Jul 10 06:01	4° Ω 16'24	2°13'12
				max. Earth dist.	16584 Jul 10 18:07	5° Ω 03'33	1.46032 AU
superior conj	16583 Jul 31 23:16	25° Ω 14'20	-2°10'51	evening rise	16584 Jul 26 07:02	29° Ω 20'02	
minimum elong	16583 Aug 01 03:48	25° Ω 32'10	2°11'05		16584 Jul 26 17:13	0° Π	
	16583 Aug 03 23:27	0° Π		greatest brilliancy	16584 Aug 04 06:06	13° Π 20'44	-0.8m
evening rise	16583 Aug 15 16:13	18° Π 53'25		asc. node	16584 Aug 09 14:55	21° Π 24'50	
	16583 Aug 22 11:33	0° Ω			16584 Aug 16 05:59	0° Ω	
asc. node	16583 Aug 23 18:08	2° Ω 02'51		evening max el	16584 Aug 17 05:32	1° Ω 00'53	18°48'05
evening max el	16583 Sep 03 17:20	17° Ω 12'22	18°16'15	retrograde	16584 Aug 23 21:11	4° Ω 37'47	
retrograde	16583 Sep 10 02:22	20° Ω 35'25		evening set	16584 Aug 27 04:58	3° Ω 34'22	
evening set	16583 Sep 13 00:40	19° Ω 48'26			16584 Aug 31 01:01	30° \mathbb{R} Π	
inferior conj	16583 Sep 18 23:32	14° Ω 19'57	1°47'49	inferior conj	16584 Sep 01 19:00	27° Π 51'49	2°27'45
minimum elong	16583 Sep 19 01:47	14° Ω 13'26	1°47'13	minimum elong	16584 Sep 01 21:09	27° Π 45'03	2°27'11
min. Earth dist.	16583 Sep 21 07:51	11° Ω 37'49	0.64458 AU	min. Earth dist.	16584 Sep 03 13:41	25° Π 38'10	0.66284 AU
morning rise	16583 Sep 25 01:14	7° Ω 59'35		morning rise	16584 Sep 07 12:21	21° Π 25'18	
desc. node	16583 Sep 25 05:57	7° Ω 50'20		desc. node	16584 Sep 11 03:16	19° Π 14'57	
direct	16583 Oct 01 14:14	5° Ω 25'06		direct	16584 Sep 13 17:59	18° Π 48'27	
morning max el	16583 Oct 15 06:42	13° Ω 21'43	27°27'51	morning max el	16584 Sep 26 18:13	26° Π 30'44	26°29'46
	16583 Oct 28 17:35	0° \mathbb{L}			16584 Sep 30 00:09	0° Ω	
	16583 Nov 15 21:30	0° \mathbb{X}			16584 Oct 21 07:45	0° \mathbb{L}	
morning set	16583 Nov 19 12:14	6° \mathbb{X} 57'35		morning set	16584 Nov 01 14:38	19° \mathbb{L} 49'50	
asc. node	16583 Nov 19 18:52	7° \mathbb{X} 30'19		max. Earth dist.	16584 Nov 05 11:56	27° \mathbb{L} 19'35	1.34427 AU
max. Earth dist.	16583 Nov 24 01:35	16° \mathbb{X} 12'45	1.32740 AU	asc. node	16584 Nov 05 15:46	27° \mathbb{L} 38'31	
					16584 Nov 06 20:12	0° \mathbb{X}	
superior conj	16583 Nov 27 14:39	23° \mathbb{X} 43'43	1°06'23				
minimum elong	16583 Nov 27 12:16	23° \mathbb{X} 30'54	1°06'37	superior conj	16584 Nov 10 13:32	7° \mathbb{X} 35'38	0°43'23
	16583 Nov 30 12:10	0° \mathbb{Z}		minimum elong	16584 Nov 10 11:27	7° \mathbb{X} 24'46	0°43'32
evening rise	16583 Dec 04 13:46	8° \mathbb{Z} 48'32		evening rise	16584 Nov 17 23:05	23° \mathbb{X} 09'59	
	16583 Dec 15 10:26	0° \approx			16584 Nov 21 06:28	0° \mathbb{Z}	
desc. node	16583 Dec 22 04:20	10° \approx 00'18		evening max el	16584 Dec 07 09:27	25° \mathbb{Z} 15'27	21°07'18
evening max el	16583 Dec 26 17:35	15° \approx 06'44	22°44'39	desc. node	16584 Dec 08 01:19	25° \mathbb{Z} 53'30	
retrograde	16584 Jan 08 17:11	21° \approx 31'45			16584 Dec 14 02:13	0° \approx	
evening set	16584 Jan 12 16:10	20° \approx 57'36		retrograde	16584 Dec 19 02:44	1° \approx 03'14	
min. Earth dist.	16584 Jan 20 02:45	17° \approx 33'05	0.54598 AU	evening set	16584 Dec 21 20:53	0° \approx 45'26	
inferior conj	16584 Jan 20 23:35	17° \approx 03'36	-5°59'48		16584 Dec 24 10:12	30° \mathbb{R} \mathbb{Z}	
minimum elong	16584 Jan 21 02:14	16° \approx 59'51	5°59'13	inferior conj	16584 Dec 30 14:11	26° \mathbb{Z} 55'15	-5°46'45
morning rise	16584 Jan 29 13:25	13° \approx 14'48		minimum elong	16584 Dec 30 07:39	27° \mathbb{Z} 04'30	5°45'20
direct	16584 Feb 01 13:30	12° \approx 54'04		min. Earth dist.	16584 Dec 31 08:03	26° \mathbb{Z} 29'56	0.54396 AU
morning max el	16584 Feb 13 07:28	18° \approx 35'04	21°09'43	morning rise	16585 Jan 07 18:33	23° \mathbb{Z} 03'37	
asc. node	16584 Feb 15 17:26	21° \approx 08'22		direct	16585 Jan 11 21:03	22° \mathbb{Z} 27'15	
	16584 Feb 22 02:54	0° \mathbb{H}		morning max el	16585 Jan 24 22:02	28° \mathbb{Z} 49'20	22°53'04
morning set	16584 Mar 03 23:43	20° \mathbb{H} 34'35			16585 Jan 26 02:30	0° \approx	
	16584 Mar 08 11:28	0° \mathbb{Y}		asc. node	16585 Feb 01 14:41	8° \approx 04'04	
					16585 Feb 13 22:23	0° \mathbb{H}	
superior conj	16584 Mar 11 07:43	5° \mathbb{Y} 55'28	1°03'59	morning set	16585 Feb 16 11:04	5° \mathbb{H} 18'31	
minimum elong	16584 Mar 11 10:14	6° \mathbb{Y} 08'26	1°03'37				
max. Earth dist.	16584 Mar 16 03:56	15° \mathbb{Y} 42'01	1.35279 AU	superior conj	16585 Feb 23 09:49	20° \mathbb{H} 16'34	1°21'30
desc. node	16584 Mar 19 05:01	21° \mathbb{Y} 34'53		minimum elong	16585 Feb 23 12:00	20° \mathbb{H} 28'10	1°21'25
evening rise	16584 Mar 20 04:01	23° \mathbb{Y} 23'07		max. Earth dist.	16585 Feb 26 20:05	27° \mathbb{H} 30'58	1.33478 AU
	16584 Mar 23 18:51	0° \mathbb{B}			16585 Feb 28 00:58	0° \mathbb{Y}	
	16584 Apr 11 20:18	0° \mathbb{I}		evening rise	16585 Mar 03 10:20	6° \mathbb{Y} 48'16	
evening max el	16584 Apr 24 11:29	15° \mathbb{I} 03'48	26°25'46	desc. node	16585 Mar 06 01:44	11° \mathbb{Y} 53'34	
retrograde	16584 May 07 11:19	22° \mathbb{I} 28'28			16585 Mar 16 09:53	0° \mathbb{B}	
evening set	16584 May 13 18:46	19° \mathbb{I} 55'42		evening max el	16585 Apr 07 01:11	28° \mathbb{B} 39'09	27°13'58
asc. node	16584 May 13 15:10	20° \mathbb{I} 02'59			16585 Apr 08 11:42	0° \mathbb{I}	
min. Earth dist.	16584 May 17 20:03	15° \mathbb{I} 44'19	0.66842 AU	retrograde	16585 Apr 20 14:32	6° \mathbb{I} 11'57	
inferior conj	16584 May 19 17:08	13° \mathbb{I} 27'09	1°44'58	evening set	16585 Apr 27 05:29	3° \mathbb{I} 41'30	
minimum elong	16584 May 19 15:01	13° \mathbb{I} 33'39	1°43'45	asc. node	16585 Apr 30 12:19	0° \mathbb{I} 39'57	
morning rise	16584 May 25 12:15	7° \mathbb{I} 45'29		min. Earth dist.	16585 May 01 02:15	0° \mathbb{I} 02'44	0.65178 AU
direct	16584 May 28 15:44	6° \mathbb{I} 49'53			16585 May 01 03:15	30° \mathbb{R} \mathbb{B}	
morning max el	16584 Jun 04 02:54	10° \mathbb{I} 15'09	18°25'48	inferior conj	16585 May 03 11:58	27° \mathbb{B} 21'50	0°54'29
desc. node	16584 Jun 15 05:19	25° \mathbb{I} 02'47		minimum elong	16585 May 03 10:34	27° \mathbb{B} 25'46	0°53'30
	16584 Jun 18 10:04	0° \mathbb{G}		morning rise	16585 May 09 17:25	21° \mathbb{B} 53'16	
morning set	16584 Jun 24 15:57	9° \mathbb{G} 50'07		direct	16585 May 12 11:30	21° \mathbb{B} 13'01	
	16584 Jul 07 12:14	0° Ω		morning max el	16585 May 18 18:33	24° \mathbb{B} 28'14	17°57'20
					16585 May 23 09:46	0° \mathbb{I}	
superior conj	16584 Jul 10 09:10	4° Ω 28'41	-2°12'45	desc. node	16585 Jun 02 02:19	15° \mathbb{I} 01'35	

morning set	16585 Jun 05 17:27	20° Π 59'17	direct	16586 Apr 26 00:59	5° \mathcal{B} 14'18	
	16585 Jun 11 05:42	0° \mathfrak{E}	morning max el	16586 May 02 12:07	8° \mathcal{B} 31'15	17°46'18
				16586 May 16 21:58	0° Π	
superior conj	16585 Jun 19 23:09	13° \mathfrak{E} 59'27 -1°55'06	morning set	16586 May 18 20:30	3° Π 20'16	
minimum elong	16585 Jun 19 14:57	13° \mathfrak{E} 27'00 1°55'04	desc. node	16586 May 19 23:13	5° Π 15'20	
max. Earth dist.	16585 Jun 23 14:26	19° \mathfrak{E} 42'54 1.45740 AU				
	16585 Jun 30 05:09	0° \mathcal{Q}	superior conj	16586 May 31 07:08	24° Π 21'13 -1°23'38	
evening rise	16585 Jul 06 00:40	8° \mathcal{Q} 56'43	minimum elong	16586 May 30 23:36	23° Π 50'18 1°23'18	
	16585 Jul 19 23:49	0° \mathfrak{M}		16586 Jun 03 18:29	0° \mathfrak{E}	
greatest brilliancy	16585 Jul 19 18:24	29° \mathcal{Q} 40'16 -0.6m	max. Earth dist.	16586 Jun 06 09:04	4° \mathfrak{E} 10'38 1.44727 AU	
asc. node	16585 Jul 27 11:42	10° \mathfrak{M} 19'12	evening rise	16586 Jun 15 10:59	18° \mathfrak{E} 21'21	
evening max el	16585 Jul 31 12:56	14° \mathfrak{M} 55'12 19°36'15		16586 Jun 23 03:44	0° \mathcal{Q}	
retrograde	16585 Aug 07 19:12	18° \mathfrak{M} 58'15	asc. node	16586 Jul 14 08:32	28° \mathcal{Q} 36'08	
evening set	16585 Aug 11 13:09	17° \mathfrak{M} 37'01	evening max el	16586 Jul 14 14:16	28° \mathcal{Q} 50'31 20°39'02	
inferior conj	16585 Aug 16 21:35	11° \mathfrak{M} 41'48 2°53'03		16586 Jul 15 19:33	0° \mathfrak{M}	
minimum elong	16585 Aug 16 23:06	11° \mathfrak{M} 36'45 2°52'36	retrograde	16586 Jul 22 18:15	3° \mathfrak{M} 30'52	
min. Earth dist.	16585 Aug 18 02:19	10° \mathfrak{M} 06'15 0.67705 AU	evening set	16586 Jul 26 23:00	1° \mathfrak{M} 51'28	
morning rise	16585 Aug 22 08:31	5° \mathfrak{M} 15'07		16586 Jul 28 21:19	30° \mathcal{R} \mathcal{Q}	
direct	16585 Aug 28 04:06	2° \mathfrak{M} 44'01	inferior conj	16586 Aug 01 04:44	25° \mathcal{Q} 44'45 3°05'46	
desc. node	16585 Aug 29 00:33	2° \mathfrak{M} 46'55	minimum elong	16586 Aug 01 05:22	25° \mathcal{Q} 42'35 3°05'21	
morning max el	16585 Sep 09 05:20	9° \mathfrak{M} 56'16 25°12'14	min. Earth dist.	16586 Aug 01 19:47	24° \mathcal{Q} 52'52 0.68661 AU	
	16585 Sep 25 03:47	0° \mathfrak{L}	morning rise	16586 Aug 06 11:26	19° \mathcal{Q} 21'56	
	16585 Oct 13 22:18	0° \mathfrak{M}	direct	16586 Aug 11 19:24	17° \mathcal{Q} 02'52	
morning set	16585 Oct 15 01:25	2° \mathfrak{M} 00'21	desc. node	16586 Aug 15 21:49	18° \mathcal{Q} 10'09	
max. Earth dist.	16585 Oct 18 13:53	8° \mathfrak{M} 25'07 1.36571 AU	morning max el	16586 Aug 22 16:26	23° \mathcal{Q} 32'02 23°44'51	
asc. node	16585 Oct 23 12:36	17° \mathfrak{M} 50'51		16586 Aug 28 10:08	0° \mathfrak{M}	
				16586 Sep 18 12:22	0° \mathfrak{L}	
superior conj	16585 Oct 25 03:04	21° \mathfrak{M} 00'08 0°14'22	morning set	16586 Sep 26 16:29	13° \mathfrak{L} 20'20	
minimum elong	16585 Oct 25 02:11	20° \mathfrak{M} 55'43 0°14'37	max. Earth dist.	16586 Sep 30 12:56	19° \mathfrak{L} 58'34 1.38966 AU	
behind sun begin	16585 Oct 24 23:27	20° \mathfrak{M} 42'11		16586 Oct 06 02:32	0° \mathfrak{M}	
behind sun end	16585 Oct 25 04:55	21° \mathfrak{M} 09'16				
	16585 Oct 29 14:20	0° \mathcal{Z}	superior conj	16586 Oct 08 03:38	3° \mathfrak{M} 48'49 -0°19'44	
evening rise	16585 Nov 02 04:53	7° \mathcal{Z} 21'32	minimum elong	16586 Oct 08 05:03	3° \mathfrak{M} 55'26 0°19'12	
	16585 Nov 14 15:36	0° \mathfrak{Z}	asc. node	16586 Oct 10 09:24	8° \mathfrak{M} 03'44	
evening max el	16585 Nov 19 14:49	6° \mathfrak{Z} 06'17 19°48'05	evening rise	16586 Oct 17 04:35	21° \mathfrak{M} 17'05	
desc. node	16585 Nov 24 22:21	10° \mathfrak{Z} 01'48		16586 Oct 21 17:10	0° \mathcal{Z}	
retrograde	16585 Nov 29 17:08	11° \mathfrak{Z} 08'44	evening max el	16586 Nov 02 10:15	17° \mathcal{Z} 47'58 18°51'14	
evening set	16585 Dec 01 18:32	10° \mathfrak{Z} 57'09	retrograde	16586 Nov 11 00:07	22° \mathcal{Z} 07'57	
inferior conj	16585 Dec 10 11:31	6° \mathfrak{Z} 56'21 -4°37'16	desc. node	16586 Nov 11 19:28	22° \mathcal{Z} 05'46	
minimum elong	16585 Dec 10 01:32	7° \mathfrak{Z} 11'48 4°33'49	evening set	16586 Nov 12 21:44	21° \mathcal{Z} 55'59	
min. Earth dist.	16585 Dec 12 14:49	5° \mathfrak{Z} 37'03 0.55138 AU	inferior conj	16586 Nov 21 03:04	17° \mathcal{Z} 35'50 -2°58'07	
morning rise	16585 Dec 18 07:10	2° \mathfrak{Z} 43'31	minimum elong	16586 Nov 20 19:51	17° \mathcal{Z} 48'46 2°54'48	
direct	16585 Dec 23 10:51	1° \mathfrak{Z} 45'02	min. Earth dist.	16586 Nov 24 02:36	15° \mathcal{Z} 28'15 0.56673 AU	
morning max el	16586 Jan 06 06:07	8° \mathfrak{Z} 38'27 24°43'15	morning rise	16586 Nov 28 15:04	12° \mathcal{Z} 48'11	
asc. node	16586 Jan 19 11:54	25° \mathfrak{Z} 59'05	direct	16586 Dec 04 13:35	11° \mathcal{Z} 23'55	
	16586 Jan 21 20:26	0° \approx	morning max el	16586 Dec 18 17:37	18° \mathcal{Z} 42'12 26°20'54	
morning set	16586 Jan 31 23:03	19° \approx 59'37		16586 Dec 28 05:15	0° \mathfrak{Z}	
	16586 Feb 05 12:43	0° \mathcal{H}	asc. node	16587 Jan 06 09:03	14° \mathfrak{Z} 38'43	
				16587 Jan 14 06:24	0° \approx	
superior conj	16586 Feb 07 17:08	4° \mathcal{H} 48'55 1°32'46	morning set	16587 Jan 16 09:52	4° \approx 33'24	
minimum elong	16586 Feb 07 18:30	4° \mathcal{H} 56'29 1°32'58				
max. Earth dist.	16586 Feb 09 19:56	9° \mathcal{H} 26'26 1.32125 AU	superior conj	16587 Jan 23 03:29	19° \approx 26'47 1°37'53	
evening rise	16586 Feb 15 02:59	20° \mathcal{H} 36'57	minimum elong	16587 Jan 23 03:51	19° \approx 28'48 1°38'19	
	16586 Feb 19 21:14	0° \mathcal{Y}	max. Earth dist.	16587 Jan 24 01:19	21° \approx 28'32 1.31274 AU	
desc. node	16586 Feb 20 22:26	1° \mathcal{Y} 58'38		16587 Jan 27 22:19	0° \mathcal{H}	
	16586 Mar 10 09:55	0° \mathcal{B}	evening rise	16587 Jan 30 03:19	4° \mathcal{H} 42'56	
evening max el	16586 Mar 20 13:18	11° \mathcal{B} 47'42 27°36'09	desc. node	16587 Feb 07 19:12	21° \mathcal{H} 44'24	
retrograde	16586 Apr 03 10:22	19° \mathcal{B} 18'56		16587 Feb 12 13:28	0° \mathcal{Y}	
evening set	16586 Apr 10 05:24	16° \mathcal{B} 57'48	evening max el	16587 Mar 02 21:23	24° \mathcal{Y} 16'27 27°26'13	
min. Earth dist.	16586 Apr 13 23:46	13° \mathcal{B} 47'21 0.63175 AU		16587 Mar 10 13:55	0° \mathcal{B}	
inferior conj	16586 Apr 16 20:38	10° \mathcal{B} 55'10 -0°10'10	retrograde	16587 Mar 16 21:50	1° \mathcal{B} 40'21	
minimum elong	16586 Apr 16 20:58	10° \mathcal{B} 54'20 0°10'23		16587 Mar 22 22:55	30° \mathcal{R} \mathcal{Y}	
transit middle	16586 Apr 16 20:58	10° \mathcal{B} 54'20 0°10'23	evening set	16587 Mar 23 15:47	29° \mathcal{Y} 35'36	
transit begin	16586 Apr 16 18:32	11° \mathcal{B} 00'27	min. Earth dist.	16587 Mar 27 11:15	26° \mathcal{Y} 46'31 0.60950 AU	
transit end	16586 Apr 16 23:23	10° \mathcal{B} 48'15	inferior conj	16587 Mar 30 15:41	23° \mathcal{Y} 58'22 -1°29'03	
asc. node	16586 Apr 17 09:31	10° \mathcal{B} 22'57	minimum elong	16587 Mar 30 18:56	23° \mathcal{Y} 51'11 1°27'56	
morning rise	16586 Apr 23 15:12	5° \mathcal{B} 42'13	asc. node	16587 Apr 04 06:45	20° \mathcal{Y} 21'05	

morning rise	16587 Apr 07 01:30	19° Υ 04'03		asc. node	16588 Mar 21 04:00	1° Υ 35'40	
direct	16587 Apr 09 04:30	18° Υ 45'05		direct	16588 Mar 21 17:33	1° Υ 34'31	
morning max el	16587 Apr 16 04:29	22° Υ 15'27	17°53'22	morning max el	16588 Mar 29 16:01	5° Υ 30'09	18°19'52
	16587 Apr 22 04:46	0° \mathcal{B}		morning set	16588 Apr 14 09:26	0° \mathcal{B} 32'30	
morning set	16587 May 01 19:40	16° \mathcal{B} 36'47			16588 Apr 14 02:34	0° \mathcal{B}	
desc. node	16587 May 06 20:05	25° \mathcal{B} 39'20		desc. node	16588 Apr 22 16:56	16° \mathcal{B} 09'30	
	16587 May 09 06:51	0° Π					
superior conj	16587 May 12 14:34	5° Π 47'19	-0°46'20	superior conj	16588 Apr 23 19:52	18° \mathcal{B} 12'33	-0°09'25
minimum elong	16587 May 12 10:29	5° Π 29'43	0°46'13	minimum elong	16588 Apr 23 19:08	18° \mathcal{B} 09'10	0°09'41
max. Earth dist.	16587 May 19 23:42	18° Π 10'58	1.43097 AU	behind sun begin	16588 Apr 23 13:14	17° \mathcal{B} 42'18	
evening rise	16587 May 26 06:35	28° Π 15'49		behind sun end	16588 Apr 24 01:02	18° \mathcal{B} 35'59	
	16587 May 27 09:11	0° \mathcal{E}			16588 Apr 30 11:54	0° Π	
	16587 Jun 16 20:26	0° Ω		max. Earth dist.	16588 May 01 09:20	1° Π 31'36	1.41026 AU
evening max el	16587 Jun 27 09:44	12° Ω 44'59	21°53'10	evening rise	16588 May 05 21:36	9° Π 03'43	
asc. node	16587 Jul 01 05:24	16° Ω 02'55			16588 May 19 09:26	0° \mathcal{E}	
retrograde	16587 Jul 06 16:35	18° Ω 09'38		evening max el	16588 Jun 09 01:08	26° \mathcal{E} 40'01	23°13'51
evening set	16587 Jul 11 08:38	16° Ω 13'04			16588 Jun 12 19:39	0° Ω	
inferior conj	16587 Jul 16 14:17	9° Ω 56'16	3°07'18	asc. node	16588 Jun 17 02:21	2° Ω 23'59	
minimum elong	16587 Jul 16 13:57	9° Ω 57'23	3°06'47	retrograde	16588 Jun 19 12:46	2° Ω 49'12	
min. Earth dist.	16587 Jul 16 16:02	9° Ω 50'06	0.69132 AU	evening set	16588 Jun 24 16:24	0° Ω 37'37	
morning rise	16587 Jul 21 19:06	3° Ω 39'43			16588 Jun 25 08:42	30° \mathcal{R} \mathcal{E}	
direct	16587 Jul 26 14:52	1° Ω 37'02		min. Earth dist.	16588 Jun 29 13:00	24° \mathcal{E} 51'50	0.69114 AU
desc. node	16587 Aug 02 19:04	5° Ω 00'44		inferior conj	16588 Jun 30 00:16	24° \mathcal{E} 12'52	2°58'16
morning max el	16587 Aug 05 05:26	7° Ω 15'54	22°16'24	minimum elong	16588 Jun 29 23:04	24° \mathcal{E} 17'00	2°57'33
	16587 Aug 22 20:52	0° \mathcal{M}		morning rise	16588 Jul 05 05:41	18° \mathcal{E} 04'15	
morning set	16587 Sep 07 08:25	23° \mathcal{M} 41'39		direct	16588 Jul 09 13:25	16° \mathcal{E} 20'13	
	16587 Sep 11 05:06	0° \mathcal{A}		morning max el	16588 Jul 17 23:02	21° \mathcal{E} 09'15	20°54'28
max. Earth dist.	16587 Sep 12 14:42	2° \mathcal{A} 19'45	1.41339 AU	desc. node	16588 Jul 19 16:17	22° \mathcal{E} 57'22	
					16588 Jul 25 10:43	0° Ω	
superior conj	16587 Sep 20 10:52	15° \mathcal{A} 50'50	-0°56'46		16588 Aug 15 01:31	0° \mathcal{M}	
minimum elong	16587 Sep 20 15:29	16° \mathcal{A} 11'23	0°55'56	morning set	16588 Aug 17 01:54	3° \mathcal{M} 07'06	
asc. node	16587 Sep 27 06:08	28° \mathcal{A} 13'01		max. Earth dist.	16588 Aug 24 22:17	15° \mathcal{M} 32'53	1.43421 AU
	16587 Sep 28 05:11	0° \mathcal{M}					
evening rise	16587 Sep 30 18:47	4° \mathcal{M} 47'09		superior conj	16588 Aug 31 20:36	26° \mathcal{M} 57'46	-1°32'40
	16587 Oct 16 10:45	0° \mathcal{A}		minimum elong	16588 Sep 01 04:07	27° \mathcal{M} 29'21	1°31'52
evening max el	16587 Oct 16 16:22	0° \mathcal{A} 14'15	18°16'21		16588 Sep 02 15:45	0° \mathcal{A}	
retrograde	16587 Oct 24 02:28	4° \mathcal{A} 01'35		evening rise	16588 Sep 12 19:08	17° \mathcal{A} 40'44	
evening set	16587 Oct 26 03:58	3° \mathcal{A} 44'39		asc. node	16588 Sep 13 02:54	18° \mathcal{A} 15'11	
desc. node	16587 Oct 29 16:38	2° \mathcal{A} 05'45			16588 Sep 19 20:08	0° \mathcal{M}	
	16587 Nov 01 12:57	30° \mathcal{R} \mathcal{M}		evening max el	16588 Sep 29 04:55	13° \mathcal{M} 15'34	18°01'44
inferior conj	16587 Nov 02 16:28	29° \mathcal{M} 03'10	-1°17'20	retrograde	16588 Oct 05 21:28	16° \mathcal{M} 42'48	
minimum elong	16587 Nov 02 13:34	29° \mathcal{M} 09'14	1°15'41	evening set	16588 Oct 08 06:13	16° \mathcal{M} 16'48	
min. Earth dist.	16587 Nov 05 22:26	26° \mathcal{M} 20'53	0.58731 AU	inferior conj	16588 Oct 15 01:56	11° \mathcal{M} 15'19	0°09'22
morning rise	16587 Nov 09 19:43	23° \mathcal{M} 39'04		minimum elong	16588 Oct 15 02:14	11° \mathcal{M} 14'34	0°09'35
direct	16587 Nov 16 06:25	21° \mathcal{M} 48'04		transit middle	16588 Oct 15 02:14	11° \mathcal{M} 14'34	0°09'35
morning max el	16587 Nov 30 13:15	29° \mathcal{M} 27'00	27°28'45	transit begin	16588 Oct 14 23:37	11° \mathcal{M} 20'54	
	16587 Dec 01 02:38	0° \mathcal{A}		transit end	16588 Oct 15 04:51	11° \mathcal{M} 08'14	
	16587 Dec 22 04:10	0° \mathcal{B}		desc. node	16588 Oct 15 13:51	10° \mathcal{M} 46'26	
asc. node	16587 Dec 24 06:10	3° \mathcal{B} 50'52		min. Earth dist.	16588 Oct 18 03:53	8° \mathcal{M} 17'55	0.61018 AU
morning set	16587 Dec 31 17:43	18° \mathcal{B} 54'32		morning rise	16588 Oct 21 19:15	5° \mathcal{M} 21'57	
	16588 Jan 05 19:17	0° \approx		direct	16588 Oct 28 11:35	3° \mathcal{M} 07'57	
				morning max el	16588 Nov 11 16:29	11° \mathcal{M} 00'56	27°58'04
superior conj	16588 Jan 07 14:55	4° \approx 04'11	1°36'58		16588 Nov 26 14:15	0° \mathcal{A}	
minimum elong	16588 Jan 07 14:13	4° \approx 00'20	1°37'29	asc. node	16588 Dec 10 03:14	23° \mathcal{A} 26'49	
max. Earth dist.	16588 Jan 07 08:53	3° \approx 30'25	1.30956 AU		16588 Dec 13 10:05	0° \mathcal{B}	
evening rise	16588 Jan 14 09:01	19° \approx 00'22		morning set	16588 Dec 14 20:36	2° \mathcal{B} 58'14	
	16588 Jan 19 16:56	0° \mathcal{H}		max. Earth dist.	16588 Dec 20 14:51	15° \mathcal{B} 23'39	1.31197 AU
desc. node	16588 Jan 25 16:01	11° \mathcal{H} 03'01					
	16588 Feb 07 11:48	0° Υ		superior conj	16588 Dec 22 01:32	18° \mathcal{B} 36'06	1°29'59
evening max el	16588 Feb 12 22:51	5° Υ 55'08	26°41'14	minimum elong	16588 Dec 21 23:55	18° \mathcal{B} 27'07	1°30'26
retrograde	16588 Feb 26 23:38	13° Υ 08'11			16588 Dec 27 04:36	0° \approx	
evening set	16588 Mar 04 09:27	11° Υ 26'26		evening rise	16588 Dec 28 18:07	3° \approx 24'44	
min. Earth dist.	16588 Mar 08 12:35	8° Υ 48'01	0.58683 AU	desc. node	16589 Jan 11 12:51	29° \approx 44'21	
inferior conj	16588 Mar 11 17:20	6° Υ 21'21	-2°58'56		16589 Jan 11 16:45	0° \mathcal{H}	
minimum elong	16588 Mar 12 00:16	6° Υ 08'04	2°56'23	evening max el	16589 Jan 24 16:06	16° \mathcal{H} 41'16	25°23'44
morning rise	16588 Mar 19 18:40	1° Υ 48'02		retrograde	16589 Feb 07 13:23	23° \mathcal{H} 39'57	
				evening set	16589 Feb 13 06:49	22° \mathcal{H} 25'31	

min. Earth dist.	16589 Feb 18 04:52	19° H 43'22	0.56643 AU		16590 Jan 29 21:36	30° R \approx	
inferior conj	16589 Feb 20 22:24	17° H 54'44	-4°29'29	min. Earth dist.	16590 Jan 30 14:07	29° \approx 36'10	0.55130 AU
minimum elong	16589 Feb 21 07:51	17° H 39'02	4°26'35	inferior conj	16590 Feb 01 06:42	28° \approx 36'29	-5°39'31
morning rise	16589 Mar 01 11:42	13° H 42'32		minimum elong	16590 Feb 01 13:48	28° \approx 26'01	5°38'06
direct	16589 Mar 03 12:13	13° H 30'29		morning rise	16590 Feb 09 23:22	24° \approx 41'41	
asc. node	16589 Mar 08 01:18	14° H 35'18		direct	16590 Feb 12 11:44	24° \approx 25'57	
morning max el	16589 Mar 12 18:26	18° H 02'22	19°07'38	asc. node	16590 Feb 22 22:35	29° \approx 19'43	
	16589 Mar 21 11:08	0° Y		morning max el	16590 Feb 23 07:34	29° \approx 41'10	20°18'27
morning set	16589 Mar 29 09:09	14° Y 53'12			16590 Feb 23 15:14	0° H	
	16589 Apr 06 01:20	0° B		morning set	16590 Mar 13 15:24	29° H 29'00	
					16590 Mar 13 21:27	0° Y	
superior conj	16589 Apr 06 18:47	1° B 23'56	0°23'37	superior conj	16590 Mar 21 07:02	15° Y 10'06	0°51'01
minimum elong	16589 Apr 06 20:13	1° B 30'48	0°23'06	minimum elong	16590 Mar 21 09:26	15° Y 22'10	0°50'31
desc. node	16589 Apr 09 13:45	6° B 41'15		max. Earth dist.	16590 Mar 26 22:40	26° Y 14'57	1.36488 AU
max. Earth dist.	16589 Apr 13 15:33	14° B 09'13	1.38742 AU	desc. node	16590 Mar 27 10:31	27° Y 11'05	
evening rise	16589 Apr 17 09:55	20° B 46'25			16590 Mar 28 22:35	0° B	
	16589 Apr 22 22:09	0° II		evening rise	16590 Mar 30 17:18	3° B 16'15	
	16589 May 13 10:17	0° E			16590 Apr 15 22:28	0° II	
evening max el	16589 May 22 14:50	10° E 35'51	24°34'54	evening max el	16590 May 05 04:29	24° II 29'47	25°49'04
retrograde	16589 Jun 03 05:28	17° E 22'39			16590 May 12 02:29	0° E	
asc. node	16589 Jun 03 23:21	17° E 20'20		retrograde	16590 May 17 17:34	1° E 43'13	
evening set	16589 Jun 08 20:36	14° E 59'19		asc. node	16590 May 21 20:24	0° E 35'22	
min. Earth dist.	16589 Jun 13 08:30	9° E 50'57	0.68609 AU		16590 May 22 18:50	30° R II	
inferior conj	16589 Jun 14 08:48	8° E 29'40	2°38'43	evening set	16590 May 23 19:33	29° II 12'25	
minimum elong	16589 Jun 14 06:55	8° E 35'58	2°37'46	min. Earth dist.	16590 May 28 00:21	24° II 40'49	0.67627 AU
morning rise	16589 Jun 19 17:22	2° E 30'24		inferior conj	16590 May 29 13:49	22° II 42'08	2°08'04
direct	16589 Jun 23 13:37	1° E 05'46		minimum elong	16590 May 29 11:37	22° II 49'06	2°06'54
morning max el	16589 Jun 30 23:16	5° E 12'27	19°44'31	morning rise	16590 Jun 04 04:17	16° II 53'36	
desc. node	16589 Jul 06 13:28	11° E 42'28		direct	16590 Jun 07 13:44	15° II 47'46	
	16589 Jul 19 08:17	0° O		morning max el	16590 Jun 14 06:40	19° II 24'04	18°49'45
morning set	16589 Jul 27 06:42	12° O 02'54			16590 Jun 22 17:06	0° E	
max. Earth dist.	16589 Aug 07 12:13	29° O 30'24	1.44984 AU	desc. node	16590 Jun 23 10:35	1° E 03'18	
	16589 Aug 07 19:43	0° P		greatest brilliancy	16590 Jun 27 21:55	7° E 44'00	-0.8m
superior conj	16589 Aug 12 06:53	7° P 06'44	-2°01'00	morning set	16590 Jul 06 17:54	21° E 21'17	
minimum elong	16589 Aug 12 14:07	7° P 35'47	2°00'48		16590 Jul 12 07:31	0° O	
evening rise	16589 Aug 26 00:23	29° P 44'24		max. Earth dist.	16590 Jul 21 07:09	13° O 58'55	1.45872 AU
	16589 Aug 26 04:05	0° A		superior conj	16590 Jul 22 22:05	16° O 31'02	-2°14'10
asc. node	16589 Aug 30 23:39	8° A 05'44		minimum elong	16590 Jul 22 23:32	16° O 36'42	2°14'35
evening max el	16589 Sep 12 19:54	26° A 41'48	18°05'53		16590 Jul 31 11:35	0° P	
	16589 Sep 18 12:57	0° M		evening rise	16590 Aug 07 05:45	10° P 47'16	
retrograde	16589 Sep 19 04:53	0° M 02'19		asc. node	16590 Aug 17 20:24	27° P 39'38	
	16589 Sep 19 20:47	30° R A			16590 Aug 19 09:21	0° A	
evening set	16589 Sep 21 22:08	29° A 23'43		evening max el	16590 Aug 27 09:54	10° A 24'03	18°27'45
inferior conj	16589 Sep 28 03:37	24° A 04'25	1°17'11	retrograde	16590 Sep 02 20:32	13° A 51'08	
minimum elong	16589 Sep 28 05:32	23° A 59'12	1°16'44	evening set	16590 Sep 05 22:55	12° A 57'11	
min. Earth dist.	16589 Sep 30 19:18	21° A 11'55	0.63264 AU	inferior conj	16590 Sep 11 17:36	7° A 22'23	2°06'42
desc. node	16589 Oct 02 11:06	19° A 32'45		minimum elong	16590 Sep 11 19:54	7° A 15'28	2°06'06
morning rise	16589 Oct 04 10:49	17° A 51'33		min. Earth dist.	16590 Sep 13 20:07	4° A 51'13	0.65282 AU
direct	16589 Oct 11 02:37	15° A 22'04		morning rise	16590 Sep 17 15:33	0° A 58'46	
morning max el	16589 Oct 25 00:56	23° A 19'56	27°48'48		16590 Sep 18 23:29	30° R P	
	16589 Oct 31 00:11	0° M		desc. node	16590 Sep 19 08:23	29° P 46'04	
	16589 Nov 19 21:34	0° A		direct	16590 Sep 24 01:51	28° P 22'29	
asc. node	16589 Nov 27 00:15	13° A 19'43			16590 Sep 29 16:23	0° A	
morning set	16589 Nov 28 16:14	16° A 39'25		morning max el	16590 Oct 07 12:03	6° A 13'58	27°06'13
max. Earth dist.	16589 Dec 03 15:36	27° A 01'10	1.32009 AU		16590 Oct 25 19:21	0° M	
	16589 Dec 05 00:48	0° B		morning set	16590 Nov 12 01:48	29° M 50'45	
superior conj	16589 Dec 06 09:24	2° B 57'22	1°16'50		16590 Nov 12 03:42	0° A	
minimum elong	16589 Dec 06 07:10	2° B 45'08	1°17'08	asc. node	16590 Nov 13 21:10	3° A 23'14	
evening rise	16589 Dec 13 04:47	17° B 51'58		max. Earth dist.	16590 Nov 16 07:51	8° A 18'17	1.33393 AU
	16589 Dec 19 01:26	0° \approx		superior conj	16590 Nov 20 12:14	17° A 01'05	0°57'25
desc. node	16589 Dec 29 09:44	17° \approx 35'23		minimum elong	16590 Nov 20 09:53	16° A 48'35	0°57'35
evening max el	16590 Jan 06 02:44	26° \approx 47'37	23°44'42		16590 Nov 26 13:33	0° B	
	16590 Jan 09 22:55	0° H		evening rise	16590 Nov 27 15:07	2° B 16'24	
retrograde	16590 Jan 19 13:15	3° H 26'52			16590 Dec 12 21:07	0° \approx	
evening set	16590 Jan 24 05:46	2° H 39'20					

desc. node	16590 Dec 16 06:40	4° \approx 17'19		retrograde	16591 Dec 11 11:49	22° \approx 35'23	
evening max el	16590 Dec 18 13:37	6° \approx 43'01	22°01'37	evening set	16591 Dec 13 20:56	22° \approx 21'17	
retrograde	16590 Dec 31 01:33	12° \approx 53'36		inferior conj	16591 Dec 22 15:36	18° \approx 27'38	-5°22'57
evening set	16591 Jan 03 11:46	12° \approx 27'29		minimum elong	16591 Dec 22 06:38	18° \approx 40'42	5°20'33
inferior conj	16591 Jan 12 00:02	8° \approx 37'06	-6°02'01	min. Earth dist.	16591 Dec 24 00:46	17° \approx 39'15	0.54598 AU
minimum elong	16591 Jan 11 22:35	8° \approx 39'07	6°01'29	morning rise	16591 Dec 30 16:00	14° \approx 29'10	
min. Earth dist.	16591 Jan 11 19:23	8° \approx 43'35	0.54397 AU	direct	16592 Jan 04 05:29	13° \approx 44'19	
morning rise	16591 Jan 20 10:13	4° \approx 49'42		morning max el	16592 Jan 17 16:08	20° \approx 20'43	23°40'18
direct	16591 Jan 23 21:17	4° \approx 23'15			16592 Jan 25 18:04	0° \approx	
morning max el	16591 Feb 05 05:28	10° \approx 21'59	21°51'49	asc. node	16592 Jan 27 17:06	2° \approx 54'28	
asc. node	16591 Feb 09 19:52	15° \approx 32'18		morning set	16592 Feb 10 13:19	28° \approx 54'20	
	16591 Feb 18 23:11	0° \approx			16592 Feb 11 01:33	0° \approx	
morning set	16591 Feb 26 01:30	14° \approx 11'25					
				superior conj	16592 Feb 17 09:32	13° \approx 46'44	1°27'02
superior conj	16591 Mar 05 04:56	29° \approx 20'24	1°12'11	minimum elong	16592 Feb 17 11:24	13° \approx 56'53	1°27'05
minimum elong	16591 Mar 05 07:22	29° \approx 33'11	1°11'54	max. Earth dist.	16592 Feb 20 06:12	19° \approx 55'06	1.32838 AU
	16591 Mar 05 12:29	0° \approx		evening rise	16592 Feb 25 03:12	29° \approx 58'11	
max. Earth dist.	16591 Mar 09 10:49	8° \approx 05'09	1.34469 AU		16592 Feb 25 03:34	0° \approx	
evening rise	16591 Mar 13 16:11	16° \approx 22'57		desc. node	16592 Feb 29 03:58	7° \approx 47'43	
desc. node	16591 Mar 14 07:15	17° \approx 34'38			16592 Mar 13 05:32	0° \approx	
	16591 Mar 21 04:06	0° \approx		evening max el	16592 Mar 30 07:14	21° \approx 38'20	27°26'54
	16591 Apr 10 08:48	0° \approx		retrograde	16592 Apr 13 00:28	29° \approx 12'03	
evening max el	16591 Apr 17 18:13	8° \approx 13'58	26°48'53	evening set	16592 Apr 19 17:48	26° \approx 44'17	
retrograde	16591 May 01 00:10	15° \approx 42'48		min. Earth dist.	16592 Apr 23 13:04	23° \approx 18'33	0.64362 AU
evening set	16591 May 07 11:21	13° \approx 10'04		asc. node	16592 Apr 24 14:42	22° \approx 11'02	
asc. node	16591 May 08 17:32	12° \approx 04'33		inferior conj	16592 Apr 26 03:58	20° \approx 30'47	0°28'51
min. Earth dist.	16591 May 11 10:30	9° \approx 13'13	0.66191 AU	minimum elong	16592 Apr 26 03:09	20° \approx 32'58	0°28'07
inferior conj	16591 May 13 13:05	6° \approx 44'41	1°25'14	morning rise	16592 May 02 14:43	15° \approx 08'53	
minimum elong	16591 May 13 11:10	6° \approx 50'22	1°24'04	direct	16592 May 05 05:04	14° \approx 34'22	
morning rise	16591 May 19 12:16	1° \approx 08'30		morning max el	16592 May 11 12:53	17° \approx 48'50	17°50'30
direct	16591 May 22 11:43	0° \approx 19'41			16592 May 20 13:27	0° \approx	
morning max el	16591 May 28 19:59	3° \approx 38'46	18°11'36	desc. node	16592 May 27 04:36	10° \approx 55'50	
desc. node	16591 Jun 10 07:38	20° \approx 50'15		morning set	16592 May 28 16:32	13° \approx 26'27	
	16591 Jun 16 01:21	0° \approx			16592 Jun 07 16:40	0° \approx	
morning set	16591 Jun 17 03:41	1° \approx 45'34					
				superior conj	16592 Jun 11 04:04	5° \approx 36'29	-1°42'58
superior conj	16591 Jul 02 07:36	25° \approx 46'48	-2°07'25	minimum elong	16592 Jun 10 19:34	5° \approx 02'23	1°42'44
minimum elong	16591 Jul 02 01:36	25° \approx 23'23	2°07'42	max. Earth dist.	16592 Jun 15 23:35	13° \approx 15'11	1.45388 AU
max. Earth dist.	16591 Jul 04 03:56	28° \approx 39'52	1.46003 AU	evening rise	16592 Jun 26 22:57	0° \approx 15'37	
	16591 Jul 05 00:30	0° \approx			16592 Jun 26 18:52	0° \approx	
evening rise	16591 Jul 18 10:34	20° \approx 50'02		greatest brilliancy	16592 Jul 11 17:58	22° \approx 23'05	-0.6m
	16591 Jul 24 08:49	0° \approx			16592 Jul 17 04:47	0° \approx	
greatest brilliancy	16591 Jul 29 14:17	7° \approx 58'31	-0.7m	asc. node	16592 Jul 21 13:57	5° \approx 30'31	
asc. node	16591 Aug 04 17:10	16° \approx 50'53		evening max el	16592 Jul 24 01:03	8° \approx 10'07	20°01'17
evening max el	16591 Aug 10 20:15	24° \approx 15'33	19°06'36	retrograde	16592 Jul 31 15:58	12° \approx 28'23	
retrograde	16591 Aug 17 17:10	28° \approx 02'16		evening set	16592 Aug 04 14:21	10° \approx 59'30	
evening set	16591 Aug 21 05:12	26° \approx 51'17		inferior conj	16592 Aug 09 21:18	4° \approx 59'06	2°59'54
inferior conj	16591 Aug 26 16:27	21° \approx 02'53	2°40'09	minimum elong	16592 Aug 09 22:27	4° \approx 55'11	2°59'27
minimum elong	16591 Aug 26 18:23	20° \approx 56'39	2°39'37	min. Earth dist.	16592 Aug 10 20:10	3° \approx 41'34	0.68167 AU
min. Earth dist.	16591 Aug 28 05:05	19° \approx 04'47	0.66940 AU		16592 Aug 13 19:16	30° \approx 00'00	
morning rise	16591 Sep 01 06:48	14° \approx 35'37		morning rise	16592 Aug 15 06:07	28° \approx 33'23	
desc. node	16591 Sep 06 05:39	12° \approx 05'30		direct	16592 Aug 20 20:47	26° \approx 06'46	
direct	16591 Sep 07 08:17	12° \approx 00'39		desc. node	16592 Aug 23 02:57	26° \approx 02'11	
morning max el	16591 Sep 19 23:42	19° \approx 31'59	25°58'40		16592 Aug 29 03:46	0° \approx	
	16591 Sep 28 22:33	0° \approx		morning max el	16592 Sep 01 10:48	3° \approx 02'48	24°35'39
	16591 Oct 18 21:12	0° \approx			16592 Sep 22 01:51	0° \approx	
morning set	16591 Oct 25 22:00	12° \approx 26'02		morning set	16592 Oct 07 00:54	24° \approx 16'06	
max. Earth dist.	16591 Oct 29 14:31	19° \approx 22'42	1.35294 AU		16592 Oct 10 06:24	0° \approx	
asc. node	16591 Oct 31 18:03	23° \approx 33'27		max. Earth dist.	16592 Oct 10 14:11	0° \approx 35'09	1.37573 AU
	16591 Nov 03 23:18	0° \approx					
				superior conj	16592 Oct 17 15:57	13° \approx 51'27	0°00'25
superior conj	16591 Nov 04 07:30	0° \approx 41'39	0°31'46	minimum elong	16592 Oct 17 15:54	13° \approx 51'11	0°00'47
minimum elong	16591 Nov 04 05:47	0° \approx 32'56	0°31'56	behind sun begin	16592 Oct 17 09:12	13° \approx 18'45	
evening rise	16591 Nov 11 23:13	16° \approx 34'04		behind sun end	16592 Oct 17 22:36	14° \approx 23'41	
	16591 Nov 18 17:18	0° \approx		asc. node	16592 Oct 17 14:52	13° \approx 46'08	
evening max el	16591 Nov 30 10:30	17° \approx 05'50	20°30'55		16592 Oct 25 18:57	0° \approx	
desc. node	16591 Dec 03 03:38	19° \approx 28'12		evening rise	16592 Oct 26 02:45	0° \approx 39'07	

evening max el	16592 Nov 11 22:04	28° ♄ 17'57	19°21'08	evening rise	16593 Oct 09 22:51	14° ♄ 24'25	
	16592 Nov 13 19:09	0° ♄			16593 Oct 18 10:23	0° ♄	
desc. node	16592 Nov 19 00:41	2° ♄ 44'48		evening max el	16593 Oct 25 22:40	10° ♄ 19'53	18°33'50
retrograde	16592 Nov 21 08:18	3° ♄ 01'29		retrograde	16593 Nov 02 23:16	14° ♄ 23'59	
evening set	16592 Nov 23 06:35	2° ♄ 50'30		evening set	16593 Nov 04 22:03	14° ♄ 10'22	
	16592 Nov 29 19:23	30° ♄ ♄		desc. node	16593 Nov 05 21:49	13° ♄ 53'31	
inferior conj	16592 Dec 01 19:44	28° ♄ 42'26	-3°56'56	inferior conj	16593 Nov 12 20:30	9° ♄ 41'23	-2°14'14
minimum elong	16592 Dec 01 10:26	28° ♄ 57'42	3°53'14	minimum elong	16593 Nov 12 15:09	9° ♄ 51'37	2°11'34
min. Earth dist.	16592 Dec 04 09:36	27° ♄ 01'03	0.55704 AU	min. Earth dist.	16593 Nov 16 00:30	7° ♄ 16'47	0.57507 AU
morning rise	16592 Dec 09 12:04	24° ♄ 15'20		morning rise	16593 Nov 20 04:58	4° ♄ 38'01	
direct	16592 Dec 15 00:33	23° ♄ 06'00		direct	16593 Nov 26 09:50	3° ♄ 01'51	
	16592 Dec 28 19:52	0° ♄		morning max el	16593 Dec 10 15:14	10° ♄ 29'27	26°54'09
morning max el	16592 Dec 29 00:46	0° ♄ 11'38	25°27'33		16593 Dec 25 15:02	0° ♄	
asc. node	16593 Jan 13 14:18	21° ♄ 09'40		asc. node	16593 Dec 31 11:27	10° ♄ 04'11	
	16593 Jan 18 10:40	0° ♄		morning set	16594 Jan 09 10:45	28° ♄ 00'52	
morning set	16593 Jan 25 01:01	13° ♄ 32'35			16594 Jan 10 08:49	0° ♄	
superior conj	16593 Jan 31 18:25	28° ♄ 22'10	1°35'41	superior conj	16594 Jan 16 05:26	13° ♄ 00'04	1°38'14
minimum elong	16593 Jan 31 19:22	28° ♄ 27'30	1°36'00	minimum elong	16594 Jan 16 05:20	12° ♄ 59'34	1°38'43
	16593 Feb 01 12:06	0° ♄		max. Earth dist.	16594 Jan 16 15:10	13° ♄ 54'35	1.31068 AU
max. Earth dist.	16593 Feb 02 08:30	1° ♄ 52'27	1.31689 AU	evening rise	16594 Jan 23 02:17	28° ♄ 06'08	
evening rise	16593 Feb 07 23:25	13° ♄ 54'52			16594 Jan 23 23:51	0° ♄	
desc. node	16593 Feb 15 00:42	27° ♄ 45'14		desc. node	16594 Feb 01 21:27	17° ♄ 20'07	
	16593 Feb 16 06:10	0° ♄			16594 Feb 09 14:00	0° ♄	
	16593 Mar 08 10:46	0° ♄		evening max el	16594 Feb 22 23:41	16° ♄ 40'18	27°11'35
evening max el	16593 Mar 12 17:55	4° ♄ 31'32	27°36'14	retrograde	16594 Mar 09 00:51	23° ♄ 59'38	
retrograde	16593 Mar 26 17:19	12° ♄ 01'09		evening set	16594 Mar 15 16:04	22° ♄ 04'23	
evening set	16593 Apr 02 12:25	9° ♄ 46'04		min. Earth dist.	16594 Mar 19 13:57	19° ♄ 21'03	0.59969 AU
min. Earth dist.	16593 Apr 06 06:37	6° ♄ 45'39	0.62237 AU	inferior conj	16594 Mar 22 19:27	16° ♄ 40'07	-2°06'14
inferior conj	16593 Apr 09 07:20	3° ♄ 52'53	-0°41'55	minimum elong	16594 Mar 23 00:14	16° ♄ 30'09	2°04'27
minimum elong	16593 Apr 09 08:46	3° ♄ 49'29	0°41'38	asc. node	16594 Mar 29 09:11	12° ♄ 16'09	
asc. node	16593 Apr 11 11:55	1° ♄ 52'03		morning rise	16594 Mar 30 11:57	11° ♄ 54'09	
	16593 Apr 13 22:22	30° ♄ ♄		direct	16594 Apr 01 12:43	11° ♄ 37'57	
morning rise	16593 Apr 16 08:12	28° ♄ 47'34		morning max el	16594 Apr 08 21:09	15° ♄ 17'58	18°02'11
direct	16593 Apr 18 14:43	28° ♄ 24'01			16594 Apr 19 01:22	0° ♄	
	16593 Apr 23 03:54	0° ♄		morning set	16594 Apr 24 11:01	9° ♄ 48'42	
morning max el	16593 Apr 25 06:26	1° ♄ 45'37	17°47'03	desc. node	16594 Apr 30 22:24	21° ♄ 41'35	
morning set	16593 May 11 04:58	26° ♄ 13'41		superior conj	16594 May 04 15:07	28° ♄ 17'55	-0°30'23
	16593 May 13 08:29	0° ♄		minimum elong	16594 May 04 12:34	28° ♄ 06'38	0°30'26
desc. node	16593 May 14 01:32	1° ♄ 14'44			16594 May 05 14:21	0° ♄	
superior conj	16593 May 22 22:00	16° ♄ 26'05	-1°08'08	max. Earth dist.	16594 May 12 04:52	11° ♄ 16'08	1.42263 AU
minimum elong	16593 May 22 15:48	16° ♄ 00'07	1°07'50	evening rise	16594 May 17 14:43	20° ♄ 05'00	
max. Earth dist.	16593 May 29 16:18	27° ♄ 31'33	1.44101 AU		16594 May 23 23:03	0° ♄	
	16593 May 31 05:22	0° ♄			16594 Jun 14 08:24	0° ♄	
evening rise	16593 Jun 06 11:30	9° ♄ 49'00		evening max el	16594 Jun 19 17:28	6° ♄ 00'30	22°27'02
	16593 Jun 19 22:45	0° ♄		asc. node	16594 Jun 25 07:42	10° ♄ 29'04	
evening max el	16593 Jul 06 23:49	22° ♄ 05'19	21°09'24	retrograde	16594 Jun 29 12:22	11° ♄ 43'51	
asc. node	16593 Jul 08 10:47	23° ♄ 27'55		evening set	16594 Jul 04 09:23	9° ♄ 40'39	
retrograde	16593 Jul 15 14:55	27° ♄ 04'04		inferior conj	16594 Jul 09 15:44	3° ♄ 20'27	3°04'42
evening set	16593 Jul 20 00:20	25° ♄ 17'26		minimum elong	16594 Jul 09 15:01	3° ♄ 22'55	3°04'08
inferior conj	16593 Jul 25 05:45	19° ♄ 06'20	3°07'43	min. Earth dist.	16594 Jul 09 11:59	3° ♄ 33'29	0.69194 AU
minimum elong	16593 Jul 25 05:58	19° ♄ 05'34	3°07'16		16594 Jul 12 03:22	30° ♄ ♄	
min. Earth dist.	16593 Jul 25 15:12	18° ♄ 33'29	0.68927 AU	morning rise	16594 Jul 14 20:30	27° ♄ 07'11	
morning rise	16593 Jul 30 11:20	12° ♄ 45'45		direct	16594 Jul 19 11:14	25° ♄ 12'02	
direct	16593 Aug 04 14:13	10° ♄ 32'58		desc. node	16594 Jul 27 21:30	29° ♄ 51'09	
desc. node	16593 Aug 10 00:14	12° ♄ 30'12			16594 Jul 28 01:10	0° ♄	
morning max el	16593 Aug 14 22:16	16° ♄ 41'25	23°06'39	morning max el	16594 Jul 28 12:47	0° ♄ 28'35	21°40'17
	16593 Aug 25 22:32	0° ♄			16594 Aug 19 16:25	0° ♄	
	16593 Sep 15 02:10	0° ♄		morning set	16594 Aug 29 12:15	15° ♄ 07'25	
morning set	16593 Sep 18 06:21	5° ♄ 11'19		max. Earth dist.	16594 Sep 04 17:37	25° ♄ 09'58	1.42284 AU
max. Earth dist.	16593 Sep 22 13:15	12° ♄ 24'52	1.40000 AU		16594 Sep 07 15:25	0° ♄	
superior conj	16593 Sep 30 09:41	26° ♄ 21'20	-0°35'18	superior conj	16594 Sep 12 08:19	8° ♄ 01'29	-1°12'27
minimum elong	16593 Sep 30 12:23	26° ♄ 33'43	0°34'36	minimum elong	16594 Sep 12 14:20	8° ♄ 27'34	1°11'35
	16593 Oct 02 08:59	0° ♄		asc. node	16594 Sep 21 08:24	24° ♄ 04'37	
asc. node	16593 Oct 04 11:38	3° ♄ 57'41		evening rise	16594 Sep 23 07:46	27° ♄ 40'43	

	16594 Sep 24 14:17	0°♄		evening rise	16595 Sep 06 00:43	10°♄15'14	
evening max el	16594 Oct 09 08:06	23°♄02'47	18°07'44	asc. node	16595 Sep 08 05:08	14°♄02'30	
retrograde	16594 Oct 16 09:18	26°♄39'48			16595 Sep 17 21:52	0°♄	
evening set	16594 Oct 18 13:46	26°♄19'21		evening max el	16595 Sep 22 22:05	6°♄15'34	18°01'10
desc. node	16594 Oct 23 19:01	23°♄12'05		retrograde	16595 Sep 29 10:19	9°♄38'37	
inferior conj	16594 Oct 25 18:53	21°♄28'48	-0°38'21	evening set	16595 Oct 01 22:31	9°♄07'40	
minimum elong	16594 Oct 25 17:33	21°♄31'47	0°37'22	inferior conj	16595 Oct 08 11:47	3°♄57'59	0°40'29
min. Earth dist.	16594 Oct 29 00:04	18°♄37'54	0.59698 AU	minimum elong	16595 Oct 08 12:57	3°♄55'00	0°40'20
morning rise	16594 Nov 01 18:02	15°♄51'25		desc. node	16595 Oct 10 16:16	1°♄43'51	
direct	16594 Nov 08 07:59	13°♄50'10		min. Earth dist.	16595 Oct 11 09:45	1°♄00'33	0.61991 AU
morning max el	16594 Nov 22 14:15	21°♄34'58	27°46'09		16595 Oct 12 11:20	30°♄	
	16594 Nov 29 23:29	0°♄		morning rise	16595 Oct 15 00:43	27°♄54'56	
asc. node	16594 Dec 18 08:33	29°♄27'43		direct	16595 Oct 21 17:18	25°♄33'39	
	16594 Dec 18 15:17	0°♄			16595 Oct 31 22:31	0°♄	
morning set	16594 Dec 24 16:44	12°♄15'12		morning max el	16595 Nov 04 20:18	3°♄29'54	27°58'40
max. Earth dist.	16594 Dec 30 22:43	25°♄54'57	1.30995 AU		16595 Nov 24 13:40	0°♄	
				asc. node	16595 Dec 05 05:36	19°♄11'36	
superior conj	16594 Dec 31 16:44	27°♄35'42	1°34'46	morning set	16595 Dec 08 16:50	26°♄09'54	
minimum elong	16594 Dec 31 15:38	27°♄29'30	1°35'15		16595 Dec 10 12:58	0°♄	
	16595 Jan 01 18:30	0°♄		max. Earth dist.	16595 Dec 14 03:04	7°♄42'57	1.31477 AU
evening rise	16595 Jan 07 09:42	12°♄27'19					
	16595 Jan 16 03:11	0°♄		superior conj	16595 Dec 16 02:24	12°♄03'16	1°25'10
desc. node	16595 Jan 19 18:16	6°♄24'14		minimum elong	16595 Dec 16 00:28	11°♄52'37	1°25'33
evening max el	16595 Feb 04 21:52	27°♄56'18	26°11'47	evening rise	16595 Dec 22 19:40	26°♄53'05	
	16595 Feb 07 05:45	0°♄			16595 Dec 24 06:29	0°♄	
retrograde	16595 Feb 18 21:17	5°♄02'44		desc. node	16596 Jan 06 15:07	24°♄45'54	
evening set	16595 Feb 25 01:24	3°♄32'22			16596 Jan 10 06:05	0°♄	
min. Earth dist.	16595 Mar 01 11:01	0°♄54'27	0.57775 AU	evening max el	16596 Jan 17 11:32	8°♄21'37	24°43'08
	16595 Mar 02 17:46	30°♄		retrograde	16596 Jan 31 05:12	15°♄13'16	
inferior conj	16595 Mar 04 12:35	28°♄42'26	-3°38'17	evening set	16596 Feb 05 13:14	14°♄10'16	
minimum elong	16595 Mar 04 20:55	28°♄27'27	3°35'21	min. Earth dist.	16596 Feb 10 23:38	11°♄21'40	0.55918 AU
morning rise	16595 Mar 12 19:43	24°♄18'07		inferior conj	16596 Feb 13 08:26	9°♄52'43	-5°03'20
direct	16595 Mar 14 18:35	24°♄05'36		minimum elong	16596 Feb 13 17:43	9°♄38'10	5°00'53
asc. node	16595 Mar 16 06:28	24°♄13'15		morning rise	16596 Feb 22 00:33	5°♄49'08	
morning max el	16595 Mar 23 05:13	28°♄15'09	18°37'30	direct	16596 Feb 24 04:39	5°♄36'18	
	16595 Mar 24 20:29	0°♄		asc. node	16596 Mar 02 03:45	7°♄58'31	
morning set	16595 Apr 08 05:27	23°♄56'02		morning max el	16596 Mar 05 02:26	10°♄25'37	19°35'01
	16595 Apr 11 08:43	0°♄			16596 Mar 18 01:56	0°♄	
				morning set	16596 Mar 22 08:16	8°♄23'58	
superior conj	16595 Apr 17 04:23	11°♄03'38	0°05'15				
minimum elong	16595 Apr 17 04:43	11°♄05'12	0°04'50	superior conj	16596 Mar 30 09:27	24°♄31'16	0°35'59
behind sun begin	16595 Apr 16 22:01	10°♄33'54		minimum elong	16596 Mar 30 11:26	24°♄40'57	0°35'26
behind sun end	16595 Apr 17 11:26	11°♄36'26			16596 Apr 02 05:24	0°♄	
desc. node	16595 Apr 17 19:13	12°♄12'30		desc. node	16596 Apr 03 16:00	2°♄43'55	
max. Earth dist.	16595 Apr 24 13:10	24°♄19'34	1.40067 AU	max. Earth dist.	16596 Apr 05 19:06	6°♄41'24	1.37756 AU
	16595 Apr 27 20:43	0°♄		evening rise	16596 Apr 09 11:32	13°♄19'20	
evening rise	16595 Apr 28 14:47	1°♄15'54			16596 Apr 19 11:28	0°♄	
	16595 May 17 06:56	0°♄			16596 May 11 06:08	0°♄	
evening max el	16595 Jun 02 07:53	19°♄55'47	23°48'42	evening max el	16596 May 14 21:12	3°♄50'44	25°07'45
asc. node	16595 Jun 12 04:40	26°♄16'29		retrograde	16596 May 26 22:05	10°♄50'59	
retrograde	16595 Jun 13 07:08	26°♄21'38		asc. node	16596 May 29 01:41	10°♄31'54	
evening set	16595 Jun 18 15:50	24°♄04'21		evening set	16596 Jun 01 18:03	8°♄23'33	
min. Earth dist.	16595 Jun 23 08:27	18°♄34'50	0.68962 AU	min. Earth dist.	16596 Jun 06 02:36	3°♄31'11	0.68241 AU
inferior conj	16595 Jun 24 01:19	17°♄37'13	2°51'16	inferior conj	16596 Jun 07 08:35	1°♄52'53	2°27'09
minimum elong	16595 Jun 23 23:48	17°♄42'25	2°50'28	minimum elong	16596 Jun 07 06:31	1°♄59'41	2°26'05
morning rise	16595 Jun 29 07:47	11°♄32'44			16596 Jun 08 19:38	30°♄	
direct	16595 Jul 03 10:35	9°♄57'00		morning rise	16596 Jun 12 19:20	25°♄58'12	
morning max el	16595 Jul 11 09:07	14°♄26'19	20°23'04	direct	16596 Jun 16 10:48	24°♄41'56	
desc. node	16595 Jul 14 18:43	18°♄10'07		morning max el	16596 Jun 23 12:34	28°♄34'20	19°19'22
	16595 Jul 23 16:10	0°♄			16596 Jun 24 21:40	0°♄	
morning set	16595 Aug 08 22:35	24°♄15'46		desc. node	16596 Jun 30 15:52	7°♄12'02	
	16595 Aug 12 15:24	0°♄		greatest brilliancy	16596 Jul 06 05:27	15°♄10'19	-0.7m
max. Earth dist.	16595 Aug 18 04:40	8°♄46'02	1.44163 AU		16596 Jul 16 00:50	0°♄	
				morning set	16596 Jul 18 03:42	3°♄15'11	
superior conj	16595 Aug 24 08:03	18°♄43'21	-1°46'04	max. Earth dist.	16596 Jul 30 20:53	22°♄58'35	1.45445 AU
minimum elong	16595 Aug 24 16:02	19°♄16'15	1°45'28				
	16595 Aug 31 01:43	0°♄		superior conj	16596 Aug 03 09:13	28°♄30'49	-2°08'51

minimum elong	16596 Aug 03 14:38	28°♎52'17	2°08'58	evening rise	16597 Jul 29 14:52	2°♎30'27	
	16596 Aug 04 07:43	0°♎		greatest brilliancy	16597 Aug 06 17:03	15°♎14'28	-0.8m
evening rise	16596 Aug 17 20:23	21°♎54'55		asc. node	16597 Aug 11 22:37	23°♎12'28	
	16596 Aug 22 18:09	0°♎			16597 Aug 16 20:55	0°♎	
asc. node	16596 Aug 25 01:53	3°♎47'08		evening max el	16597 Aug 20 01:46	3°♎37'07	18°42'17
evening max el	16596 Sep 05 13:00	19°♎49'45	18°12'57	retrograde	16597 Aug 26 15:49	7°♎10'54	
retrograde	16596 Sep 11 21:46	23°♎11'45		evening set	16597 Aug 29 22:12	6°♎10'01	
evening set	16596 Sep 14 18:42	22°♎27'05		inferior conj	16597 Sep 04 13:20	0°♎29'32	2°22'40
inferior conj	16596 Sep 20 19:12	17°♎00'59	1°40'17	minimum elong	16597 Sep 04 15:33	0°♎22'39	2°22'05
minimum elong	16596 Sep 20 21:24	16°♎54'43	1°39'42		16597 Sep 04 22:49	30°♎	
min. Earth dist.	16596 Sep 23 05:31	14°♎15'34	0.64161 AU	min. Earth dist.	16597 Sep 06 10:06	28°♎10'57	0.66038 AU
morning rise	16596 Sep 26 22:17	10°♎42'13		morning rise	16597 Sep 10 07:50	24°♎03'37	
desc. node	16596 Sep 26 13:31	10°♎59'48		desc. node	16597 Sep 13 10:48	22°♎05'12	
direct	16596 Oct 03 12:09	8°♎08'36		direct	16597 Sep 16 14:50	21°♎26'35	
morning max el	16596 Oct 17 06:23	16°♎06'11	27°34'11	morning max el	16597 Sep 29 17:46	29°♎11'37	26°39'53
	16596 Oct 28 18:23	0°♎			16597 Sep 30 12:39	0°♎	
	16596 Nov 16 07:46	0°♎			16597 Oct 22 14:42	0°♎	
morning set	16596 Nov 21 08:34	9°♎39'28		morning set	16597 Nov 04 12:57	22°♎37'17	
asc. node	16596 Nov 21 02:34	9°♎09'44		asc. node	16597 Nov 07 23:29	29°♎17'09	
max. Earth dist.	16596 Nov 26 00:24	19°♎11'11	1.32531 AU		16597 Nov 08 08:07	0°♎	
				max. Earth dist.	16597 Nov 08 12:15	0°♎20'33	1.34143 AU
superior conj	16596 Nov 29 08:24	26°♎17'46	1°09'22	superior conj	16597 Nov 13 08:26	10°♎13'27	0°47'17
minimum elong	16596 Nov 29 06:02	26°♎05'00	1°09'35	minimum elong	16597 Nov 13 06:14	10°♎02'02	0°47'26
	16596 Dec 01 01:23	0°♎		evening rise	16597 Nov 20 16:03	25°♎42'11	
evening rise	16596 Dec 06 06:23	11°♎19'24			16597 Nov 22 17:27	0°♎	
	16596 Dec 15 15:38	0°♎		desc. node	16597 Dec 10 08:56	28°♎17'03	
desc. node	16596 Dec 23 12:00	12°♎10'01		evening max el	16597 Dec 10 11:20	28°♎22'57	21°20'51
evening max el	16596 Dec 28 20:56	18°♎18'08	23°00'08		16597 Dec 12 05:49	0°♎	
retrograde	16597 Jan 10 23:57	24°♎47'21		retrograde	16597 Dec 22 09:43	4°♎16'45	
evening set	16597 Jan 15 03:28	24°♎10'03		evening set	16597 Dec 25 07:45	3°♎57'08	
min. Earth dist.	16597 Jan 22 06:59	20°♎51'37	0.54704 AU	inferior conj	16598 Jan 03 00:01	0°♎07'32	-5°52'46
inferior conj	16597 Jan 23 09:08	20°♎14'18	-5°56'20	minimum elong	16598 Jan 02 18:40	0°♎15'03	5°51'39
minimum elong	16597 Jan 23 13:08	20°♎08'36	5°55'36		16598 Jan 03 05:22	30°♎	
morning rise	16597 Feb 01 00:00	16°♎24'16		min. Earth dist.	16598 Jan 03 12:12	29°♎50'25	0.54367 AU
direct	16597 Feb 03 20:38	16°♎05'08		morning rise	16598 Jan 11 05:54	26°♎17'37	
morning max el	16597 Feb 15 09:10	21°♎39'49	20°55'45	direct	16598 Jan 15 04:30	25°♎43'59	
asc. node	16597 Feb 17 01:03	23°♎22'44			16598 Jan 25 18:29	0°♎	
	16597 Feb 22 03:47	0°♎		morning max el	16598 Jan 28 01:24	2°♎00'19	22°36'47
morning set	16597 Mar 06 16:23	23°♎03'08		asc. node	16598 Feb 03 22:18	10°♎07'53	
	16597 Mar 10 00:13	0°♎			16598 Feb 15 09:31	0°♎	
superior conj	16597 Mar 14 02:11	8°♎28'51	1°00'45	morning set	16598 Feb 19 03:29	7°♎46'55	
minimum elong	16597 Mar 14 04:42	8°♎41'43	1°00'21	superior conj	16598 Feb 26 03:18	22°♎47'23	1°19'14
max. Earth dist.	16597 Mar 19 03:24	18°♎36'09	1.35579 AU	minimum elong	16598 Feb 26 05:33	22°♎59'24	1°19'06
desc. node	16597 Mar 21 12:43	23°♎11'34			16598 Mar 01 13:39	0°♎	
evening rise	16597 Mar 23 01:55	26°♎06'02		max. Earth dist.	16598 Mar 01 18:34	0°♎25'26	1.33724 AU
	16597 Mar 25 04:59	0°♎		evening rise	16598 Mar 06 06:26	9°♎26'48	
	16597 Apr 12 22:07	0°♎		desc. node	16598 Mar 08 09:26	13°♎31'43	
evening max el	16597 Apr 27 10:47	17°♎41'12	26°16'50		16598 Mar 17 16:55	0°♎	
retrograde	16597 May 10 08:09	25°♎03'28			16598 Apr 08 16:51	0°♎	
asc. node	16597 May 15 22:46	23°♎01'16		evening max el	16598 Apr 10 00:36	1°♎19'14	27°08'14
evening set	16597 May 16 14:10	22°♎31'06		retrograde	16598 Apr 23 12:09	8°♎51'01	
min. Earth dist.	16597 May 20 16:20	18°♎14'27	0.67057 AU	evening set	16598 Apr 30 02:14	6°♎19'52	
inferior conj	16597 May 22 11:25	16°♎01'50	1°51'29	asc. node	16598 May 02 19:55	3°♎50'28	
minimum elong	16597 May 22 09:16	16°♎08'31	1°50'17	min. Earth dist.	16598 May 03 23:37	2°♎36'29	0.65455 AU
morning rise	16597 May 28 05:14	10°♎18'15		inferior conj	16598 May 06 07:29	29°♎58'32	1°03'04
direct	16597 May 31 10:14	9°♎20'02		minimum elong	16598 May 06 05:55	0°♎03'00	1°02'01
morning max el	16597 Jun 06 22:40	12°♎47'53	18°31'28		16598 May 06 06:58	30°♎	
desc. node	16597 Jun 17 12:55	26°♎44'57		morning rise	16598 May 12 11:13	24°♎27'49	
	16597 Jun 19 16:01	0°♎		direct	16598 May 15 06:40	23°♎45'24	
morning set	16597 Jun 27 23:02	12°♎57'20		morning max el	16598 May 21 13:44	27°♎01'10	18°00'26
	16597 Jul 08 20:16	0°♎			16598 May 24 06:20	0°♎	
superior conj	16597 Jul 13 19:56	7°♎46'20	-2°13'47	desc. node	16598 Jun 04 09:56	16°♎40'40	
minimum elong	16597 Jul 13 17:58	7°♎38'39	2°14'15	morning set	16598 Jun 08 20:22	23°♎54'25	
max. Earth dist.	16597 Jul 13 16:16	7°♎32'04	1.46015 AU		16598 Jun 12 14:11	0°♎	
	16597 Jul 28 00:43	0°♎					

superior conj	16598 Jun 23 08:07	17°☿11'11	-1°58'50	superior conj	16599 Jun 03 12:58	27°♄24'27	-1°28'58
minimum elong	16598 Jun 23 00:18	16°☿40'19	1°58'53	minimum elong	16599 Jun 03 05:04	26°♄52'14	1°28'37
max. Earth dist.	16598 Jun 26 12:50	22°☿12'17	1.45833 AU		16599 Jun 05 03:18	0°☿	
	16598 Jul 01 13:01	0°♌		max. Earth dist.	16599 Jun 09 08:01	6°☿43'22	1.44918 AU
evening rise	16598 Jul 09 10:55	12°♌12'20		evening rise	16599 Jun 18 21:16	21°☿36'09	
	16598 Jul 21 04:03	0°♍			16599 Jun 24 10:05	0°♌	
greatest brilliancy	16598 Jul 22 14:01	2°♍05'39	-0.7m		16599 Jul 16 03:11	0°♍	
asc. node	16598 Jul 29 19:23	12°♍11'21		asc. node	16599 Jul 16 16:11	0°♍34'47	
evening max el	16598 Aug 03 09:59	17°♍30'45	19°28'09	evening max el	16599 Jul 17 12:13	1°♍26'05	20°28'51
retrograde	16598 Aug 10 13:31	21°♍29'06		retrograde	16599 Jul 25 12:37	6°♍00'31	
evening set	16598 Aug 14 05:58	20°♍10'26		evening set	16599 Jul 29 15:43	4°♍23'45	
inferior conj	16598 Aug 19 15:02	14°♍16'58	2°50'04		16599 Aug 02 15:47	30°♌♌	
minimum elong	16598 Aug 19 16:40	14°♍11'34	2°49'35	inferior conj	16599 Aug 03 21:40	28°♌18'33	3°04'35
min. Earth dist.	16598 Aug 20 21:47	12°♍35'29	0.67520 AU	minimum elong	16599 Aug 03 22:26	28°♌15'54	3°04'10
morning rise	16598 Aug 25 02:47	7°♍50'07		min. Earth dist.	16599 Aug 04 14:42	27°♌20'00	0.68545 AU
direct	16598 Aug 30 23:58	5°♍17'51		morning rise	16599 Aug 09 04:51	21°♌54'54	
desc. node	16598 Aug 31 08:05	5°♍18'19		direct	16599 Aug 14 14:32	19°♌33'51	
morning max el	16598 Sep 12 04:59	12°♍35'14	25°24'42	desc. node	16599 Aug 18 05:23	20°♌26'18	
	16598 Sep 26 06:40	0°♎		morning max el	16599 Aug 25 16:08	26°♌10'18	23°58'10
	16598 Oct 15 07:54	0°♎			16599 Aug 29 04:44	0°♍	
morning set	16598 Oct 18 02:17	4°♎54'28			16599 Sep 19 19:22	0°♎	
max. Earth dist.	16598 Oct 21 15:23	11°♎25'27	1.36231 AU	morning set	16599 Sep 29 20:34	16°♎22'41	
asc. node	16598 Oct 25 20:19	19°♎29'04		max. Earth dist.	16599 Oct 03 14:34	22°♎53'28	1.38604 AU
					16599 Oct 07 13:15	0°♎	
superior conj	16598 Oct 27 23:34	23°♎42'32	0°19'08				
minimum elong	16598 Oct 27 22:25	23°♎36'50	0°19'22	superior conj	16599 Oct 11 02:19	6°♎37'01	-0°14'18
	16598 Oct 31 02:19	0°♏		minimum elong	16599 Oct 11 03:19	6°♎41'42	0°13'49
evening rise	16598 Nov 04 22:32	9°♏55'43		behind sun begin	16599 Oct 10 23:38	6°♎24'14	
	16598 Nov 15 15:15	0°♏		behind sun end	16599 Oct 11 07:00	6°♎59'11	
evening max el	16598 Nov 22 14:26	9°♏06'12	19°58'28	asc. node	16599 Oct 12 17:07	9°♎42'05	
desc. node	16598 Nov 27 05:58	12°♏42'45		evening rise	16599 Oct 19 23:22	23°♎54'11	
retrograde	16598 Dec 02 22:39	14°♏15'39			16599 Oct 23 02:22	0°♏	
evening set	16598 Dec 05 01:39	14°♏03'37		evening max el	16599 Nov 05 07:54	20°♏40'13	18°58'15
inferior conj	16598 Dec 13 19:27	10°♏04'52	-4°50'25	retrograde	16599 Nov 14 02:51	25°♏06'12	
minimum elong	16598 Dec 13 09:29	10°♏20'00	4°47'11	desc. node	16599 Nov 14 03:03	25°♏06'12	
min. Earth dist.	16598 Dec 15 18:22	8°♏53'35	0.54974 AU	evening set	16599 Nov 16 00:20	24°♏54'39	
morning rise	16598 Dec 21 16:17	5°♏56'24		inferior conj	16599 Nov 24 07:54	20°♏37'38	-3°13'45
direct	16598 Dec 26 16:30	5°♏01'38		minimum elong	16599 Nov 24 00:03	20°♏51'22	3°10'17
morning max el	16599 Jan 09 09:48	11°♏50'34	24°27'10	min. Earth dist.	16599 Nov 27 05:20	18°♏36'28	0.56404 AU
asc. node	16599 Jan 21 19:32	27°♏54'46		morning rise	16599 Dec 01 21:01	15°♏55'19	
	16599 Jan 23 01:51	0°♐		direct	16599 Dec 07 17:03	14°♏35'02	
morning set	16599 Feb 03 15:30	22°♐28'48		morning max el	16599 Dec 21 20:28	21°♏50'15	26°07'55
	16599 Feb 07 02:17	0°♑			16599 Dec 29 00:30	0°♏	
				asc. node	16600 Jan 08 16:44	16°♏28'23	
superior conj	16599 Feb 10 10:00	7°♑18'24	1°31'27		16600 Jan 15 18:10	0°♐	
minimum elong	16599 Feb 10 11:31	7°♑26'42	1°31'37	morning set	16600 Jan 19 02:38	7°♐03'54	
max. Earth dist.	16599 Feb 12 17:24	12°♑19'46	1.32297 AU				
evening rise	16599 Feb 17 21:45	23°♑12'14		superior conj	16600 Jan 25 20:03	21°♐55'46	1°37'31
	16599 Feb 21 08:05	0°♒		minimum elong	16600 Jan 25 20:35	21°♐58'42	1°37'54
desc. node	16599 Feb 23 06:10	3°♒39'03		max. Earth dist.	16600 Jan 26 22:06	24°♐20'36	1.31365 AU
	16599 Mar 11 09:21	0°♓			16600 Jan 29 11:42	0°♑	
evening max el	16599 Mar 23 13:03	14°♓32'21	27°34'41	evening rise	16600 Feb 01 21:06	7°♑15'51	
retrograde	16599 Apr 06 09:09	22°♓04'16		desc. node	16600 Feb 10 02:55	23°♑27'57	
evening set	16599 Apr 13 03:57	19°♓41'09			16600 Feb 13 19:49	0°♒	
min. Earth dist.	16599 Apr 16 22:27	16°♓27'02	0.63492 AU	evening max el	16600 Mar 05 21:49	27°♒07'32	27°29'54
inferior conj	16599 Apr 19 17:53	13°♓35'32	0°00'37		16600 Mar 09 04:51	0°♓	
minimum elong	16599 Apr 19 17:53	13°♓35'34	0°00'14	retrograde	16600 Mar 19 22:06	4°♓33'17	
transit middle	16599 Apr 19 17:53	13°♓35'34	0°00'14	evening set	16600 Mar 26 16:34	2°♓25'33	
transit begin	16599 Apr 19 14:43	13°♓43'40			16600 Mar 29 23:15	30°♒♒	
transit end	16599 Apr 19 21:02	13°♓27'29		min. Earth dist.	16600 Mar 30 11:29	29°♒33'56	0.61283 AU
asc. node	16599 Apr 19 17:06	13°♓37'32		inferior conj	16600 Apr 02 15:13	26°♒43'55	-1°16'16
morning rise	16599 Apr 26 10:21	8°♓20'14		minimum elong	16600 Apr 02 17:57	26°♒37'45	1°15'22
direct	16599 Apr 28 21:19	7°♓50'40		asc. node	16600 Apr 06 14:22	23°♒28'48	
morning max el	16599 May 05 07:15	11°♓06'28	17°46'50	morning rise	16600 Apr 09 22:42	21°♒46'50	
	16599 May 18 06:13	0°♈		direct	16600 Apr 12 02:30	21°♒26'49	
morning set	16599 May 21 19:57	6°♈05'51		morning max el	16600 Apr 19 00:05	24°♒54'30	17°51'11
desc. node	16599 May 22 06:55	6°♈52'43			16600 Apr 23 05:26	0°♈	

morning set	16600 May 04 16:34	19°♄15'25		morning set	16601 Apr 18 04:29	3°♄06'30	
desc. node	16600 May 09 03:50	27°♄15'38		desc. node	16601 Apr 26 00:40	17°♄45'12	
	16600 May 10 16:56	0°♄					
superior conj	16600 May 15 16:59	8°♄41'31	-0°52'06	superior conj	16601 Apr 27 19:16	20°♄58'45	-0°14'50
minimum elong	16600 May 15 12:20	8°♄21'39	0°51'55	minimum elong	16601 Apr 27 18:05	20°♄53'24	0°15'03
max. Earth dist.	16600 May 22 23:13	20°♄48'18	1.43369 AU	behind sun begin	16601 Apr 27 15:36	20°♄42'10	
	16600 May 28 17:11	0°♄		behind sun end	16601 Apr 27 20:34	21°♄04'38	
evening rise	16600 May 29 14:40	1°♄24'16			16601 May 02 21:48	0°♄	
	16600 Jun 17 22:21	0°♄		max. Earth dist.	16601 May 05 09:24	4°♄14'48	1.41356 AU
evening max el	16600 Jun 30 08:28	15°♄20'37	21°41'34	evening rise	16601 May 10 02:33	12°♄04'05	
asc. node	16600 Jul 03 13:04	18°♄10'13			16601 May 21 15:11	0°♄	
retrograde	16600 Jul 09 11:13	20°♄38'42		evening max el	16601 Jun 13 00:23	29°♄15'44	23°01'38
evening set	16600 Jul 14 01:31	18°♄44'40			16601 Jun 13 18:33	0°♄	
inferior conj	16600 Jul 19 07:01	12°♄29'13	3°07'44	asc. node	16601 Jun 20 09:59	4°♄42'28	
minimum elong	16600 Jul 19 06:50	12°♄29'51	3°07'15	retrograde	16601 Jun 23 07:46	5°♄18'25	
min. Earth dist.	16600 Jul 19 10:45	12°♄16'09	0.69093 AU	evening set	16601 Jun 28 09:39	3°♄09'00	
morning rise	16600 Jul 24 11:57	6°♄11'29			16601 Jul 01 07:22	30°♄	
direct	16600 Jul 29 09:31	4°♄06'08		inferior conj	16601 Jul 03 17:04	26°♄45'20	3°00'17
desc. node	16600 Aug 05 02:41	7°♄05'07		minimum elong	16601 Jul 03 15:59	26°♄49'05	2°59'37
morning max el	16600 Aug 08 04:42	9°♄52'59	22°29'15	min. Earth dist.	16601 Jul 03 07:47	27°♄17'33	0.69154 AU
	16600 Aug 24 01:08	0°♄		morning rise	16601 Jul 08 22:13	20°♄35'23	
morning set	16600 Sep 10 16:03	26°♄52'54		direct	16601 Jul 13 07:46	18°♄48'23	
	16600 Sep 12 13:53	0°♄		morning max el	16601 Jul 21 21:21	23°♄44'24	21°05'54
max. Earth dist.	16600 Sep 15 15:20	5°♄05'27	1.40999 AU	desc. node	16601 Jul 22 23:56	24°♄52'55	
					16601 Jul 27 09:05	0°♄	
superior conj	16600 Sep 23 12:24	18°♄46'24	-0°51'06		16601 Aug 17 08:42	0°♄	
minimum elong	16600 Sep 23 16:30	19°♄04'49	0°50'19	morning set	16601 Aug 21 12:26	6°♄25'13	
asc. node	16600 Sep 29 13:52	29°♄52'01		max. Earth dist.	16601 Aug 28 21:47	18°♄10'22	1.43144 AU
	16600 Sep 29 15:35	0°♄					
evening rise	16600 Oct 03 15:12	7°♄28'24		superior conj	16601 Sep 05 01:31	0°♄01'51	-1°27'33
	16600 Oct 16 21:52	0°♄		minimum elong	16601 Sep 05 08:42	0°♄32'19	1°26'43
evening max el	16600 Oct 19 12:44	3°♄00'34	18°20'16		16601 Sep 05 01:05	0°♄	
retrograde	16600 Oct 27 02:18	6°♄51'51		asc. node	16601 Sep 16 10:36	19°♄55'19	
evening set	16600 Oct 29 02:56	6°♄35'56		evening rise	16601 Sep 16 17:53	20°♄27'52	
desc. node	16600 Nov 01 00:13	5°♄23'25			16601 Sep 22 02:54	0°♄	
inferior conj	16600 Nov 05 18:04	1°♄57'49	-1°31'57	evening max el	16601 Oct 03 00:35	15°♄57'17	18°02'44
minimum elong	16600 Nov 05 14:33	2°♄05'00	1°30'00	retrograde	16601 Oct 09 19:01	19°♄26'32	
	16600 Nov 08 03:30	30°♄		evening set	16601 Oct 12 02:37	19°♄02'04	
min. Earth dist.	16600 Nov 08 23:56	29°♄19'24	0.58403 AU	desc. node	16601 Oct 18 21:26	14°♄11'08	
morning rise	16600 Nov 12 22:41	26°♄38'50		inferior conj	16601 Oct 19 00:42	14°♄03'24	-0°02'35
direct	16600 Nov 19 08:08	24°♄51'28		minimum elong	16601 Oct 19 00:38	14°♄03'34	0°02'11
	16600 Nov 30 21:03	0°♄		transit middle	16601 Oct 19 00:38	14°♄03'34	0°02'11
morning max el	16600 Dec 03 14:46	2°♄27'59	27°21'00	transit begin	16601 Oct 18 21:23	14°♄11'16	
	16600 Dec 23 11:46	0°♄		transit end	16601 Oct 19 03:53	13°♄55'52	
asc. node	16600 Dec 26 13:52	5°♄36'32		min. Earth dist.	16601 Oct 22 03:46	11°♄07'02	0.60674 AU
morning set	16601 Jan 03 11:04	21°♄27'32		morning rise	16601 Oct 25 19:33	8°♄14'02	
	16601 Jan 07 08:57	0°♄		direct	16601 Nov 01 11:34	6°♄03'01	
superior conj	16601 Jan 10 07:28	6°♄34'04	1°37'31	morning max el	16601 Nov 15 16:50	13°♄54'04	27°56'17
minimum elong	16601 Jan 10 06:56	6°♄31'05	1°38'00		16601 Nov 28 15:54	0°♄	
max. Earth dist.	16601 Jan 10 05:31	6°♄23'04	1.30964 AU	asc. node	16601 Dec 13 10:56	25°♄09'28	
evening rise	16601 Jan 17 02:09	21°♄32'18			16601 Dec 15 21:45	0°♄	
	16601 Jan 21 03:49	0°♄		morning set	16601 Dec 18 14:46	5°♄34'07	
desc. node	16601 Jan 27 23:42	12°♄51'24		max. Earth dist.	16601 Dec 24 11:57	18°♄18'21	1.31123 AU
	16601 Feb 08 04:12	0°♄					
evening max el	16601 Feb 16 00:29	8°♄54'41	26°50'13	superior conj	16601 Dec 25 18:18	21°♄07'11	1°31'28
retrograde	16601 Mar 02 01:37	16°♄09'44		minimum elong	16601 Dec 25 16:48	20°♄58'53	1°31'55
evening set	16601 Mar 08 13:01	14°♄24'22			16601 Dec 29 17:52	0°♄	
min. Earth dist.	16601 Mar 12 14:29	11°♄45'00	0.59009 AU	evening rise	16602 Jan 01 10:50	5°♄56'07	
inferior conj	16601 Mar 15 19:44	9°♄14'01	-2°44'57		16602 Jan 13 20:31	0°♄	
minimum elong	16601 Mar 16 02:07	9°♄01'31	2°42'34	desc. node	16602 Jan 14 20:30	1°♄39'14	
morning rise	16601 Mar 23 18:52	4°♄37'26					
asc. node	16601 Mar 24 11:39	4°♄29'15					
direct	16601 Mar 25 18:01	4°♄23'22					
morning max el	16601 Apr 02 12:37	8°♄14'44	18°14'37				
	16601 Apr 16 12:45	0°♄					